

# **Health of Alameda County Adults**

# Selected Findings from the 2003 California Health Interview Survey



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# **Executive Summary**

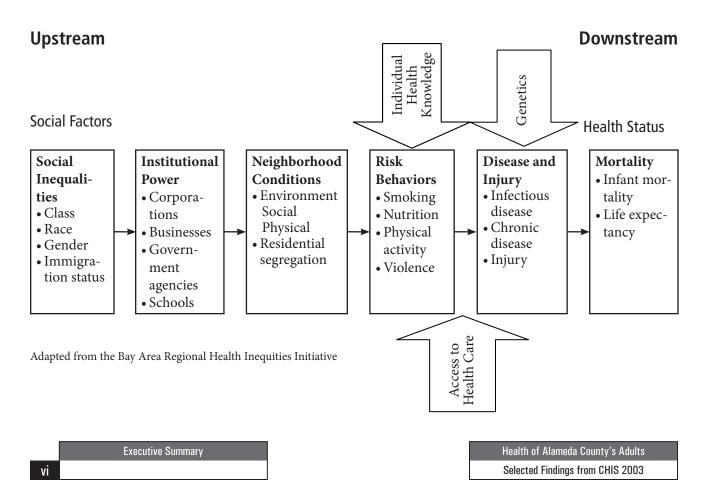
Health of Alameda County Adults: Selected Findings from the 2003 California Health Interview Survey examines health status, health-related behaviors, prevention and screening practices, social and neighborhood characteristics, and access to health care among Alameda County adults and identifies vulnerable groups. Data from the 2003 California Health Interview Survey (CHIS), a random telephone survey, provide important empirical guidance for the development of policies and programs to address health inequities in Alameda County. This report is structured to focus on the social context of health. It examines health indicators by measures of socioeconomic status—income and education—in addition to demographic characteristics—age, gender, race/ethnicity.

The Alameda County Public Health Department (ACPHD) has focused its work on understanding the

impact of social determinants on health inequities. ACPHD employs the term health *inequities* rather than *disparities* to reflect the contribution of unjust social, political, and economic forces that are beyond the control of individuals and ultimately create what are referred to as health disparities. ACPHD recognizes that these forces that affect health and health behaviors must be addressed in addition to addressing risk behaviors for various diseases to bring about comprehensive improvements in health status and health equity.

The diagram below illustrates ACPHD's approach to understanding health inequities. It has long been observed that neighborhood conditions (e.g., the social and physical environment in neighborhoods) are strongly associated with health outcomes. It is important to understand how neighborhood conditions are created in order to develop strategies to eliminate

#### Framework for Health Equity



health inequities. The framework shown in the diagram summarizes the social processes through which adverse neighborhood conditions are created and the pathways through which they operate to influence risk behaviors and ensuing disease patterns. It does not imply that these relationships are linear or suggest that there is no role of genetics, access to medical services, quality of medical services, and individual knowledge or choice. However, it does propose a possible pathway through which social inequalities (first box), maintained and perpetuated through the practices of government and private institutions (second box), create adverse neighborhood conditions (third box), and may produce health disparities (fourth through sixth boxes).

Neighborhood conditions such as poverty, lack of education, unemployment, social isolation, crime, and racism may promote unhealthy behaviors or have direct and adverse physiologic effects on health. Conversely, neighborhood conditions such as high educational attainment, stable family relationships, positive youth-adult relationships, meaningful opportunities for civic participation, positive relations between race/ethnic groups, timely access to health and social services, and high career/employment expectations can act as protective or resiliency factors against unhealthy behaviors and poor health outcomes.

ACPHD is working in partnership with impacted communities to reduce unfavorable neighborhood and social conditions and increase protective and resiliency factors to improve health outcomes. In addition to delivering services and implementing prevention programs to address the county's health concerns, the ACPHD is also working to empower community residents to confront the underlying social determinants of health. The department is committed to reducing health inequities through policies that strategically target underlying inequities in income and education.

Findings in this report show that on most health and social indicators examined, adults in Alameda

County are faring as well as or better than adults in the Bay Area or the state. However, Healthy People 2010 objectives for behavioral risk factors, use of prevention and screening services, and access to health care have not been met. Low-income residents disproportionately bear the greatest burden of ill health, unhealthy behaviors, and inadequate access to prevention services and basic health care.

Major findings and ACPHD approaches and strategies to address specific health issues and broader determinants of health are outlined below.

Chronic diseases continue to impose a substantial health burden on county residents. There are race/ ethnic disparities in chronic disease prevalence and the poor bear a disproportionate burden of chronic diseases.

- Reducing the prevalence of diabetes is a priority for ACPHD because of its serious health consequences. National and state trends show a growing population at risk of developing diabetes. Timely diagnosis and treatment among those at risk and lack of access to health care are some of the challenges of diabetes prevention programs. ACPHD will continue to strengthen local programs for prevention and care of diabetes. Current prevention efforts focus on obesity prevention and promoting physical activity programs through collaborations with community organizations; ACPHD proposes to expand partnerships to sustain these efforts. ACPHD is currently in collaboration with community-based organizations and health care organizations to develop and implement a comprehensive model for care of diabetes and other chronic diseases in the county.
- ACPHD is integrating chronic disease prevention efforts in the county to optimize the use of existing resources. The department will continue its collaborative efforts to improve practice in chronic disease risk assessment, diagnosis, and

- management. ACPHD will promote development of local policies that improve access to basic health care for the uninsured and low-income populations in the county and reduce barriers to diagnosis and treatment of chronic diseases in these communities.
- Asthma is a major health concern because of its impact on individuals, children, and families; it also has a heavy economic cost. ACPHD will further strengthen its asthma prevention programs to focus on environmental exposures for vulnerable groups and improve access to asthma treatment for low-income communities and the uninsured.

The county has a large population of adults that is overweight or obese and a growing population of those at risk for these conditions—adults who are physically inactive or have unhealthy eating habits. The prevalence of these unhealthy behaviors is highest among populations at the lowest SES levels. Lack of insurance is also associated with higher prevalence of certain risk behaviors—physical inactivity or smoking.

ACPHD is developing and implementing strategies to address environmental influences on diet and physical activity in vulnerable communities. Preventing adult weight gain and childhood obesity are goals for ACPHD. The department is working on policies and legislation to create safe environments for physical activity in the county and specific policies targeted to promote exercise and walking. The department works in partnership with school districts to promote regular physical activity among children and teens. At the neighborhood level, the department is working with community residents, city government and community-based organizations to increase the availability of safe parks and opportunities for physical activity in underserved communities.

- ACPHD promotes policies in local schools that provide healthy food choices for children and teens at school. In addition, the ACPHD is working with community-based organizations, city government and local store owners to increase the availability of affordable fresh fruits, vegetables, and other healthy foods in neighborhoods that do not have these foods readily available.
- ACPHD will continue to promote policies to reduce smoking in low-income communities, and advocate for local policies to reduce cigarette marketing and sale in these communities.

There are striking disparities in the use of cancer screening by race/ethnicity, SES, and insurance status in Alameda County. Although similar disparities are not observed in the provision of adult immunization and STD screening, these services can be improved for high-risk groups.

- ACPHD will strengthen its partnerships with service providers and community organizations such as the Ethnic Health Institute and the American Cancer Society to promote policies and practices that narrow gaps in prevention for vulnerable groups.
- The department will strengthen other prevention services such as immunization among adults and improve STD screening among high-risk populations.

The pattern of disparity in neighborhood conditions such as perceived safety, social cohesion, and other characteristics such as availability of parks/playgrounds or open spaces is striking. Low SES communities are most likely to have neighborhood environments that fail to promote or support healthy behaviors—conditions associated with poor health outcomes.

ACPHD is committed to implementing neigh-

borhood-level strategies using a place-based approach to empower residents in vulnerable communities to address concerns that they consider a priority. Some of these communities in the county have identified economic development, employment, safety, violence, access to services, youth activities, nutrition, housing, and transportation as their key concerns. The place-based strategy involves building social capital and empowering residents to take action in partnership with city and county governments and community-based organizations on issues that improve their neighborhood conditions.

There are notable disparities in access to health care among Alameda County residents. Lack of health insurance impacts the burden of chronic disease like diabetes, heart disease, and asthma, and chronic disease risk factors such as physical inactivity and smoking, especially in low-income communities.

ACPHD will work in partnership with clinics, hospitals, policy-makers, and elected officials to develop and advocate for policies that improve access to basic health care for the uninsured and under-insured. The department will implement effective solutions to ensure universal access to high-quality health care for all Alameda County residents.

# **Key Findings**

This report presents findings of CHIS 2003 for adults in Alameda County. The content areas include health status, health-related behaviors, screening and prevention services, social and neighborhood characteristics, and access to health care. CHIS 2003 findings show important differences in morbidity by age, gender, and race/ethnicity. Additionally, these findings identify significant differences across income and education groups, and reveal the impact of insurance status on health, health behaviors, and access to care.

## **Health Status**

CHIS 2003 measured prevalence of common chronic conditions. Estimates of prevalence are based on self-reported diagnosis with these conditions; there was no independent confirmation of these diagnoses. Self-rated health was also measured. The findings indicate that there are inequities in the burden of chronic disease by SES in the county.

#### **Diabetes**

Diabetes is a major chronic disease and risk factor for other serious health conditions. It predominantly affects middle-aged adults and seniors in the county. African Americans and those with lower education are at greater risk of diabetes than other population groups. Being insured increases the chances of being diagnosed with diabetes. Obesity is a risk factor for diabetes. The majority of diabetics have Type II, or adult-onset diabetes.

- One in 20 adults in Alameda County was diagnosed with diabetes, a significantly lower proportion than in California.
- Seniors 65-79 were more than twice as likely as adults 40-64 to be diagnosed with diabetes.
- There were significant race/ethnic disparities in diabetes prevalence: African Americans were twice as likely as Asian/Pacific Islanders to have diabetes.
- Lower education was associated with higher dia-

- betes prevalence. Adults who did not go to high school were three times as likely to have diabetes as those who went to graduate school.
- Obesity was clearly associated with diabetes prevalence. Diabetic adults were twice as likely to be obese than those without diabetes.
- Four in five diabetics had a diagnosis of Type II diabetes.

## Heart Disease, Hypertension, and Stroke

Heart disease, hypertension, and stroke are most prevalent among seniors in the county. African Americans and Whites have particularly high heart disease and hypertension prevalence rates of the major race/ethnic groups. Low income increases the risk of heart disease. Those who have health insurance are more likely to be diagnosed with heart disease than the uninsured.

- One in 20 adults in the county was diagnosed with heart disease, a significantly lower proportion than in California.
- Seniors 65 and older had over 20 times the rates of heart disease than adults 18-39.
- African Americans and Whites had over twice the rate of heart disease as Asian/Pacific Islanders or Latinos.
- High-income adults had significantly lower rates of heart disease than low-income adults.
- The insured were three times as likely as the uninsured to be diagnosed with heart disease.
- About one in five adults in the county was diagnosed with hypertension (high blood pressure).
- Hypertension was substantially more common among adults age 40 or older than younger adults; one in four adults 40-64, and about two-thirds of seniors 80 or older had hypertension.
- African Americans were 2.5 times as likely and Whites twice as likely as Latinos to have hypertension.
- One in 20 seniors 65-79 and one in 20 males reported ever having a stroke.

#### **Asthma**

Asthma is a significant health problem among adults in the county. African Americans are especially vulnerable to developing asthma in their lifetime. Seniors with asthma are more likely than younger adults to have experienced attacks or episodes in the past year. Adults over 40 and low-income adults with asthma have more severe symptoms requiring daily medication for their asthma.

- About one in 10 adults reported having asthma in their lifetime.
- African Americans were over twice as likely to have asthma in their lifetime as Asian/Pacific Islanders.
- Over one-third of adults with asthma reported having an attack/episode in the past 12 months. A much higher proportion—about half of seniors with asthma—reported having an attack/episode in the past 12 months.
- Adults over 40 were twice as likely to be on asthma medication as younger adults.
- Adults from low-income households were twice as likely to be on daily medication for asthma as those from high-income households.

## **Health-Related Quality of Life**

Self-perceived health, unhealthy days, and activity limitations due to ill health are measures of health-related quality of life, and can indicate the burden of chronic diseases and their risk factors in a community. Seniors had particularly high rates of poor self-perceived health. Low education and income are associated with poorer physical and mental health, and limitations in daily activities due to poor health.

- Only 3.6% adults in the county reported poor self-rated health. Seniors 80 and older were over four times as likely, and those 65-79 were over twice as likely as adults 40-64 to report poor self-rated health.
- Education strongly influenced self-rated health.
   Adults who did not go to high school were over

- five times as likely to report poor self-rated health as those with a bachelor's degree.
- Adults from low-income households had about nine times the rate of poor self-rated health than those from high-income households.
- About one in 10 adults reported that their physical health was not good on 14 or more of the past 30 days. Seniors were over five times as likely as younger adults 18-39 to experience physical illness on 14 or more of the past 30 days.
- Adults from low-income households were about twice as likely as those from high-income households to report poor physical health in the past 30 days.
- One in 10 adults reported that their mental health was not good in the past 30 days.
- Females were substantially more likely than males to report significant mental distress in the past 30 days.
- Adults from low-income households were almost twice as likely as those from high-income households to report significant mental distress.
- About one in 20 adults reported that their daily activities were limited due to poor physical or mental health.
- Adults from low-income households were over twice as likely as adults from high-income households to experience activity limitations due to health.

# **Health-Related Behaviors**

CHIS 2003 measured prevalence of health-related behaviors such as overweight and obesity, physical activity, smoking, and binge drinking. There was substantial variation by age group, gender, and race/ethnicity in prevalence of overweight and obesity, physical inactivity, unhealthy eating habits, and smoking—behaviors that put individuals at risk of chronic disease. There were also striking differences by income and education in prevalence of these behaviors.

#### **Overweight and Obesity**

Overweight/obesity is a major risk factor for several chronic diseases. It is a health concern in the county because it affects half of all adults. Middle-aged adults, African Americans, and those at the lowest level of education are at greatest risk of being obese.

- About half of adults in the county were overweight—a substantially higher proportion than the Healthy People 2010 target of 40%.
- Overweight increased with age and was most common among adults 40-64.
- Males were substantially more likely than females to be overweight.
- Adults who had completed college were much less likely to be overweight than those who were less educated.
- About one in five adults (18.4%) in the county was obese—a higher proportion than the Healthy People 2010 target of no more than 15% of adults.
- Obesity rates increased significantly after age 25; adults 40-64 had the highest obesity prevalence, over twice that for young adults 18-24.
- About one-third of African Americans were obese—over three times the rate of Asian/Pacific Islanders, and about twice that for Whites.
- Lower education was associated with higher obesity rates—adults who did not go to high school were about three times as likely to be obese as those who went to graduate school.

## **Weight Perception and Management**

In the county, over half of middle-aged adults perceive themselves as overweight; the same proportion of all adults is doing something to maintain or lose weight.

- Over half of adults 40-64 (the age group most likely to be overweight) perceived themselves as slightly or very overweight.
- Females were substantially more likely than males to perceive themselves as being overweight although males were more likely to be overweight

than females.

- Over one-third of adults in the county were trying to lose weight. An additional one in five adults was trying to stay the same weight.
- Exercise or physical activity was the most common strategy used by adults to lose weight or maintain their body weight.

#### **Physical Activity**

Physical inactivity is a risk factor for diabetes, obesity, and other serious health conditions. Whites are the most active of all race/ethnic groups. Lower education and income are associated with higher physical inactivity levels. Walking is an activity that adults commonly engage in regardless of gender, race/ethnicity, and SES.

- One in five adults in the county reported being physically inactive, i.e., not engaging in any moderate or vigorous physical activity in their leisure time.
- Latinos, African Americans, and Asian/Pacific Islanders were about twice as likely as Whites to be physically inactive.
- Lower education was clearly associated with higher rates of inactivity. Adults who did not go to high school were over five times as likely to be physically inactive as those who went to graduate school.
- Adults from low-income households were over three times as likely to be inactive as those from high-income households.
- The majority—three-fourths—of adults in the county reported walking for fun or transport.

#### **Diet**

Consumption of at least five fruits and vegetables a day (5-a-Day) reduces the risk of developing chronic health problems. Whites have the highest rates of 5-a-Day consumption of all race/ethnic groups. Low education and income are associated with low consumption of 5-a-Day.

- About one-fourth of adults in the county reported consuming the recommended five servings of fruits and vegetables a day.
- Males were much less likely than females to consume 5-a-Day.
- Whites were substantially more likely to consume 5-a-Day than all other race/ethnic groups.
- Lower education was associated with lower 5-a-Day consumption—adults with the highest level of education were four times as likely to consume 5-a-Day as those with the lowest level of education.
- Adults from high-income households were over twice as likely to consume 5-a-Day as adults from low-income households.
- About one in five adults reported consuming fast food at least once a day.

#### **Smoking and Secondhand Smoke**

Smoking is the most modifiable risk factor for chronic disease. There are striking disparities in smoking prevalence by race/ethnicity and income in the county.

- Adult smoking prevalence in the county (15.8%) did not meet the Healthy People 2010 target of 12% or less.
- Smoking prevalence increased with age among adults 18-64, and dropped substantially among seniors 65 and older.
- Males had substantially higher smoking prevalence than females.
- African Americans had over twice the smoking prevalence rates as Asian/Pacific Islanders.
- Adults from middle-income households had substantially higher smoking prevalence than those from high-income households.
- One in ten adults in the county reported being exposed to secondhand smoke in the home.

#### **Binge Drinking**

Binge drinking is a serious health risk in the county that predominantly impacts adults below 40 and males in the county.

- Binge drinking prevalence among adults in the county was over twice the Healthy People 2010 target of 12%.
- Prevalence of binge drinking decreased substantially after age 40.
- Males were substantially more likely to binge drink than females.

# Screening and Prevention Services

CHIS 2003 asked about screening for breast, prostate, colorectal, and cervical cancer, sexually transmitted disease testing among high-risk adults, and immunization for the flu and pneumonia. There were disparities in cancer screening rates by race/ethnicity and SES and the insured were more likely than the uninsured to use all screening and prevention services.

#### **Breast Cancer Screening**

Breast cancer screening rates in the county are better than the Bay Area and the state; however, there are inequities in screening rates by SES.

- Over three-fourths of women 40 and older in the county had been screened for breast cancer in the past two years. This met the Healthy People 2010 target of 70% of women receiving a mammogram, and far exceeded the Bay Area and California mammography screening rates.
- Women with low education and low income had the lowest mammography screening rates.

#### **Prostate Cancer Screening**

Prostate cancer screening rates in the county are lower than in the Bay Area and the state. There are also inequities in screening rates by SES.

- About one in five men 40 and older reported having a prostate-specific antigen (PSA) test in the past year—a substantially lower proportion than in the Bay Area and California.
- Seniors 65-79 were over three times as likely to be screened as adults 40-64.
- Adults with low education and low income had the lowest PSA screening rates.

#### **Colorectal Cancer Screening**

There are different types of screening tests for colorectal cancer. The rate of colorectal cancer screening using tests to examine the colon meet the Healthy People 2010 objective. However the screening rate using a blood stool test is much lower in the county compared to the Bay Area or the state.

- About half of adults 50 and older in the county reported having a sigmoidoscopy, colonoscopy, or proctoscopy in the past decade to be screened for colorectal cancer.
- The rates of colorectal cancer screening using these tests increased with higher educational attainment.
- About one-fourth of adults in the county reported having a fecal occult blood test in the past two years to be screened for colorectal cancer. The proportion of adults screened in the county was substantially lower than in California, and substantially below the Healthy People target of 50%.

#### **Cervical Cancer Screening**

The majority of women in the county received cervical cancer screening; however there were striking race/ethnic disparities in screening rates.

- The majority of adult women (over 80%) in the county had received a Pap smear to be screened for cervical cancer. However, the screening rate did not meet the Healthy People 2010 target of 90%.
- Asian/Pacific Islanders had substantially lower rates of cervical cancer screening than all other

race/ethnic groups.

#### **STD Testing**

It is recommended that adults at risk for STD have a STD test. One-fourth of the adults in the county have tested for STD. An equal proportion (one-third) have been tested for chlamydia, gonorrhea, or HIV/AIDS.

- Adults 18-35 who had at least one sexual partner in the past 12 months, and adults 36-70 who had more than one sexual partner in the past 12 months, were considered at risk for STD. Over one-fourth of adults at risk for an STD (28.4%) had been tested for STD.
- Females were twice as likely to be tested for STD as males.
- African Americans were three times as likely to be tested for STD as Asian/Pacific Islanders.
- One-third of adults screened for STD had been tested for chlamydia.
- One-third of adults screened for STD had been tested for gonorrhea.
- About two-thirds of adults screened for STD had been tested for HIV/AIDS.

#### **Adult Immunization**

The majority of elderly adults in the county had been immunized against flu and pneumonia.

- Over half of adults 40 and older had received a flu shot in the past 12 months.
- Seniors 80 and older were twice as likely as adults 40-64 to receive a flu shot.
- Adults from low-income households were substantially more likely to receive a flu shot than adults from higher income groups.
- Over one-third of adults in the county 40 or older had ever received a pneumonia shot.
- Seniors 80 and older were substantially more likely than other age groups to receive a pneumonia shot.

# Social and Neighborhood Characteristics

Social support and neighborhood conditions are important determinants of health and health-related behavior. CHIS 2003 measured types of social support available, select housing and neighborhood characteristics, neighborhood cohesion, and neighborhood safety. Low SES was associated with lower availability of social support, less favorable neighborhood characteristics, lower social/neighborhood cohesion, and less-safe neighborhoods.

#### **Social Support**

Social support is strongly associated with individual health outcomes. The measures of social support examined were availability of tangible, emotional, or affectionate support; and positive social interaction. In the county, tangible support and positive social interaction were more available to males than females. Whites had higher levels of all types of social support than other race/ethnic groups. Low SES was associated with lower levels of social support. Seniors were the most likely of all age groups to get social support by visiting a place of worship.

- Males were significantly more likely than females to report availability of someone to help with daily chores when sick, or someone to get together with for relaxation.
- Whites were significantly more likely than all other major race/ethnic groups to have tangible, emotional, and affectionate support, and positive social interactions available to them.
- Lower education was associated with lower availability of all types of social support.
- Adults from low-income households were significantly less likely than those from high-income households to have all types of social support available to them.
- Seniors 65-79 were significantly more likely to visit a place of worship than 25-39 year olds.

#### Housing

Two-thirds of county adults lived in a house and one in four lived in a multiple-unit building. One in four households experienced residential crowding.

- About half of adults in the county were home owners—significantly less than in the Bay Area. A significantly higher prortion of adults were renters in the county than in the Bay Area or the state.
- The proportion of adults who lived in multipleunit housing (one-fourth) was significantly higher than in California.
- Nearly one-fourth of adults in the county lived under crowded conditions.

#### **Neighborhood Characteristics**

Neighborhood characteristics are important determinants of health status and health behavior. The neighborhood characteristics examined were: crime prevention programs, availability of a park/play-ground or open space, home break-ins, and availability of a place near home to walk/exercise. The 18-24 age group, African Americans, and those at the highest levels of SES were more likely to live in neighborhoods with a crime prevention program. Middle-aged adults 40-64, Whites and Asian/Pacific Islanders, and those at the highest levels of SES were more likely to have a place to walk/exercise in the neighborhood.

- Adults of different age groups described their neighborhoods in distinctive ways. Young adults 18-24 were more likely than seniors to have a crime prevention program/neighborhood watch, and a park/playground or open space in their neighborhood.
- Middle-aged adults 40-64 were more likely than the elderly 80 and older to have a place near home to walk or exercise.
- Adults 25-39 were more likely to experience a

- home break-in than seniors.
- There were notable race/ethnic differences in neighborhood characteristics. African Americans were more likely than Latinos to have a crime prevention program/neighborhood watch in their neighborhood. Whites were more likely than Asian/Pacific Islanders to have a park/playground or open space within walking distance of their home.
- Characteristics of neighborhoods varied by education of residents. Adults who did not go to high school were less likely than those at higher education levels to have a park/playground or open space in their neighborhood. The likelihood of living in a neighborhood with a crime prevention program/neighborhood watch increased with higher education.
- Neighborhood characteristics were also associated with income. Adults from high-income neighborhoods were substantially more likely than adults from all other income groups to have a park/playground or open space in the neighborhood. They were also significantly more likely to have a place near home to walk or exercise than adults from low-income households. Adults from high-income households were also significantly more likely than those in middle-income group to live in a neighborhood with a crime prevention program/neighborhood watch.

## **Neighborhood Cohesion**

Neighborhood cohesion is associated with health outcomes. CHIS 2003 examined social cohesion by the following measures: people having trust, getting along, being helpful, having shared values, and knowing each other. Young adults 18-24, Whites, and those at the highest levels of SES were more likely to live in highly cohesive neighborhoods. Latinos and those at the lowest level of education were most likely of all groups to live in neighborhoods where people knew each other.

- Adults in the county were significantly less likely to report neighborhood trust than adults in the Bay Area, and significantly less likely to be in neighborhoods where people know each other than adults in California. County residents were significantly more likely to report shared values in their neighborhood than Bay Area or California residents.
- Young adults age 18-24 perceived their neighborhoods as less cohesive than older adults.
- Whites were most likely of all race/ethnic groups to live in neighborhoods where there was trust, people were helpful, got along, or shared values. Latinos were most likely of all race/ethnic groups to be in neighborhoods where people knew each other.
- Higher social cohesion—a neighborhood where there is trust, people get along, are helpful, and have shared values—was generally associated with higher education of residents. However, adults at the lowest level of education were more likely than those at higher education levels to be in neighborhoods where people knew each other.
- High social cohesion—characterized by a neighborhood where people can be trusted, get along, are helpful, and share values—was also associated with high income. Adults from low-income households were most likely to be in neighborhoods where people knew each other compared to other income groups.

## **Neighborhood Safety**

Neighborhoods were perceived as much less safe in the county than in the Bay Area or the state. Males, Whites, the middle-aged 40-64, those at higher levels of SES, and those who lived in a house perceived their neighborhoods as safe.

Three-fourths of adults in the county reported that the park/playground in their neighborhood was safe during the day, and about half reported that it was safe at night. This perception of park/playground safety was significantly lower than in the Bay Area or California. A significantly higher proportion of adults in the county reported that people were afraid to go out at night in their neighborhood than in the Bay Area or California.

- Middle-aged adults age 40-64 were significantly more likely to perceive their neighborhood park or playground to be safe during the day and night than seniors. Seniors were significantly more likely to report fear of going out at night in their neighborhood than middle-aged adults. Middle-aged adults were significantly more likely than seniors to feel that it was safe to walk or exercise outdoors in their neighborhood.
- Males were significantly more likely than females to perceive their neighborhood park or playground as safe during the day and night.
- Whites were significantly more likely than all other race/ethnic groups to perceive their neighborhood park or playground to be safe during the day and significantly more likely than Latinos or African Americans to perceive their neighborhood park or playground to be safe during at night. Whites were also significantly more likely to feel that it was safe to walk or exercise in their neighborhood than all other race/ethnic groups, and significantly less likely to report fear of going out at night in their neighborhood than Latinos or African Americans.
- Perceived neighborhood safety was associated with education level. Adults with more education were more likely to perceive their neighborhood park/playground as safe than those with less education. Adults among the lowest educational level were significantly more likely to perceive that people were afraid to go out at night in their neighborhood than those with the highest educational level.
- Perceived neighborhood safety was also associated with income. Adults with higher income were more likely to perceive their neighborhood park/playground as safe. Adults from low-income

- households were significantly more likely to report that people were afraid to go out at night in their neighborhood than those from high-income neighborhoods. Low income was also associated with a lower perception that it was safe to walk or exercise outdoors in the neighborhood.
- Adults in multi-unit housing were less likely to feel that it was safe to walk or exercise in their neighborhood than those who lived in a house.

## Access to Health Care

Access to health care strongly influences health status and health behaviors. Key measures of access to health care were included in CHIS 2003 were: health insurance coverage, having a usual source of care, and delays in getting needed medical care or prescription medication.

#### **Health Insurance**

The percentage of uninsured was particularly high among young adults 18-24, Latinos, and those at the lowest level of education or income.

- The percentage of uninsured adults 18 or older in the county (13.6%) was substantially lower than that in California (16.6%).
- Young adults 18-24 were about twice as likely to be uninsured as other non-elderly adults 25-64.
- Latinos were three times and Asian/Pacific Islanders were over twice as likely to be uninsured as Whites.
- Adults with the lowest educational level were six times as likely to be uninsured as those with the highest educational level.
- Adults from low-income households were about five times as likely to be uninsured as those from high-income households.

#### Usual Source of Care

Females, Latinos, those at the lowest levels of SES, and the uninsured were the groups that had particularly low levels of having a usual source of care.

- The majority of adults in the county (87.2%) had a usual place to go when they were sick or needed health advice. However, this percentage was lower than the Healthy People 2010 target of 90% adults having a usual source of care.
- The proportion of adults with a usual source of care increased with age; almost all seniors had a usual source of care.
- Males were substantially more likely to have a usual source of care than females.
- Latinos were much less likely than all other race/ ethnic groups to have a usual source of care.
- Adults from low-income households were substantially less likely to have a usual source of care than those from high-income households.
- The insured were twice as likely to have a usual source of care as the uninsured.

#### **Delay in Needed Medical Care**

Young adults 18-24 and low-income adults were most vulnerable to delays in needed medical care.

- The proportion of adults who reported delays in needed medical care in the past 12 months was over twice the Healthy People 2010 target of 7% or less.
- Young adults 18-24 were over four times as likely as seniors 65-79 to delay needed medical care.
- Adults from low-income households were about five times as likely to delay medical care as those from high-income households.

## **Delay in Prescription Medication**

African Americans and the uninsured were particularly vulnerable to delays in prescription medication.

One in 10 adults reported that they experienced delays in getting prescription medication in the past 12 months.

- Adults 25-64 were substantially more likely than young adults 18-24 or seniors 65-79 to experience delays in getting prescription medication.
- African Americans were much more likely than Whites to experience delays in getting prescription medication.
- The insured were significantly less likely to experience delays in needed medical care than the uninsured.

# Introduction

# **Background**

The California Health Interview Survey (CHIS) is a randomly sampled telephone survey of the California population that is conducted every two years, and began in 2001. It is designed as a broad public health surveillance system for state and local health data for California. CHIS interviews are conducted in five languages: English, Spanish, Chinese (Mandarin and Cantonese dialects), Vietnamese, and Korean to capture the cultural diversity of the state's population. Households are randomly sampled from every county in the state, and interviews are conducted with one randomly selected adult from each household. In households with children, one adolescent and one child are also randomly selected for interviews. The child interviews are conducted with the adult who is most knowledgeable about the child's health, usually a parent, while the adolescent is interviewed directly. CHIS 2003 health topics included health conditions and limitations, cancer screening, health-related behaviors, sexual health, dental health, housing and neighborhood conditions, social support, health access, utilization, and insurance. In Alameda County the CHIS 2003 was implemented with an enhanced sample design and content that included additional questions related to diet, physical activity, and weight management. The details of methodology are described in the Appendix.

Health status of a community is strongly influenced by health behaviors. Social and neighborhood conditions are important determinants of health status and and health behavior. Access to and use of prevention and health services also influence health outcomes. Socioeconomic factors are important determinants of health status, health behavior, neighborhood conditions, use of prevention services, and access to health care. CHIS data are a unique source of information on socioeconomic factors related to disease prevalence, behavioral risk factors, neighborhood conditions, and access to health and prevention services, at the local level. This report summarizes CHIS 2003 findings for Alameda County adults on health status,

health-related behaviors, screening and prevention services, social and neighborhood characteristics, and access to health care. It is structured to focus on the social context of health by presenting analysis stratified by measures of socioeconomic status—income and education—in addition to demographic characteristics—age, gender, race/ethnicity.

The relationship between socioeconomic status (SES) and the health of individuals and populations is well established.1 Lower mortality, morbidity, and disability rates among people with socioeconomic advantage have been found and replicated using various indicators of SES and multiple disease outcomes. The relationship between SES and health is characterized by large improvements in health associated with changes in SES at low levels of SES and smaller improvements in health at higher levels of SES.<sup>2</sup> Health behavior is also strongly associated with SES. The social environment influences behavior by shaping norms, enforcing patterns of social control, and providing or not providing opportunities to engage in certain behaviors. It can place constraints on individual behavior choices.3

Institutional, cultural, and political factors affect how socioeconomic conditions influence health and health behaviors. Measures of SES indicate social position within society. Social position is a powerful determinant of the extent of health-damaging exposures and health-enhancing resources in a population. SES also determines an individual's access to medical care and is strongly related to access to and quality of preventive care. SES of an individual or group is most commonly described by measures of income, education, and occupation.

Income is an important measure of SES because it relates directly to the material conditions that affect health, e.g. the quality, type, or location of housing; food; clothing; medical care; and opportunities for recreational and physical activities. Household in-

come is a strongly associated with mortality.

Educational attainment or completion of milestones in education is another useful measure of SES. There is consistent and strong evidence of the importance of education as a health determinant. Higher education provides resources that have broad potential to influence health. Educational success is related to likelihood of future success. Higher levels of education are associated with better jobs, higher income, better housing, and better neighborhood and working conditions. Higher education may also have a socially symbolic or material value for individuals. There is considerable research evidence that higher education is associated with lower mortality.

In recent years there is increasing attention to the role of social class or SES as a determinant of racial differences in health and health behaviors. Ace is a major basis for social stratification in the United States. There is no biological basis for racial differences—evidence suggests that race is a social, not biological, construct. Race is strongly associated with health and many researchers view race as a proxy for SES.

There are disparities by race/ethnicity in the distribution of income and education. The median household income of African Americans and American Indians is considerably lower than that of the White population in the United States. The median household income for Latinos is higher than that of African Americans and American Indians but lower than that of Whites, while the Asian population has the highest levels of median household income in the United States. Poverty follows a similar pattern by race. US data on educational attainment reveals that African Americans, Latinos, and American Indians have considerably lower level of educational attainment than Whites. Rates of high school completion for Asian/ Pacific Islanders are comparable to that of Whites, with Asian/Pacific Islanders having even higher levels of college graduation than Whites.

In Alameda County, there is a similar pattern of dis-

parity in income and education by race/ethnicity. One in five African Americans in Alameda County lives in poverty.<sup>5</sup> This is almost four times the poverty rate of Whites. Poverty rates among American Indians, Latinos, and those of other or multiple races also exceeds the White rate by two or more times. The percentage of adults with a high school diploma also shows wide disparities by race/ethnicity. The proportion of adults with a high school diploma varies substantially from a high of 92% for Whites to a low of 56% for Latinos.

There are large disparities in health by SES, regardless of race. However, there are racial differences within SES groups. Most racial differences in health are accounted for by SES differences; however, race has an independent effect on health as it reflects more than SES. The finding in literature that SES does not completely explain racial differences in health indicates that cultural differences among race/ethnic groups and racism are important influences on health.<sup>4</sup>

CHIS 2003 findings on health status, health behaviors, use of prevention services, social and neighborhood conditions, and access to health care presented in this report demonstrate that race/ethnic disparities in health can largely be explained by underlying inequities in SES.<sup>6</sup>

# Report Organization

Each section of this report includes relevant background information on the indicators included. The questions included in the analysis for each topic area are listed in a shaded box at the beginning of each section.

**Heath Status:** Diabetes; Heart Disease, Hypertension and Stroke; Asthma; Health-Related Quality of Life.

**Health-Related Behaviors:** Overweight, Obesity, and Weight Management; Physical Activity; Diet; Smoking and Secondhand Smoke; Binge Drinking.

**Screening and Prevention Services:** Cancer Screening; Sexually Transmitted Disease Testing; Adult Immunization.

**Social and Neighborhood Characteristics:** Social Support; Neighborhood Characteristics; Neighborhood Cohesion; Neighborhood Safety.

**Health Insurance and Access to Care:** Current Insurance; Usual Source of Care; Delay in Needed Medical Care; Delay in Getting Prescription Medication.

Findings are described in a narrative presented with accompanying tables and graphs for each topic area. Tables include all detailed findings, and graphs highlight select findings in each section. Comparisons with regional (Bay Area) and/or state estimates are discussed for most indicators. Where relevant, comparisons with the Healthy People 2010<sup>7</sup> goal are also discussed.

# **Tables**

The content of columns left to right in the tables are as detailed below.

## **Population Group**

Estimates for most indicators are presented by age, gender, race/ethnic group, education level, poverty level and insurance status. Details of what is presented in tables are further described below.

**Age group:** Analysis was done to obtain estimates for each indicator by age group in the categories 18-24, 25-39, 40-64, 65-79, and 80+ years. For some indicators these categories are collapsed to allow presentation of stable estimates or more meaningful categories for the specific indicator.

**Gender:** Findings are presented for males and females, except when they were relevant only for one or the other.

Race/ethnicity: Results are presented in categories fitting the California Department of Finance Definition. The "Asian" and "Native Hawaiian and Pacific Islander" categories were combined for the purpose of this report. This resulted in race/ethnic categories which were labeled as White, Latino, African American, Asian/Pacific Islander, American Indian/Alaska Native, Two+, and Other.

Education level: Analysis was done by categories describing meaningful increments to examine associations of health indicators with education level. The categories are: Less than high school, Some high school/high school diploma, Some college/vocational training/AA/AS, Bachelor's, Some graduate school/Master's, and Doctorate or equivalent.

**Poverty level:** This is determined by the household income and number of people supported by that income, as reported by the adult respondent. The poverty levels for analysis purposes are based on the official published federal poverty level (FPL) for 2003 and are expressed as a percent of the FPL. The four levels are: 0-99% FPL, 100-199% FPL, 200-299% FPL, and 300% FPL.

**Insurance status:** This refers to whether respondents had health insurance at the time of the CHIS 2003 interview. The percentages in the tables indicate the proportions of the insured and the uninsured.

**Total:** Estimates for the population of Alameda County as a whole are shown at the bottom of a table in each section.

## **Percent of Group**

This column represents the weighted percent of the CHIS sample for the health indicator. In cases where sample sizes are too small to provide reliable estimates, the estimate is marked "\*". This happens most often with smaller race/ethnic categories (American Indian/Alaska Natives, Two+, Other). See the "Unstable Estimates" section of the Appendix for details on how reliability is defined.

#### 95% CI

This column presents the lower and upper limits of a 95% confidence interval for the weighted percent. Using the example of adult diabetes prevalence (Table 1A), the confidence interval for adults age 65-74 is 10.2% to 19.7%. That means it is 95% certain that the true percent of adults ages 65-74 who have ever been diagnosed with diabetes is between this lower and upper limit. It is estimated that it is 14.9%, but it may be as low as 10.2% and as high as 19.7%. The Appendix contains a description of how to use confidence intervals to determine if percents are statistically different from each other in the "Using Confidence Intervals" section.

#### **Estimated Number**

CHIS 2003 data were weighted to the California Department of Finance population distribution for Alameda County and are representative of the county's non-institutionalized population. This column shows the estimated number of Alameda County residents in each population group for each indicator. The estimated numbers were calculated by multiplying the weighted sample percents (in the second column) by the Department of Finance population figure for each row in the table, after adjusting for sampling error. Some tables have rows for which the details are not shown due to small numbers (indicated by "-"). The totals in these tables include the numbers for population group(s) for which the percent, confidence interval, and estimated number are not shown. Unstable estimates in tables are indicated by "\*".

# Graphs

Selected findings by race, education level or income are represented graphically for the majority of topics. Graphs present only the stable estimates for a given indicator.

# Narrative

The narrative includes a discussion of findings by area, age, gender, race/ethnicity, education level, income, and insurance status for most indicators. County estimates are compared to those for the Bay Area and California for the majority of indicators. The Bay Area is defined as the counties of Santa Clara, Alameda, Contra Costa, San Francisco, San Mateo, Sonoma, Solano, Marin, and Napa.

The discussion of race/ethnic differences includes major groups, i.e., Latino, White, African American, and Asian/Pacific Islander.

The terms "percent," "percentage", "prevalence" and "proportion" are used interchangeably throughout the narrative. Significant differences between groups are discussed in each section. The conclusion of a significant difference for a given comparison between groups is based on non-overlapping confidence intervals, which are presented in tables. The same approach to using confidence intervals is used in the "Social and Neighborhood Characteristics" section which shows results graphically. This section does not include tables with confidence intervals for various comparisons. The general approach to describing differences among population groups is to highlight not only significant differences, but ranking and the ratio of the highest and lowest estimates as well. Healthy People 2010 target goals are also used as appropriate for select indicators to highlight findings. In the discussion of findings on education and income the term "SES" is used to refer to socioeconomic status.

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# **Health Status**

## Diabetes

Diabetes is a significant health problem in the United States. In the last 15 years the number of persons in the United States diagnosed with diabetes has more than doubled. In recent years, an increasing proportion of younger adults, adolescents and children are being diagnosed with diabetes.

Type II diabetes most often appears in persons over 40 and is linked to obesity and physical inactivity. It accounts for 90-95% of diabetes. Type II diabetes is the leading medical cause of amputations, blindness, and kidney disease in adults, and is a major risk factor for serious health conditions such as heart disease, stroke, and pregnancy-related complications.

In 2005, 7% of the US population had diabetes.<sup>2</sup> Diabetes has the greatest impact among older adults—one in five adults over age 65 have diabetes. Women are at greater risk of diabetes than men; African Americans and Latinos have twice the rates of diabetes as Whites. A substantial proportion of adults have have elevated blood sugar not high enough to be diabetes (prediabetes)—three times the percentage of those with diabetes.

Moderate weight loss and exercise can prevent or delay the onset of Type II diabetes among adults at risk. The increasing burden of diabetes and its complications can be prevented by early detection, improved delivery of care, and better education on self management.

In 2003, 6.6% of California adults 18 and older had been diagnosed with diabetes.<sup>3</sup> Whites (5.6%) and Asian/Pacific Islanders (6.6%) had the lowest prevalence of diabetes among the major race/ethnic groups. A greater proportion of Latinos (7.5%), African Americans (9.2%), and American Indian/Alaska

Natives (10.4%) had been diagnosed compared with Whites or Asian/Pacific Islanders. Adults living in households with incomes below 200% of the FPL were significantly more likely to have diabetes than those at or above 200% FPL. The insured were more likely to be diagnosed with diabetes than the uninsured (7.1% vs. 4.3%).

In 2003, among the 6.6% of adults with diabetes, 84.3% had Type II diabetes.<sup>3</sup> The proportion of adults with Type II diabetes increased significantly with each age group. Approximately two-thirds of diabetics ages 25-39 had a Type II diagnosis. The proportions with Type II diabetes among those ages 40-64 and 65-79 were 84.1% and 90.5%, respectively. American Indian/Alaska Natives (76.9%) were least likely to receive a Type II diagnosis and Whites (86.9%) were most likely. The proportion of those with a Type II diagnosis among African Americans, Asian/Pacific Islanders, and Latinos was 85.0%, 83.9%, and 81.1% respectively.

#### Diabetes Prevalence and Type II Diagnosis

- (Other than during pregnancy, has/Has) a doctor ever told you that you have diabetes or sugar diabetes?
- Were you diagnosed with Type I or Type II diabetes?

#### **Diabetes Prevalence**

- In the county, 5.1% of adults reported having been diagnosed with diabetes (Table 1A). Adult diabetes prevalence was similar to that for the Bay Area (5.6%), and significantly lower than that for California (6.6%).
- Diabetes prevalence was highest among adults 65-79; this age group was twice as likely to be diabetic than those 40-64.
- Males were more likely than females to be diagnosed with diabetes (5.5% vs. 4.8%).
- Among major race/ethnic groups, African Americans (8.2%) had significantly higher diabetes prevalence than Asian/Pacific Islanders (3.5%). A greater proportion of Latinos (5.6%) and Whites (5.0%) were diagnosed with diabetes than Asian/Pacific Islanders (Table IB; Figure 1).

- Diabetes prevalence decreased with higher educational attainment; adults with some graduate education or higher were significantly less likely to be diabetic than those who did not complete high school (2.9% vs. 9.7%) (Table 1B; Figure 2).
- Differences in diabetes prevalence by income were not significant.
- A greater proportion of adults with health insurance were diagnosed with diabetes than those lacking insurance (5.3% vs. 3.7%).
- Obesity was clearly associated with diabetes; prevalence of obesity among diabetic adults (37.0%) was over twice that for adults without diabetes (17.1%). Adults with prediabetes had about three times the obesity rates (51.0%) of those without diabetes (Table 2).

Table 1A

Ever Diagnosed With Diabetes, Adults Age 18 or Older

Age, Gender, and Race/Ethnic Group

Population Group	Percent of Group	95% CI	Estimated Number
Age Group			
18-39	1.7*	(0.6 - 2.7)	8,303
40-64	6.1	(4.5 - 7.8)	28,554
65-79	14.9	(10.2 - 19.7)	15,667
80+	10.9	(5.0 - 16.8)	4,148
Gender			
Male	5.5	(4.0 - 6.9)	29,299
Female	4.8	(3.5 - 6.1)	27,372
Race/Ethnicity			
White	5.0	(3.5 - 6.6)	23,286
Latino	5.6	(3.2 - 7.9)	11,226
African American	8.2	(5.4 - 11.0)	10,839
Asian/Pacific Islander	3.5	(1.5 - 5.5)	10,076
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	5.7*	(1.0 - 10.3)	1,111
Alameda County Total	5.1	(4.1 - 6.1)	56,672

5.6

6.6

(4.9 - 6.2)

(6.2 - 6.9)

Table 1B		
Ever Diagnosed With Diabetes, Adults Age 18 or Older		
Education and Poverty Level and Insurance Status		

Population Group	Percent of Group	95% CI	Estimated Number
Education Level			
Less than High School	9.7	(5.1 - 14.3)	9,252
Some HS/HS Diploma	5.5	(3.3 - 7.6)	17,261
Some College/Voc/AA/AS	5.7	(3.6 - 7.9)	15,047
Bachelor's Degree	4.0	(2.3 - 5.8)	10,451
Some Grad School/Master's	2.9	(1.4 - 4.4)	3,998
Doctorate or Equivalent	1.7*	(0.3 - 3.1)	663
Poverty Level			
0-99% FPL	6.6	(3.5 - 9.7)	8,791
100-199% FPL	7.5	(4.0 - 11.1)	12,236
200-299% FPL	5.6	(3.3 - 8.0)	8,054
≥300% FPL	4.1	(3.0 - 5.3)	27,592
Insurance Status			
Insured	5.3	(4.3 - 6.4)	51,015
Not Insured	3.7	(0.4 - 7.1)	5,657

<sup>\*</sup> Rate unreliable

Bay Area Total

California Total

<sup>-</sup> Data not reported due to small numbers

Figure 1 Ever Diagnosed With Diabetes, Adults Age 18 or Older Race/Ethnic Group

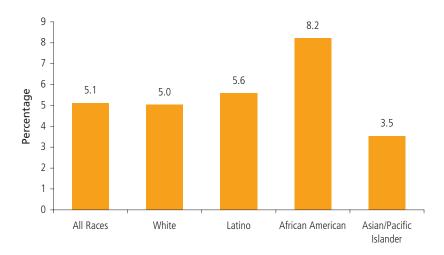


Figure 2
Ever Diagnosed With Diabetes, Adults Age 18 or Older
Education Level

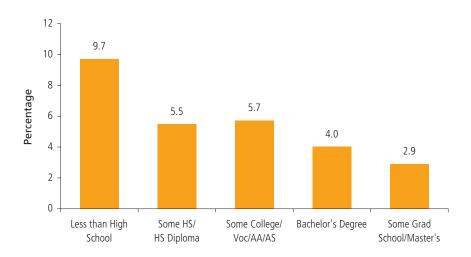


Table 2 Obesity Prevalence and Diabetes Risk			
Diabetes Risk	Percent Obese	95% CI	Estimated Number
Has Diabetes	37.0	(27.8 - 46.2)	20,983
Does Not Have Diabetes	17.1	(15.2 - 19.0)	178,368
Has Borderline Diabetes	51.0	(30.6 - 71.3)	4,218

#### **Type II Diabetes Diagnosis**

- Of the 5.1% adults diagnosed with diabetes in the county, 80.9% received a diagnosis of Type II diabetes (Table 3). The proportion of diabetics with a Type II diagnosis was similar to that in the Bay Area and in California (85.1% and 84.3% respectively).
- The likelihood of being diagnosed with Type II diabetes increased with age. A high proportion of diabetics over 80 (98.5%) had Type II diabetes, a significantly lower proportion than those below 80 (Table 4A). The proportions of Type II

	Table 3 Diabetes Typ	e	
	Percent of Group	95% CI	Estimated Number
Type I	19.1	(11.7 - 26.5)	10,821
Type II	80.9	(73.5 - 88.3)	45,850

Table 4A Type II Diabetes Diagnosis Among Ever Diagnosed, Adults 18 or Older Age, Gender, and Race/Ethnic Group

	Percent of		Estimated
Population Group	Group	95% CI	Number
Age Group			
18-24	-	-	-
25-39	75.8	(51.6 - 99.9)	6,029
40-64	84.4	(75.4 - 93.3)	24,086
65-79	74.4	(58.2 - 90.6)	11,650
<del>*************************************</del>	98.5	(95.4 - 100.0)	4,085
Gender			
Male	81.3	(70.4 - 92.2)	23,823
Female	80.5	(70.6 - 90.3)	22,028
Race/Ethnicity			
White	77.6	(64.2 - 91.0)	18,075
Latino	69.6	(50.3 - 88.9)	7,813
African American	86.7	(77.2 - 96.3)	9,401
Asian/Pacific Islander	97.2	(93.0 - 100.0)	9,796
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	56.9*	(14.5 - 99.3)	632
Alameda County Total	80.9	(73.5 - 88.3)	45,850
	·		
Bay Area Total	85.1	(80.7 - 89.4)	

84.3

(82.3 - 86.3)

- diabetics among those 40-64, 25-39, and 65-79 were 84.4%, 75.8%, and 74.4% respectively. The estimate for adults 18-24 was unreliable and thus not reported.
- A similar proportion of males and females reported being diagnosed with Type II diabetes (81.3% and 80.5% respectively).
- Among major race/ethnic groups, Asian/Pacific Islanders were more likely to receive a Type II diagnosis (97.2%) than African Americans (86.7%), Whites (77.6%) and Latinos (69.6%).
- Differences in likelihood of having a diagnosis of Type II diabetes by income, education, and insurance status were not significant (Table 4B).

Table 4B
Type II Diabetes Diagnosis Among Ever Diagnosed,
Adults 18 or Older
Education and Poverty Level and Insurance Status

	Percent of		Estimated
Population Group	Group	95% CI	Number
Education Level			
Less than High School	74.8	(56.0 - 93.6)	6,922
Some HS/HS Diploma	82.3	(70.1 - 94.5)	14,205
Some College/Voc/AA/AS	82.6	(67.7 - 97.6)	12,432
Bachelor's Degree	85.8	(68.3 - 100.0)	8,968
Some Grad School/Master's	66.5	(38.5 - 94.5)	2,660
Doctorate or Equivalent	-	-	-
Poverty Level			
0-99% FPL	73.0	(54.5 - 91.5)	6,418
100-199% FPL	83.3	(67.3 - 99.4)	10,195
200-299% FPL	85.8	(73.8 - 97.7)	6,909
≥300% FPL	80.9	(69.5 - 92.4)	22,328
Insurance Status			
Insured	80.4	(72.7 - 88.2)	41,019
Not Insured	85.4	(63.9 - 100.0)	4,832

<sup>\*</sup> Rate unreliable

Health of Alameda County's Adults Selected Findings from CHIS 2003

California Total

Health Status	
Diabetes	1

<sup>-</sup> Data not reported due to small numbers

# Heart Disease, Hypertension, and Stroke

Heart disease is a term that includes several specific heart conditions. The most common heart disease in the United States is coronary heart disease, which can lead to heart attack. Heart disease is the leading cause of death in the United States and is a major cause of disability. In 2003 about 37% of adults in the United States reported having two or more of six risk factors for heart disease and stroke—high blood pressure, high cholesterol, diabetes, current smoking, physical inactivity, and obesity. Studies among people without heart disease have shown that lowering high cholesterol and high blood pressure can lower the risk of developing heart disease.4 In 2003, 6.9% of California adults had been diagnosed with heart disease.3 The prevalence of heart disease increased substantially after age 40. There were no differences between males (7.0%) and females (6.8%), but there were significant race/ethnic differences. Latinos (4.4%) had lower heart disease prevalence compared to Asian/Pacific Islanders, (4.7%), African Americans (6.7%), Whites (8.9%, or American Indian/Alaska Natives (9.8%). A significantly lower percent of adults at or above 300% of the FPL (6.2%) had been diagnosed with heart disease compared to those between 100% and 299% FPL. The insured were significantly more likely than the uninsured to have been diagnosed with heart disease (7.6% vs. 3.1%, respectively).

Blood pressure is the force in the arteries when the heart beats (systolic pressure) and when the heart is at rest (diastolic pressure). It is measured in millimeters of mercury (mm Hg). High blood pressure, also known as hypertension, is defined in an adult as a blood pressure greater than or equal to 140 mm Hg systolic pressure or greater than or equal to 90 mm Hg diastolic pressure. Hypertension is known as "the silent killer" because it often has no symptoms. If left

unchecked and untreated, high blood pressure can lead to heart failure, kidney failure, heart attack, and stroke, especially when it is present with other risk factors. In 2003 the lifetime prevalence of hypertension among California adults was 23.5% and ranged from 6.1% among those 18-24 to 59.9% of adults 80 and older. The prevalence of hypertension among African Americans (33.9%) was almost double that of Latinos (18.0%), and substantially higher than it was among Whites (25.9%) and Asian/Pacific Islanders (22.0%).

A stroke occurs when the blood supply to part of the brain is blocked or when a blood vessel in the brain bursts, causing damage to a part of the brain. Stroke is the third leading cause of death in the United States and a leading cause of serious, long-term disability. High blood pressure, diabetes mellitus, smoking, or physical inactivity can increase an individual's risk of stroke.<sup>6</sup> In 2003, 8.8% of California adults reported ever having a stroke.<sup>3</sup> The difference in stroke prevalence between males (8.4%) and females (9.2%) was not significant. Asian/Pacific Islanders (7.2%) were less likely to have had a stroke compared to Latinos (8.1%), Whites (9.1%), or African Americans (11.0%).

#### Heart Disease, Hypertension, and Stroke

- Has a doctor ever told you that you have high blood pressure?
- Has a doctor ever told you that you have any kind of heart disease?
- Have you ever been told by a doctor that you had a stroke?

#### **Heart Disease**

- In the county, 5.4% of adults reported that they had been diagnosed with heart disease (Table 5A). Prevalence of heart disease among adults was similar to that for the Bay Area (6.4%), and significantly lower than that for California (6.9%).
- Heart disease prevalence increased with age: seniors 80 and older had the highest heart disease prevalence of all age groups, 29.4%. Adults 65 and older were significantly more likely to have heart disease than those under age 65.
- Males were more likely than females to be diagnosed with heart disease (6.6% vs. 4.3%).
- Among major race/ethnic groups, African Americans and Whites (7.2% and 7.1% respectively) had significantly higher heart disease prevalence than Asian/Pacific Islanders or Latinos (3.1% and 2.9% respectively) (Figure 3).

- Heart disease prevalence decreased with higher educational attainment: rates ranged from 6.6% among those who did not go to high school to 3.6% among those who went to graduate school (Table 5B).
- Adults from low-income households (0-99% below the FPL) were significantly more likely to have heart disease than those from high-income households (6.0% vs. 4.6%).
- A significantly greater proportion of adults with health insurance had heart disease than those lacking insurance (5.9% vs. 2.1%).

Note: Low-income households refers to those 0-99% below the FPL. High-income households refers to those at or above 300% FPL.

Table 5A			
Ever Diagnosed With Heart Disease, Adults 18 or Older			
Age, Gender, and Race/Ethnic Group			

Age, Gender, and Kace/Ethnic Group				
Population Group	Percent of Group	95% CI	Estimated Number	
Age Group				
18-39	1.4	(0.6 - 2.2)	7,011	
40-64	4.7	(3.4 - 6.0)	22,009	
65-79	18.8	(13.6 - 24.0)	19,766	
80+	29.4	(18.9 - 40.0)	11,197	
Gender				
Male	6.6	(5.0 - 8.2)	35,457	
Female	4.3	(3.3 - 5.3)	24,526	
Race/Ethnicity				
White	7.1	(5.4 - 8.9)	32,896	
Latino	2.9	(1.7 - 4.0)	5,768	
African American	7.2	(4.6 - 9.8)	9,512	
Asian/Pacific Islander	3.1	(1.6 - 4.5)	8,772	
Amer Indian/Alaska Native	-	-	-	
Other	-	-	-	
Two+	10.9*	(3.4 - 18.3)	2,131	
Alameda County Total	5.4	(4.5 - 6.3)	59,983	
Day Area Total	C 4	(E 0 7 C)		
Bay Area Total	6.4	(5.8 - 7.0)		

6.9

(6.6 - 7.2)

Table 5B			
Ever Diagnosed With Heart Disease, Adults 18 or Older			
Education and Poverty Level and Insurance Status			

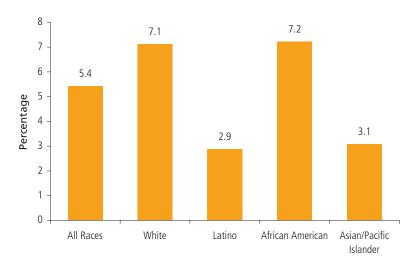
Population Group	Percent of Group	95% CI	Estimated Number	
Education Level				
Less than High School	6.6	(3.6 - 9.6)	6,278	
Some HS/HS Diploma	6.5	(4.5 - 8.6)	20,562	
Some College/Voc/AA/AS	5.6	(3.6 - 7.6)	14,809	
Bachelor's Degree	4.4	(2.7 - 6.1)	11,431	
Some Grad School/Masters	3.6	(2.0 - 5.1)	4,892	
Doctorate or Equivalent	5.2*	(0.9 - 9.4)	2,012	
Poverty Level				
0-99% FPL	6.0	(3.7 - 8.2)	8,004	
100-199% FPL	8.6	(5.6 - 11.6)	13,932	
200-299% FPL	5.3	(3.4 - 7.1)	7,489	
≥300% FPL	4.6	(3.4 - 5.8)	30,559	
Insurance Status				
Insured	5.9	(4.9 - 7.0)	56,831	
Not Insured	2.1	(0.9 - 3.3)	3,152	

<sup>\*</sup> Rate unreliable

California Total

<sup>-</sup> Data not reported due to small numbers

Figure 3 Ever Diagnosed With Heart Disease, Adults 18 or Older Race/Ethnic Group



#### Hypertension

- In the county, 21.1% of adults reported having been diagnosed with hypertension, i.e., high blood pressure (Table 6A). Adult hypertension prevalence was similar to that for the Bay Area (23.1%), and for California (23.5%).
- Hypertension prevalence increased significantly with each successive age group through 65-79. Prevalence was highest among seniors 80 and older (63.8%).
- Males were less likely than females to have been diagnosed with hypertension (19.8% vs. 22.3%).
- Among major race/ethnic groups, African
  Americans had the highest and Latinos the low-

- est hypertension prevalence (30.4% vs. 12.0%). A higher proportion of Whites (23.9%) and Asian/Pacific Islanders (19.0%) were diagnosed with hypertension than Latinos. (23.9% and 19% respectively) (Figure 4).
- Differences in hypertension prevalence by education were not significant (Table 6B).
- Prevalence of hypertension was not significantly different by income.
- Having health insurance increased the likelihood of being diagnosed with hypertension; a significantly higher proportion of adults with health insurance had been diagnosed with hypertension than the uninsured (23.0% vs. 9.1%).

Table 6A		
Ever Diagnosed with Hypertension, Adults 18 or Older		
Age, Gender, and Race/Ethnic Group		

	Percent of		Estimated
Population Group	Group	95% CI	Number
Age Group			
18-24	2.3	(0.9 - 3.7)	3,071
25-39	6.7	(4.6 - 8.8)	24,391
40-64	25.6	(22.6 - 28.6)	119,271
65-79	59.7	(53.1 - 66.3)	62,711
80+	63.8	(52.7 - 75.0)	24,293
Gender			
Male	19.8	(17.0 - 22.7)	106,620
Female	22.3	(19.7 - 24.8)	127,118
Race/Ethnicity			
White	23.9	(21.0 - 26.7)	110,144
Latino	12.0	(8.8 - 15.2)	24,188
African American	30.4	(24.8 - 36.0)	40,092
Asian/Pacific Islander	19.0	(14.7 - 23.4)	54,244
Amer Indian/Alaska Native	15.4*	(0.0 - 32.2)	945
Other	-	-	-
Two+	19.2	(10.5 - 27.8)	3,755
Alameda County Total	21.1	(19.2 - 23.0)	233,738

Bay Area Total	23.1	(22.0 - 24.3)
California Total	23.5	(22.9 - 24.0)

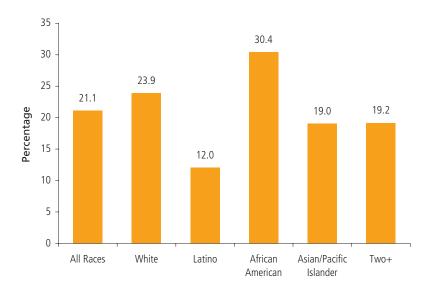
# Table 6B Ever Diagnosed with Hypertension, , Adults 18 or Older Education and Poverty Level and Insurance Status

Percent Estimated				
Population Group	of Group	95% CI	Number	
Education Level				
Less than High School	22.8	(14.9 - 30.8)	21,709	
Some HS/HS Diploma	23.8	(19.8 - 27.8)	74,746	
Some College/Voc/AA/AS	22.7	(19.1 - 26.3)	59,752	
Bachelor's Degree	16.4	(13.0 - 19.8)	42,429	
Some Grad School/Master's	20.3	(15.1 - 25.5)	27,920	
Doctorate or Equivalent	18.4	(11.4 - 25.5)	7,181	
Poverty Level				
0-99% FPL	23.7	(17.3 - 30.0)	31,771	
100-199% FPL	22.1	(17.3 - 27.0)	36,014	
200-299% FPL	26.0	(20.8 - 31.2)	37,100	
≥300% FPL	19.3	(16.9 - 21.6)	128,853	
Insurance Status				
Insured	23.0	(20.9 - 25.1)	219,970	
Not Insured	9.1	(5.2 - 13.0)	13,767	

<sup>\*</sup> Rate unreliable

<sup>-</sup> Data not reported due to small numbers

Figure 4
Ever Diagnosed with Hypertension, Adults 18 or Older
Race/Ethnic Group



### **Stroke**

- In the county, 7.3% of adults 65 and older reported ever having a stroke (Table 7). Stroke prevalence was comparable to that for the Bay Area (7.6%) and California (8.8%).
- Seniors 65-79 had a stroke prevalence rate of 4.9%; the estimate for those 80 and older was not reliable.
- Males had a stroke prevalence rate of 5.7%; the rate for females was not reliable.

Table 7 Ever Diagnosed With Stroke, Adults 65 and Older Age and Gender			
Population Group	Percent of Group	95% CI	Estimated Number
Age Group			
65-79	4.9	(2.8 - 7.0)	5,121
80 +	14.0*	(2.4 - 25.7)	5,338
Gender			
Male	5.7	(2.6 - 8.8)	3,693
Female	8.7*	(2.6 - 14.7)	6,765
Alameda County Total	7.3	(3.7 - 10.9)	10,459
Day Araa Tatal	7.6	(C 0 0 2)	
Bay Area Total		(6.0 - 9.2)	
California Total	8.8	(8.0 - 9.7)	

<sup>\*</sup> Rate unreliable

# **Asthma**

Asthma is a chronic lung condition characterized by wheezing, breathlessness, chest tightness, and night-time or early morning coughing; it is a serious and growing health problem in California and in the United States.<sup>7</sup>

Asthma can have serious health, quality of life, and economic consequences for patients, families, and society. However, it can be controlled with effective treatment and management. People with asthma have more frequent symptoms if they are exposed to environmental "triggers" such as certain air pollutants, outdoor allergens, tobacco smoke, cockroaches, dust mites, furry pets, mold, and viral respiratory infections. They will also have more symptoms if they do not take appropriate or adequate medications. Frequent asthma symptoms can be a sign of inadequate medical control and persistent exposure to environmental triggers as well as greater severity of the disease. Lack of insurance and low income are critical reasons why asthma sufferers do not receive medical management of their asthma.8

Lifetime asthma prevalence is the percentage of persons who report being diagnosed with asthma at any point in their lives. In 2003, adult lifetime prevalence was 12.3% in California.<sup>3</sup> The lifetime prevalence of asthma among adults ages 18-24 (14.8%) was significantly higher than that of all other age groups. Females had a higher lifetime prevalence of asthma than males (13.8% vs. 10.8%, respectively). Latinos (9.5%) and Asian/Pacific Islanders (9.6%) had lower lifetime asthma prevalence than African Americans (16.2%), Whites (13.9%, or American Indian/Alaska Natives

(22.6%). Adults living in households at or above 300% FPL were more likely to have been diagnosed than those in households below 100% FPL. Those with health insurance had a higher lifetime prevalence of diagnosed asthma than those without health insurance (12.9% vs. 9.2%, respectively).

Among adult Californians who had ever been diagnosed with asthma in 2003, 34.7% reported having had an asthma attack in the past 12 months.<sup>3</sup> Those ages 18-24 were less likely than all other age groups (except those 80 and older) to report having an attack, and a smaller proportion of males (25.8%) with asthma had an attack compared with females (41.3%). Latinos (32.4%) had lower 12-month attack prevalence than Asian/Pacific Islanders (32.8%), African Americans (33.3%), Whites (35.5%) or American Indian/Alaska Natives (53.7%).

In 2003 almost half of California adults (47.2%) who reported a lifetime diagnosis of asthma were currently taking daily medication for quick-relief, long-term control or both.<sup>3</sup> Adults 40 and older were more likely to be taking asthma medication than those ages 18-39. A substantially higher proportion of African Americans (59.8%) and American Indian/Alaska Natives (58.8%) was taking medication compared with Whites (47.0%), Latinos (44.8%) or Asian/Pacific Islanders (39.3%). A higher percentage of people with incomes below 100% FPL was taking medication than among people above 300% FPL. Those with insurance were more likely to be taking medication for their asthma than those without.

### Lifetime Asthma, 12-Month Attack, and Currently on Asthma Medication

- Have you ever been told by a doctor that you have asthma?
- During the past 12 months, have you had an episode of asthma or an asthma attack?
- During the past 12 months, have you used prescription medications for your asthma?
- Are you now taking a daily medication to control your asthma (such as Pulmicort, Azmacort, Flovent, Vanceril, or AeroBid)?

### Lifetime Asthma Prevalence

- In the county, 12.1% of adults reported that they had been diagnosed with asthma in their lifetime (Table 8A). Adult lifetime asthma prevalence was similar to that for the Bay Area (13.0%), and that for California (12.3%).
- Lifetime asthma prevalence peaked among adults 40-64 (12.6%) and was the lowest among seniors 80 and older (9.8%).
- Males were about as likely as females to be diagnosed with asthma (11.3% and 12.9% respectively).
- Among major race/ethnic groups, African

- Americans had significantly higher lifetime asthma prevalence than Asian/Pacific Islanders (19.4% vs. 7.9%). A greater proportion of Latinos and Whites (10.3% and 12.5% respectively) were diagnosed with asthma in their lifetime than Asian/Pacific Islanders (Figure 5).
- Differences in lifetime asthma prevalence by education were not significant (Table 8B).
- Lifetime prevalence of asthma was not significantly different by income.
- Lifetime asthma prevalence among adults was similar for the insured and uninsured (12.3% and 11.0% respectively).

Table 8A
Lifetime Asthma Prevalence, Adults 18 or Older
Age, Gender, and Race/Ethnic Group

	Percent of		Estimated
Population Group	Group	95% CI	Number
Age Group			
18-24	11.7	(7.2 - 16.2)	15,569
25-39	12.0	(8.6 - 15.3)	43,809
40-64	12.6	(10.5 - 14.7)	58,886
65-79	11.5	(7.8 - 15.2)	12,101
80 <b>+</b>	9.8	(4.1 - 15.4)	3,718
Gender			
Male	11.3	(8.8 - 13.8)	60,734
Female	12.9	(11.0 - 14.7)	73,349
Race/Ethnicity			
White	12.5	(10.3 - 14.7)	57,566
Latino	10.3	(7.1 - 13.6)	20,766
African American	19.4	(13.0 - 25.7)	25,557
Asian/Pacific Islander	7.9	(5.1 - 10.6)	22,379
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	21.7	(12.1 - 31.4)	4,263
Alameda County Total	12.1	(10.5 - 13.7)	134,083

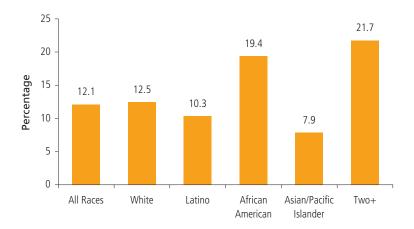
Bay Area Total	13.0	(12.0 - 14.0)
California Total	12.3	(11.9 - 12.8)

# Table 8B Lifetime Asthma Prevalence, Adults 18 or Older Education and Poverty Level and Insurance Status

	Percent of		Estimated
Population Group	Group	95% CI	Number
Education Level			
Less than High School	8.5	(4.6 - 12.4)	8,089
Some HS/HS Diploma	10.6	(8.1 - 13.1)	33,317
Some College/Voc/AA/AS	17.1	(12.8 - 21.5)	45,015
Bachelor's Degree	11.9	(8.7 - 15.2)	30,943
Some Grad School/Masters	9.0	(6.5 - 11.6)	12,404
Doctorate or Equivalent	11.1	(5.7 - 16.5)	4,314
Poverty Level			
0-99% FPL	10.7	(6.7 - 14.6)	14,293
100-199% FPL	10.0	(7.2 - 12.8)	16,275
200-299% FPL	13.9	(9.6 - 18.3)	19,872
≥300% FPL	12.5	(10.3 - 14.7)	83,642
Insurance Status			
Insured	12.3	(10.6 - 13.9)	117,457
Not Insured	11.0	(6.3 - 15.7)	16,626

<sup>-</sup> Data not reported due to small numbers

Figure 5 Lifetime Asthma Prevalence, Adults 18 or Older Race/Ethnic Group



### Twelve-Month Asthma Attack

- In the county, 36.4% of adults who were diagnosed with asthma reported having an asthma attack or episode in the past 12 months (Table 9A). Adult 12-month asthma prevalence was similar to that for the Bay Area (30.9%), and that for California (34.7%).
- Twelve-month asthma prevalence increased with age: adults 25-39 were over twice as likely to have an asthma attack than those under 25.
- Males were less likely than females to have an asthma attack or episode in the past 12 months (30.9% vs. 40.0%).
- Among major race/ethnic groups, Asian/Pacific Islanders had the highest proportion reporting an asthma episode/attack in the past 12 months and African Americans the lowest (44.3% vs. 23.3%). The proportion of Whites and Latinos reporting an asthma episode/attack in the past 12 months was 40.2% and 25.5% respectively. Differences among race/ethnic groups were not significant.
- Differences in 12-month asthma attack prevalence by education were not significant (Table 9B).
- Twelve-month asthma attack prevalence was not significantly different by income or insurance status.

Table 9A
Twelve-Month Asthma Attack/Episode Among Those with Asthma,
Adults 18 or Older
Age, Gender, and Race/Ethnic Group

	Percent of		Estimated
Population Group	Group	95% CI	Number
Age Group			
18-24	17.4	(3.0 - 31.9)	2,716
25-39	36.3	(22.5 - 50.1)	15,900
40-64	38.1	(29.5 - 46.7)	22,442
65-79	49.3	(32.7 - 65.8)	5,961
80+	46.5	(17.8 - 75.1)	1,727
Gender			
Male	31.9	(21.1 - 42.8)	19,388
Female	40.0	(32.5 - 47.6)	29,359
Race/Ethnicity			
White	40.2	(30.9 - 49.5)	23,146
Latino	25.5	(12.3 - 38.8)	5,300
African American	23.3	(12.9 - 33.7)	5,949
Asian/Pacific Islander	44.3	(25.5 - 63.2)	9,915
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	61.0	(37.2 - 84.8)	2,600
Alameda County Total	36.4	(29.9 - 42.8)	48,747

Bay Area Total	30.9	(27.3 - 34.4)
California Total	34.7	(33.0 - 36.4)

Table 9B
Twelve-Month Asthma Attack/Episode Among Those with Asthma,
Adults 18 or Older
Education and Poverty Level and Insurance Status

Education and I overty Edver and insurance otatas			
	Percent of		Estimated
Population Group	Group	95% CI	Number
Education Level			
Less than High School	35.7	(14.0 - 57.4)	2,887
Some HS/HS Diploma	42.7	(30.6 - 54.9)	14,241
Some College/Voc/AA/AS	26.2	(15.8 - 36.5)	11,772
Bachelor's Degree	43.4	(28.5 - 58.2)	13,424
Some Grad School/Master's	40.3	(25.9 - 54.7)	4,996
Doctorate or Equivalent	33.1	(12.5 - 53.7)	1,428
Poverty Level			
0-99% FPL	25.9	(12.0 - 39.8)	3,696
100-199% FPL	37.3	(24.0 - 50.6)	6,069
200-299% FPL	50.0	(33.0 - 67.0)	9,930
≥300% FPL	34.7	(26.2 - 43.3)	29,052
Insurance Status			
Insured	37.9	(31.1 - 44.7)	44,542
Not Insured	25.3	(5.0 - 45.6)	4,205

<sup>-</sup> Data not reported due to small numbers

### On Medication for Asthma

- In the county, 41.1% of adults with asthma reported being on daily medication for long-term control or management of asthma symptoms or attacks, which is comparable to the percentage in the Bay Area (43.7%) and California (47.2%).
- Adults age 40 and older were significantly more likely (over twice as likely) to be on daily asthma medication than younger adults. The proportion of adults with asthma who were on medication increased with increasing age: 61.4% of seniors 65-79 and 87.3% of those over 80 were on medication for their asthma.
- Males with asthma were more likely than females to be on medication (43.5% vs. 39.7%).
- Among major race/ethnic groups, African
   Americans were more likely to be on medication

for their asthma (58.0%) than Latinos (44.8%) and Whites (41.8%). The numbers for Asian/Pacific Islanders were too small to calculate reliable rates for comparison (Figure 6).

- The percentage of adults on medication for their asthma was not significantly different by education level (Table 10B).
- Income clearly influenced the likelihood of adults with asthma being on medication. Adults from lower income households were more likely to be on medication for their asthma than those from higher income households—the percentage of those on medication ranged from 69.8% in the lowest income group to 34.9% in the highest income group (Figure 7).
- Among asthmatic adults who were insured, 43.8% were on medication. The estimated percentage among the uninsured was not reliable.

Table 10A
Currently Taking Asthma Medication, Adults 18 or Older
Age, Gender, and Race/Ethnic Group

	Percent of		Estimated
Population Group	Group	95% CI	Number
Age Group			
18-24	9.2*	(0.0 - 18.9)	862
25-39	24.1	(12.8 - 35.5)	5,752
40-64	49.2	(38.3 - 60.1)	19,547
65-79	61.4	(43.9 - 78.8)	6,597
80+	87.3	(70.0 - 100.0)	3,095
Gender			
Male	43.5	(29.4 - 57.6)	13,865
Female	39.7	(31.5 - 47.9)	21,988
Race/Ethnicity			
White	41.6	(30.5 - 52.8)	17,544
Latino	44.8	(24.6 - 65.1)	4,304
African American	58.0	(44.7 - 71.2)	9,123
Asian/Pacific Islander	26.9*	(9.3 - 44.5)	3,508
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	32.8	(6.8 - 58.8)	1,188
Total	41.1	(33.7 - 48.4)	35,852
Bay Area Total	43.7	(39.0 - 48.5)	

47.2

(44.9 - 49.5)

# Table 10B Currently Taking Asthma Medication, Adults 18 or Older Education and Poverty Level and Insurance Status

Education and Poverty Level and Insurance Status				
	Percent of		<b>Estimated</b>	
Population Group	Group	95% CI	Number	
Education Level				
Less than High School	49.9	(22.6 - 77.1)	2,633	
Some HS/HS Diploma	43.2	(29.9 - 56.5)	11,139	
Some College/Voc/AA/AS	42.2	(28.1 - 56.3)	10,332	
Bachelor's Degree	36.7	(20.0 - 53.4)	7,858	
Some Grad School/Master's	41.5	(24.2 - 58.7)	3,358	
Doctorate or Equivalent	24.2*	(4.9 - 43.5)	533	
Poverty Level				
0-99% FPL	69.8	(52.2 - 87.3)	5,612	
100-199% FPL	56.9	(40.5 - 73.3)	6,637	
200-299% FPL	35.0	(18.3 - 51.6)	5,875	
≥300% FPL	34.9	(25.2 - 44.6)	17,728	
Insurance Status				
Insured	43.8	(36.1 - 51.4)	34,454	
Not Insured	16.4*	(1.9 - 30.8)	1,398	

<sup>\*</sup> Rate unreliable

California Total

<sup>-</sup> Data not reported due to small numbers

Figure 6 Currently Taking Asthma Medication, Adults 18 or Older Race/Ethnic Group

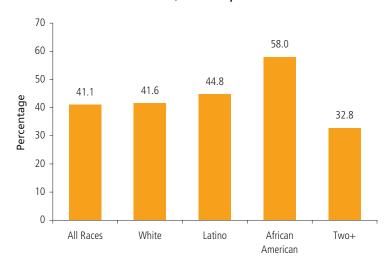
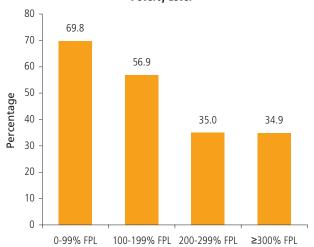


Figure 7
Currently Taking Asthma Medication, Adults 18 or Older
Poverty Level



# **Health-Related Quality of Life**

Health-Related Quality of Life (HRQOL) is defined as "an individual's or group's perceived physical and mental health over time." HRQOL is rapidly gaining acceptance as a measurable health outcome. HRQOL questions on perceived physical and mental health and function have become an important component of health surveillance and are generally considered valid measures of service needs and intervention outcomes. HRQOL is related to both self-reported chronic diseases (diabetes, breast cancer, arthritis, and hypertension), and their risk factors (body mass index, physical inactivity, and smoking status). Measuring HRQOL can help determine the burden of preventable disease, injuries, and disabilities in a population.

The Centers for Disease Control and Prevention (CDC) has developed and validated a compact set of measures for HRQOL. These are the Healthy Days measures, an integrated set of broad questions about recent perceived health status and activity limitation. The core Healthy Days measures assess a person's perceived sense of well-being through four questions on: 1) self-rated health; 2) number of recent days when physical health was not good; 3) number of recent days when mental health was not good; and 4) number of activity limitation days because of poor physical or mental health. For the Healthy Days measures, recent is defined as the past 30 days and "not good" is defined as experiencing illness or distress during 14 or more of the last 30 days.

In 2003, 4.3% of California adults reported that their health was "poor" (4.3%).<sup>3</sup> A greater proportion reported that their health was "fair" (14.9%), "good" (30.1%,), "very good" (30.2%), or "excellent" (20.6%). Whites (3.9%) were least likely to report poor health compared to Latinos (5.2%), Asian/Pacific Islanders (5.7%), African Americans (7.0%), or American Indians/Alaska Natives (10.5%).

In 2003, 11% of Californians reported that their physical health was "not good" due to physical illness or injury. The percentage ranged from 5.5% in the 18-24 age group to 21.1% of those 80 and older. Differences between each successive age group were significant. Women were significantly more likely than men to report poor physical health. Among race/ethnic groups, Asians (7.4%) were substantially less likely to report poor physical health compared to Latinos (10.7%), Whites (11.4%), African Americans (13.1%), and American Indian/Alaska Natives (15.8%). A smaller proportion of adults in households between 200% and 299% FPL (10.9%) and at or above 300% FPL (7.9%) reported poor health compared to lower income groups.

In 2003, 11.1% of California adults reported frequent mental distress, i.e. 14 or more days of poor mental health in the past 30 days. <sup>10</sup> Seniors 65 and older were significantly less likely to have poor mental health than any of the younger age groups. Men (8.4%) were less likely than women (13.6%) to report frequent mental distress. Among the major race/ethnic groups,

#### **Self-Perceived Health Status**

• In general, would you say your health is excellent, very good, good, fair or poor?

#### **Unhealthy Days**

Now we're going to talk about your health over the past 30 days.

- Think only about the health of your body. On how many days was the health of your body not good?
- Mental health includes stress, feeling sad or down and just not feeling like yourself. On how many days would you say your mental health was not good?
- On how many days did poor health of your body or mind keep you from doing the things you usually do, such as taking care of yourself, working, and having fun?

Asians (7.2%) reported the lowest prevalence of frequent mental distress compared to Whites (10.7%), Latinos (12.1%), African Americans (14.3%), or American Indian/Alaska Natives (19.1%). Adults in households below 200% FPL were significantly more likely to have frequent mental distress than those in households at or above 200% FPL. Insured adults (10.5%) reported less frequent mental distress compared to uninsured adults (14.1%).

In 2003 the percentage of California adults who reported having 14 or more days in which they were unable to perform daily activities due to poor physical or mental health was 5.7%. Those 40 and older were significantly more likely to have activity limitations due to ill health than those under age 40. A higher percentage of women (6.7%) than men (4.7%) reported activity limitations due to poor physical or mental health. Asians (3%) were less likely than Latinos (5.3%), Whites (6.1%), African Americans (7.9%), or American Indian/Alaska Natives (11.8%) to report activity limitations. Those below 200% FPL had significantly higher percents of reporting activity limitations due to poor health compared to those at or above 200% FPL.

### **Self-Perceived Health Status**

- In the county, only 3.6% of adults reported that they were in poor health; this rate is similar to that for the Bay Area (3.2%) and California (3.7%) (Table 11).
- About one-third of adults (32.1%) described their health as 'very good', 27.6% as 'good', and 22.5% as 'excellent'. A smaller proportion reported that their health was 'fair' (14.2%) (Figure 8).

Table 11 Self-Perceived Health Status, Adults 18 or Older			
Self-Perceived Health Status	Percent	95% CI	Estimated Number
Excellent	22.5	(20.4 - 24.7)	249,667
Very Good	32.1	(29.8 - 34.4)	355,271
Good	27.6	(25.4 - 29.8)	306,233
Fair	14.2	(12.4 - 16.0)	157,276
Poor	3.6	(2.8 - 4.3)	39,467

Bay Area Total	3.2	(2.8 - 3.7)
California Total	3.7	(3.5 - 3.9)

Figure 8
Self-Perceived Health Status, Adults 18 or Older



### **Poor Self-Perceived Health Status**

- The percentage of adults reporting poor self-rated health increased with age; adults 65 and over were significantly more likely than those 40-64 to report poor health status (Table 12A). Among seniors, 18.2% of those 80 and older reported being in poor health, almost twice the proportion of those age 65-79 (9.8%).
- Males were less likely than females to report poor health status (2.9% vs. 4.2%).
- Among major race/ethnic groups, African Americans were most likely and Whites least likely to report poor self-rated health (4.6% & and 2.9% respectively). Latinos and Asian/Pacific Islanders (4.2% and 3.7% respectively) were less likely to report poor health status than African Americans (Figure 9).
- Education was associated with self-reported

- health status. Adults who did not go to high school were significantly more likely to report being in poor health than those with a high school education or higher. The rates of poor health status ranged from 11.6% among those who did not go to high school to 2.4% among those with a bachelor's degree (Table 12B; Figure 10).
- Lower income was associated with poor self-reported health status. Adults with household incomes below the FPL were significantly more likely to report poor health status (10.5%) than those with incomes at 200-299% FPL or 300% FPL and above (3.2% and 1.2% respectively) (Figure 11).
- The percentage of adults reporting poor self-reported health was not significantly different by insurance status.

Table 12A
Poor Self-Perceived Health Status, Adults 18 or Older
Age, Gender, and Race/Ethnic Group

3-,			
Denulation Crown	Percent of	OEN/ CI	Estimated Number
Population Group	Group	95% CI	Number
Age Group			
18-39	-	-	-
40-64	3.5	(2.5 - 4.4)	16,205
65-79	9.8	(5.7 - 13.9)	10,323
80+	18.2	(10.1 - 26.4)	6,932
Gender			
Male	2.9	(1.9 - 4.0)	15,764
Female	4.2	(3.1 - 5.2)	23,703
Race/Ethnicity			
White	2.9	(1.9 - 3.9)	13,250
Latino	4.2	(2.1 - 6.3)	8,447
African American	4.6	(2.9 - 6.3)	6,093
Asian/Pacific Islander	3.7	(2.1 - 5.2)	10,458
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	6.2*	(0.3 - 12.0)	1,208
Alameda County Total	3.6	(2.8 - 4.3)	39,467

Table 12B
Poor Self-Perceived Health Status, Adults 18 or Older
Education and Poverty Level and Insurance Status

	Percent of		Estimated
Population Group	Group	95% CI	Number
Education Level			
Less than High School	11.6	(7.3 - 15.9)	11,042
Some HS/HS Diploma	4.2	(2.6 - 5.8)	13,196
Some College/Voc/AA/AS	2.8	(1.6 - 3.9)	7,287
Bachelor's Degree	2.4	(1.0 - 3.9)	6,289
Some Grad School/Master's	1.0*	(0.3 - 1.6)	1,348
Doctorate or Equivalent	0.8*	(0.0 - 1.8)	305
Poverty Level			
0-99% FPL	10.5	(6.9 - 14.1)	14,099
100-199% FPL	7.7	(4.8 - 10.6)	12,566
200-299% FPL	3.2	(1.5 - 5.0)	4,617
≥300% FPL	1.2	(0.7 - 1.8)	8,185
Insurance Status			
Insured	3.7	(3.0 - 4.5)	35,833
Not Insured	2.4	(0.5 - 4.3)	3,634

<sup>\*</sup> Rate unreliable

<sup>-</sup> Data not reported due to small numbers

Figure 9 Poor Self-Perceived Health Status, Adults 18 or Older Race/Ethnic Group

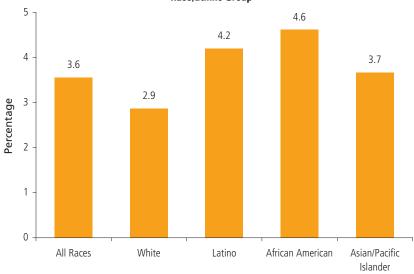


Figure 10

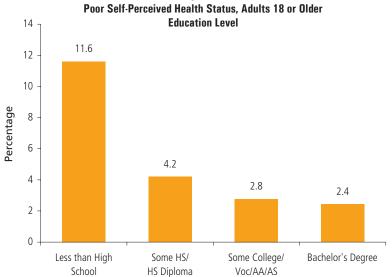
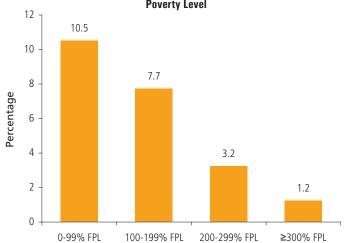


Figure 11 Poor Self-Perceived Health Status, Adults 18 or Older **Poverty Level** 



Health of Alameda County's Adults Selected Findings from CHIS 2003

**Health Status** Health-Related Quality of Life

### **Physically Unhealthy Days**

- In the county, 9.2% of adults reported that their physical health was "not good" due to physical illness or injury, a lower percentage than in California (11%) (Table 13A). The CDC defines "not good" as experiencing physical illness or injury during 14 of the past 30 days.
- Higher proportions of adults in each successive age group reported being physically unhealthy, ranging from 4.2% of those 18-39 to 19.3% of those 80 and over. Adults 40 and over were significantly more likely to report being physically unhealthy for 14 or more of the past 30 days than those below 40 (4.2% vs. 11.5%).
- Males were less likely than females to report that their physical health was "not good" (7.8% vs. 10.5%).
- Among major race/ethnic groups, African Amer-

- icans were most likely to report being physically unhealthy (11.1%) compared to Whites (10.8%), Latinos (8.0%) or Asian/Pacific Islanders (6.2%) (Figure 12).
- Lower education level was associated with a higher likelihood of adults reporting that their physical health was "not good." The proportion of adults reporting poor physical health ranged from 6.8% among those with some graduate school education to 11.2% among those who did not go to high school (Table 13B; Figure 13).
- Adults from low-income households were significantly more likely to report being physically unhealthy than those from high-income households (12.1% vs. 6.6%) (Figure 14).
- The proportion of adults who reported being physical unhealthy was not significantly different by insurance status.

Table 13A
Physically Unhealthy Days Past 30 Days, Adults 18 or Older
Age, Gender, and Race/Ethnic Group

	Percent of		Estimated
Population Group	Group	95% CI	Number
Age Group			
18-39	4.2	(3.0 - 5.5)	21,206
40-64	11.5	(9.1 - 14.0)	53,703
65-79	18.9	(13.7 - 24.0)	19,810
80+	19.3	(11.5 - 27.0)	7,333
Gender			
Male	7.8	(5.6 - 10.0)	41,851
Female	10.5	(9.0 - 12.1)	60,202
Race/Ethnicity			
White	10.8	(8.4 - 13.3)	50,018
Latino	8.0	(5.8 - 10.3)	16,093
African American	11.1	(8.2 - 14.0)	14,633
Asian/Pacific Islander	6.2	(3.9 - 8.6)	17,794
Amer Indian/Alaska Native	11.5*	(0.0 - 25.8)	710
Other	-	-	-
Two+	14.3	(6.4 - 22.2)	2,806
Alameda County Total	9.2	(7.9 - 10.5)	102,052

California Total 11.0 (10.5 · 11.4)

Table 13B
Physically Unhealthy Days Past 30 Days, Adults 18 or Older
Education and Poverty Level and Insurance Status

	Percent of		Estimated
Population Group	Group	95% CI	Number
Education Level			
Less than High School	11.2	(7.1 - 15.2)	10,632
Some HS/HS Diploma	9.1	(7.0 - 11.2)	28,540
Some College/Voc/AA/AS	10.0	(7.7 - 12.4)	26,327
Bachelor's Degree	9.5	(5.6 - 13.4)	24,726
Some Grad School/Master's	6.8	(4.2 - 9.5)	9,400
Doctorate or Equivalent	6.2*	(2.4 - 10.1)	2,427
Poverty Level			
0-99% FPL	12.1	(8.7 - 15.4)	16,198
100-199% FPL	15.9	(11.6 - 20.2)	25,879
200-299% FPL	11.2	(7.6 - 14.8)	15,967
≥300% FPL	6.6	(4.9 - 8.2)	44,009
Insurance Status			
Insured	9.4	(8.0 - 10.9)	90,174
Not Insured	7.9	(4.5 - 11.3)	11,879

<sup>\*</sup> Rate unreliable

<sup>-</sup> Data not reported due to small numbers

Figure 12
Physically Unhealthy Days Past 30 Days, Adults 18 or Older
Race/Ethnic Group

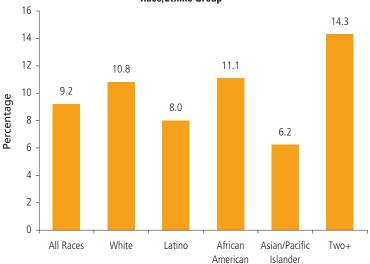


Figure 13
Physically Unhealthy Days Past 30 Days, Adults 18 or Older
Education Level

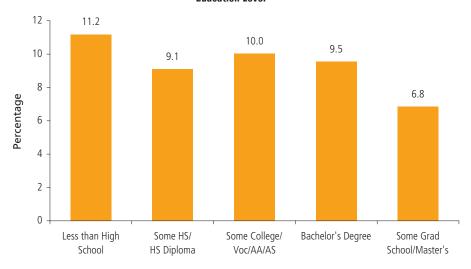


Figure 14
Physically Unhealthy Days Past 30 Days, Adults 18 or Older
Poverty Level



### **Mentally Unhealthy Days**

- In the county, 10.4% of adults reported that their mental health was "not good" due to frequent mental distress; this proportion is similar to that in California (11.1%) (Table 14A). The CDC defines "not good" as experiencing poor mental health during 14 of the past 30 days.
- The proportion of adults reporting poor mental health was not significantly different by age group.
- Males were significantly less likely than females to report that their mental health was "not good" (8.0% vs. 12.6%).
- Among major race/ethnic groups, African Americans were more likely to report poor mental health (13.0%) than Latinos (11.2%), Asian/Pacific Islanders (9.9%), or Whites (9.4%) (Figure 15).

- Education level influenced the likelihood of adults reporting that their mental health was "not good." This proportion ranged from 7.3% among those with some graduate school education to 12.3% among those with a high school education (Table 14B; Figure 16).
- Adults from low-income households were significantly more likely to report being mentally unhealthy than those from high-income households (14.8% vs. 8.2%) (Figure 17).
- The proportion of adults who reported being mentally unhealthy was not significantly different by insurance status.

Note: Low-income households refers to those 0-99% below the FPL. High-income households refers to those at or above 300% FPL.

Table 14A
Mentally Unhealthy Days Past 30 Days, Adults 18 or Older
Age, Gender, and Race/Ethnic Group

Population Group	Percent of Group	95% CI	Estimated Number
Age Group			
18-39	10.2	(7.9 - 12.6)	51,109
40-64	10.2	(8.2 - 12.3)	47,607
65-79	9.4	(6.0 - 12.8)	9,889
80 <b>+</b>	16.3*	(4.2 - 28.4)	6,201
Gender			
Male	8.0	(6.0 - 10.1)	43,182
Female	12.6	(10.5 - 14.6)	71,624
Race/Ethnicity			
White	9.4	(7.4 - 11.4)	43,398
Latino	11.2	(8.0 - 14.4)	22,472
African American	13.0	(10.0 - 16.1)	17,180
Asian/Pacific Islander	9.9	(6.0 - 13.8)	28,212
Amer Indian/Alaska Native	10.6*	(0.0 - 24.7)	654
Other	-	-	-
Two+	13.2	(6.2 - 20.2)	2,591
Alameda County Total	10.4	(8.9 - 11.8)	114,806
California Total	11.1	(10.7 - 11.5)	

Table 14B

Mentally Unhealthy Days Past 30 Days, Adults 18 or Older
Education and Poverty Level and Insurance Status

Population Group	Percent of Group	95% CI	Estimated Number
Education Level			
Less than High School	11.7*	(4.4 - 18.9)	11,089
Some HS/HS Diploma	12.3	(9.5 - 15.1)	38,694
Some College/Voc/AA/AS	11.9	(8.7 - 15.0)	31,137
Bachelor's Degree	8.4	(5.7 - 11.1)	21,752
Some Grad School/Master's	7.3	(4.3 - 10.4)	10,084
Doctorate or Equivalent	5.3*	(0.0 - 11.3)	2,050
Poverty Level			
0-99% FPL	14.8	(10.5 - 19.1)	19,848
100-199% FPL	15.4	(11.3 - 19.5)	25,070
200-299% FPL	10.4	(7.2 - 13.7)	14,890
≥300% FPL	8.2	(6.3 - 10.2)	54,998
Insurance Status			
Insured	10.2	(8.6 - 11.8)	97,432
Not Insured	11.5	(7.8 - 15.2)	17,373

<sup>\*</sup> Rate unreliable

<sup>-</sup> Data not reported due to small numbers

Figure 15
Mentally Unhealthy Days Past 30 Days, Adults 18 or Older
Age, Gender, and Race/Ethnic Group

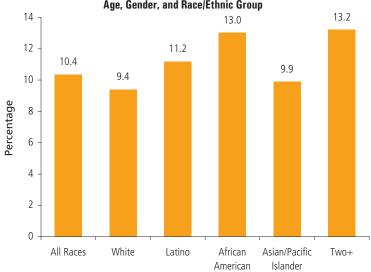


Figure 16
Mentally Unhealthy Days Past 30 Days, Adults 18 or Older
Education Level

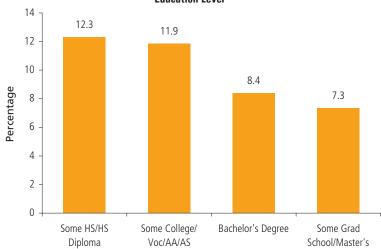
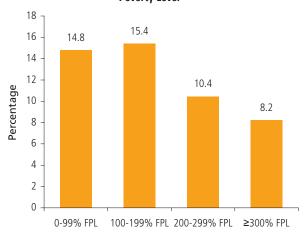


Figure 17 Mentally Unhealthy Days Past 30 Days, Adults 18 or Older Poverty Level



### **Poor Health Prohibited Activity**

- In the county, 4.5% of adults reported having 14 or more days in which that they were unable to perform their daily activities due to poor mental or physical health, i.e., experienced activity limitations. This percentage is significantly lower than in California (5.7%) (Table 15A).
- The proportion of adults who report activity limitations due to poor health increased with each successive age group, although the differences by age group were not significant.
- Males were less likely than females to report that poor health prohibited their activities (3.9% vs. 5.2%).
- Among major race/ethnic groups, African Americans were most likely to report activity limitations due to poor health (7.7%) compared to Whites (5.1%), or Latinos (4.9%). The numbers were too small among Asian/Pacific Islanders to

- calculate reliable rates for comparison.
- Education level influenced the proportion of adults who experienced activity limitations due to poor health. This proportion increased from 2.6% among adults with a doctorate or equivalent to 5.5% among those with less than a high school education (Table 15B).
- Adults from low-income households were significantly more likely to report activity limitations due to poor health than those from high-income households (7.4% vs. 2.8%) (Figure 18).
- The proportion of adults who reported activity limitations was not significantly different by insurance status.

Note: Low-income households refers to those 0-99% below the FPL. High-income households refers to those at or above 300% FPL.

Table 15A
Poor Health Prohibited Activity Past 30 Days, Adults 18 or Older
Age, Gender, and Race/Ethnic Group

	Percent of		Estimated
Population Group	Group	95% CI	Number
Age Group			
18-39	3.2	(1.9 - 4.5)	15,897
40-64	5.1	(3.8 - 6.4)	23,904
65-79	7.0	(4.0 - 9.9)	7,321
80+	8.0*	(2.8 - 13.2)	3,033
Gender			
Male	3.9	(2.6 - 5.1)	20,731
Female	5.2	(4.0 - 6.3)	29,424
Race/Ethnicity			
White	5.1	(3.6 - 6.7)	23,695
Latino	4.9	(2.8 - 7.0)	9,826
African American	7.7	(5.1 - 10.4)	10,201
Asian/Pacific Islander	1.5*	(0.4 - 2.6)	4,239
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	10.9*	(3.5 - 18.2)	2,131
Alameda County Total	4.5	(3.7 - 5.4)	50,156

Table 15B
Poor Health Prohibited Activity Past 30 Days, Adults 18 or Older
Education and Poverty Level and Insurance Status

	Percent of		Estimated
Population Group	Group	95% CI	Number
Education Level			
Less than High School	5.5	(2.9 - 8.1)	5,276
Some HS/HS Diploma	5.3	(3.7 - 7.0)	16,814
Some College/Voc/AA/AS	4.9	(3.2 - 6.6)	12,874
Bachelor's Degree	3.7	(1.6 - 5.8)	9,564
Some Grad School/Master's	3.4	(1.2 - 5.6)	4,628
Doctorate or Equivalent	2.6	(0.8 - 4.3)	999
Poverty Level			
0-99% FPL	7.4	(4.5 - 10.3)	9,905
100-199% FPL	8.7	(5.7 - 11.7)	14,144
200-299% FPL	5.0	(2.6 - 7.5)	7,177
≥300% FPL	2.8	(1.9 - 3.8)	18,930
Insurance Status			
Insured	4.5	(3.6 - 5.4)	43,205
Not Insured	4.6	(2.3 - 6.9)	6,950

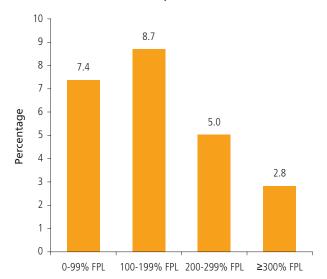
- \* Rate unreliable
- Data not reported due to small numbers

5.7

(5.4 - 6.0)

California Total

Figure 18
Poor Health Prohibited Activity Past 30 Days, Adults 18 or Older
Poverty Level



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# Health-Related Behaviors

# Overweight, Obesity, and Weight Management

Nationally, the prevalence of obesity increased by 61% in the 1990s. This increasing trend was seen in all demographic groups, and can be explained largely by the decrease in physical activity levels over time. Obesity is a major risk factor for diabetes. In the United States obesity is more prevalent among the poor compared to the affluent, and people of color compared to Whites. Obese persons are significantly more likely to report fair/poor health, activity limitations, and to make visits to health care providers than persons who are of normal weight or overweight. Overweight adults are at increased risk of hypertension, coronary heart disease, and some forms of cancer.

Physical activity and diet contribute to the maintenance of body weight. The combination of inactivity and poor dietary habits is the second leading contributor to mortality in the United States after tobacco use. Avoiding weight gain in adulthood is important because treatment of obesity has poor long-term success and lost weight is often regained. Increasing leisure time activity is associated with reductions in weight gain. To maintain weight loss, permanent lifestyle changes involving good dietary habits, decreased sedentary behavior, and increased physical activity are essential. Changes in physical and social environment can help people maintain long-term lifestyle

changes both for diet and physical activity.3

In 2003, over half of California's adults (55.6%) was overweight or obese, i.e., had a body mass index (BMI) of 25 or higher.<sup>5</sup> Those 40-64 (61.7%) and 65-79 (60.5%) were substantially more likely to be overweight than the other age groups, and men (64.5%) were significantly more likely than women (47.0%) to be overweight. Higher proportions of proportions of African Americans (65.7%), Latinos (65.0%), and American Indian/Alaska Natives (64.0%) were overweight compared to Whites (53.7%) and Asians (33.3%). Among income groups, those at or above 300% FPL were less likely to be overweight than adults in the other income categories. There were no differences based on insurance status.

In 2003, 21.2% of California adults was obese i.e., had a BMI of 30 or higher.<sup>5</sup> Males (22.1%) had similar rates of obesity as females (20.3%). Asian/Pacific Islanders (7.6%) had substantially lower obesity prevalence compared to Whites (19.2%), Latinos (27.2%), American Indian/Alaska Natives (32.2%), or African Americans (33.5%).

Note: Body mass index (BMI) is a measure of body fat based on height and weight {Weight (kg)/Height (m)²} and applies to adult men and women. It is categorized as: <18.5=underweight, 18.5-24.9=normal, 25-30=overweight, >30=obese.

### Overweight and Obesity

- How tall are you without shoes?
- (When not pregnant, how/How) much do you weigh without shoes?

### Perception of Own Weight

 Would you say you are very underweight, slightly underweight, about the right weight, slightly overweight, or very overweight?‡

#### Weight Management

- Are you currently trying to (lose weight,) stay the same weight, (gain weight,) or not do anything about your weight?‡
- In the past 7 days, did you diet to (lose weight/keep from gaining weight)?‡
- Did you exercise?‡
- Did you do anything else?‡
- In the past 12 months has a doctor advised you to lose weight?‡
- ‡ Asked only of Alameda County residents.

### **Overweight**

- In the county, over half (51.9%) of adults were overweight, i.e., had a BMI of 25 or higher (Table 16A). The county did not meet the Healthy People 2010 goal of no more than 40% overweight adults. The percentage of overweight adults was similar to that for the Bay Area (51.2%), and for California (55.6%).
- Adults 40 and older were significantly more likely to be overweight than those under 40. Those 40-64 had the highest prevalence of overweight (59.3%) and young adults 18-24 had the lowest (36.1%).
- Males were significantly more likely than females to be overweight (60.7% vs. 43.6%).
- Among major race/ethnic groups, Latinos were over twice as likely to be overweight as Asian/Pacific Islanders (67.3% vs. 32.6%). African Ameri-

Table 16A
Overweight BMI 25 or Higher, Adults 18 or Older
Age, Gender, and Race/Ethnic Group

	Percent of		Estimated
Population Group	Group	95% CI	Number
Age Group			
18-24	36.1	(28.7 - 43.5)	48,176
25-39	46.4	(41.7 - 51.1)	169,675
40-64	59.3	(55.7 - 62.8)	276,134
65-79	57.6	(50.9 - 64.2)	60,453
80+	54.1	(41.4 - 66.8)	20,595
Gender			
Male	60.7	(57.0 - 64.4)	326,171
Female	43.6	(40.5 - 46.7)	248,861
Race/Ethnicity			
White	53.2	(49.7 - 56.8)	245,747
Latino	67.3	(62.0 - 72.6)	135,201
African American	64.8	(58.6 - 71.0)	85,426
Asian/Pacific Islander	32.6	(27.2 - 37.9)	92,881
Amer Indian/Alaska Native	44.2*	(12.3 - 76.1)	2,715
Other	58.8*	(22.4 - 95.2)	1,531
Two+	58.8	(46.7 - 71.0)	11,532
Alameda County Total	51.9	(49.4 - 54.4)	575,033
	<b>54.0</b>	/40.0 50.0	
Bay Area Total	51.2	(49.8 - 52.6)	

55.6

(54.9 - 56.2)

- cans and Whites (64.8% and 53.2% respectively) were significantly more likely to be overweight than Asian/Pacific Islanders (Figure 19).
- Prevalence of overweight decreased with higher educational attainment. A significantly higher proportion of adults with less than a bachelor's degree were overweight compared to those with a bachelor's degree or higher (Table 16B; Figure 20). The proportion of overweight adults ranged from 67.9% among those who did not go to high school to 39.2% among those who went to graduate school.
- There was no significant difference in prevalence of overweight by income.
- There was no significant difference in the proportion of overweight adults by insurance status.
- Only young adults 18-24, Asian/Pacific Islanders, and those with some graduate school or a master's met the Healthy People 2010 target.

# Table 16B Overweight BMI 25 or Higher, Adults 18 or Older Education and Poverty Level and Insurance Status

Education and Poverty Level and Insurance Status				
	Percent of		Estimated	
Population Group	Group	95% CI	Number	
Education Level				
Less than High School	67.9	(59.4 - 76.4)	64,614	
Some HS/HS Diploma	54.9	(50.2 - 59.7)	172,611	
Some College/Voc/AA/AS	58.2	(53.2 - 63.3)	153,010	
Bachelor's Degree	43.8	(38.8 - 48.9)	113,645	
Some Grad School/Master's	39.2	(33.1 - 45.4)	53,928	
Doctorate or Equivalent	44.2	(34.3 - 54.1)	17,225	
Poverty Level				
0-99% FPL	51.3	(43.6 - 59.0)	68,810	
100-199% FPL	56.8	(50.7 - 62.9)	92,370	
200-299% FPL	47.7	(41.5 - 53.9)	67,964	
≥300% FPL	51.7	(48.5 - 55.0)	345,888	
Insurance Status				
Insured	51.8	(49.2 - 54.5)	496,180	
Not Insured	52.3	(44.7 - 59.8)	78,852	

<sup>\*</sup> Rate unreliable



**HP 2010 Objective 19-1:** At least 60% of adults age 20 and older will be at a healthy weight (defined as a BMI equal to or greater than 18.5 and less than 25). Conversely, no more than 40% will be overweight or obese (BMI equal to or greater than 25).

California Total

Figure 19 Overweight BMI 25 or Higher, Adults 18 or Older Race/Ethnic Group

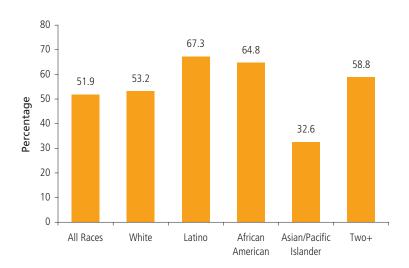
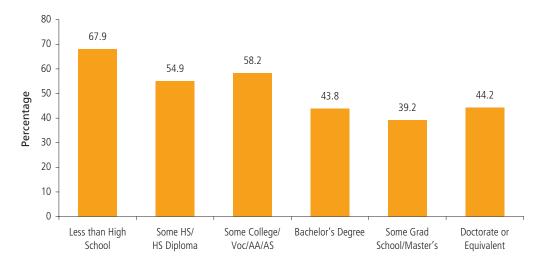


Figure 20 Overweight BMI 25 or Higher, Adults 18 or Older Education Level



# Obesity

- In the county, 18.4% of adults were obese, i.e., BMI 30 or higher (Table 17A). This exceeds the Healthy People 2010 target of no more than 15% obese adults. Adult obesity prevalence was similar to that for the Bay Area (17.2%), and for California (20.4%).
- Obesity prevalence increased with successive age group; adults 25 and older were significantly more likely to be obese than young adults 18-24.
- Males were about as likely as females to be obese (18.7% and 18.1% respectively).
- Among major race/ethnic groups, African Americans were over three times as likely to be obese than Asian/Pacific Islanders (31.7% vs. 9.2%). They were also significantly more likely to

- be obese than Whites (16.9%). Latinos had the second highest obesity prevalence of all groups (26.0%) (Figure 21).
- Obesity prevalence decreased with higher education level. The prevalence of obesity was significantly higher among those who did not go to high school (30.0%) than among those with a doctorate or equivalent (12.4%) (Table 17B; Figure 22).
- There was no significant difference in obesity prevalence by income (Figure 23) or insurance status..
- Only young adults 18-24, Asian/Pacific Islanders, and adults with a bachelor's degree or higher met the Healthy People 2010 target for obesity.

Table 17A		
Obesity, BMI 30 or Higher, Adults 18 or Older		
Age, Gender, and Race/Ethnic Group		

Population Group	Percent of	95% CI	Estimated Number
	Group	95% CI	Nulliber
Age Group			
18-24	9.2	(5.4 - 13.0)	12,241
25-39	17.8	(14.2 - 21.4)	64,935
40-64	21.2	(18.6 - 23.9)	98,952
65-79	18.6	(13.6 - 23.7)	19,571
80 ÷	20.7*	(6.7 - 34.6)	7,870
Gender			
Male	18.7	(15.8 - 21.6)	100,248
Female	18.1	(15.8 - 20.4)	103,320
Race/Ethnicity			
White	16.9	(14.2 - 19.5)	77,912
Latino	26.0	(21.0 - 30.9)	52,173
African American	31.7	(25.9 - 37.5)	41,790
Asian/Pacific Islander	9.2	(5.9 - 12.6)	26,309
Amer Indian/Alaska Native	30.7*	(0.1 - 61.3)	1,889
Other	-	-	-
Two+	14.4	(7.1 - 21.7)	2,817
Alameda County Total	18.4	(16.5 - 20.2)	10,869

Bay Area Total	17.2	(16.1 - 18.2)
California Total	20.4	(19.9 - 20.9)

# Table 17B Obesity, BMI 30 or Higher, Adults 18 and Older Education and Poverty Level and Insurance Status

Population Group	Percent of Group	95% CI	Estimated Number
Education			
Less than High School	30.0	(21.2 - 38.8)	28,552
Some HS/HS Diploma	20.0	(16.6 - 23.5)	62,942
Some College/Voc/AA/AS	24.3	(20.1 - 28.4)	63,774
Bachelor's Degree	11.4	(8.3 - 14.5)	29,503
Some Grad School/Master's	10.2	(6.2 - 14.2)	13,963
Doctorate or Equivalent	12.4	(5.8 - 19.0)	4,835
Poverty Level			
0-99% FPL	18.4	(12.5 - 24.4)	24,743
100-199% FPL	22.3	(17.6 - 27.0)	36,326
200-299% FPL	18.1	(13.2 - 23.0)	25,798
≥300% FPL	17.5	(15.1 - 19.8)	116,702
Insurance Status			
Insured	18.3	(16.4 - 20.3)	175,350
Not Insured	18.7	(13.2 - 24.2)	28,219

<sup>\*</sup> Rate unreliable

<sup>-</sup> Data not reported due to small numbers



**HP 2010 Objective 19-2:** Reduce to 15% the prevalence of obesity among adults.

Figure 21 Obesity, BMI 30 or Higher, Adults 18 or Older Race/Ethnic Group

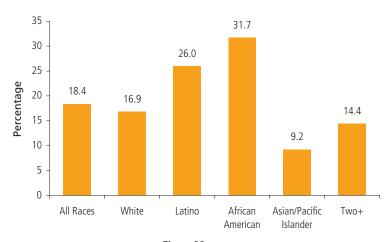


Figure 22 Obesity, BMI 30 or Higher, Adults 18 or Older Education Level

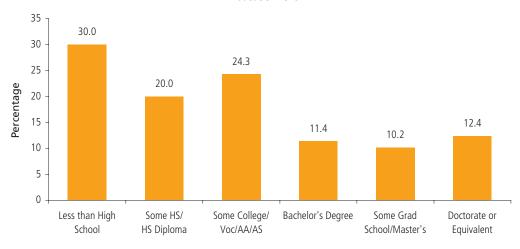
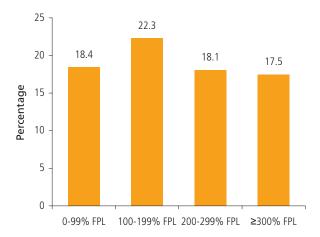


Figure 23 Obesity, BMI 30 or Higher, Adults 18 or Older Poverty Level



### **Self Perception of Weight**

- Respondents were asked to report how they perceived their own weight relative to ideal body weight. In the county, 44.7% of adults perceived themselves as slightly or very overweight. A lower percentage of adults perceived themselves as being about the right weight (42.0%). In contrast, only 6.8% perceived themselves as slightly or very underweight (Table 18).
- Adults 40-64 were significantly more likely to report perceptions of being slightly or very overweight (55%) than seniors 80 and older (26.9%) (Figure 24). Seniors 65-79 were least likely of all age groups to have the perception of being about the right weight (35.0%). Seniors 80 and older were significantly more likely (54.9%) than younger adults to have the perception of being about the right weight. Young adults 18-24 were significantly more likely that middle-aged adults 40-64 and seniors 65-79 to perceive that they were the right body weight.
- Males were more likely to have the perception of being about the right weight than females (45.4% vs. 38.8%) (Figure 25). Females were significantly more likely to perceive themselves as being slightly or very overweight (48.6% vs. 40.4%).

#### Table 18 Perception of Own Weight Relative to Ideal Weight, Adults 18 or Older Estimated Percent of 95% CI Number Group Slightly/Very Overweight 44.7 (42.2 - 47.1)494,758 About the Right Weight 42.0 (39.5 - 44.4)464,832 (5.5 - 8.1)75,308 Slightly/Very Underweight 6.8

### **Weight Management**

- Respondents were asked about how they were managing their weight and specific actions or advice to change or maintain their weight. In the county, 38.6% of all adults reported that they were trying to lose weight. A smaller proportion of adults reported that they were trying to maintain the same weight or not doing anything about their weight (21.2% and 28.7% respectively) (Table 19).
- When asked about specific weight management strategies, 41.3% of adults reported that they exercised to lose or maintain their weight, 12.3% had been advised by a doctor to lose weight, and 14.6% reported having dieted to lose weight (Table 20).

Trying to Maint			
	Percent	95% CI	Estimated Number
Lose Weight	38.6	(36.2 - 41.0)	15,300
Stay the Same Weight	21.2	(19.2 - 23.3)	12,609
Gain Weight	4.8	(3.7 - 5.9)	6,254
Not Do Anything	28.7	(26.5 - 31.0)	14,138

Table 20 Advice or Action Taken to Manage Weight, Adults 18 or Older			
	Percent	95% CI	Estimated Number
Advised by Doctor to Lose Weight Past 12 Months	12.3	(10.7 - 13.9)	136,177
Exercised to Lose/Maintain Weight	41.3	(38.9 - 43.8)	458,044
Dieted to Lose/Maintain Weight	14.6	(12.8 - 16.4)	161,618
Did Anything Else to Lose/Maintain Weight	11.2	(9.8 - 12.7)	124,388

Note: Rows represent independent percentages.

Figure 24
Perception of Own Weight Relative to Ideal Weight, Adults 18 or Older
Age Group

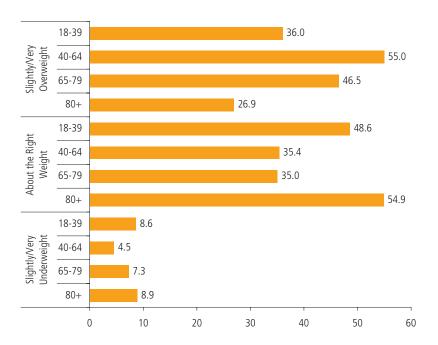
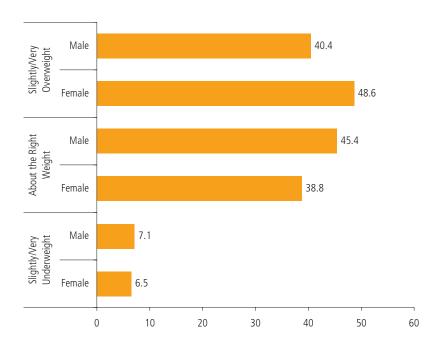


Figure 25
Perception of Own Weight Relative to Ideal Weight, Adults 18 or Older
Gender



# **Physical Activity**

Physical activity promotes weight loss while preserving and increasing lean mass. The rate of weight loss is associated with the frequency and duration of physical activity. Physical activity also maintains muscle strength, bone mass, proper joint function, and may foster and maintain mental health.<sup>6</sup> People may have a more positive self evaluation of physical and mental health status if they are more active. The benefits of physical activity are greatest for the elderly because it delays onset of disability, chronic disease, functional limitations, and subsequent loss of independence.<sup>7</sup>

Physical inactivity is linked with increased risk of coronary heart disease, colon cancer, and diabetes. Modest increases in physical activity levels are associated with substantial reduction in mortality from these conditions. The combination of physical inactivity and unhealthy eating habits has been ranked as the second leading factor contributing to mortality in the United States after tobacco use. 8

Physical activities vary by exertion level required for participation (moderate or vigorous), purpose, or obstacles to participation. They might require different amounts of leisure time, financial resources, or equipment. Physical activity can be recreational or utilitarian. Recreational activities are those done during a person's leisure time and could include jogging, hiking, weight lifting, etc. Utilitarian activities are those a person engages in for another purpose, e.g., walking or biking to get to work.<sup>9</sup>

Physical activities are also described by the extent to which they can be adopted and adhered to. Activities that involve less exertion, require less equipment, do not take much time from other activities, and have some practical purpose are most likely to be adopted and maintained over time. Unstructured activities done for short periods of time are easier to adopt and adhere to than structured activities such as a regimen in a gym.<sup>9</sup>

The CDC recommends 30 minutes of moderate leisure time activity on most days of the week. This is also referred to as regular physical activity. Regular physical activity has been shown to protect against death from coronary heart disease. It also reduces the risk of colon cancer, diabetes, and hypertension. Sedentary individuals can improve their health by increasing their physical activity. Research has shown that physical activity need not be strenuous to be beneficial.<sup>6</sup> In 2003, 33% of US adults reported getting regular physical activity, and 38% reported being physically inactive. The remainder of US adults reported getting insufficient amounts of physical activity to maintain health or wellness.<sup>10</sup>

Physical activity levels can be measured in a number of ways. Some of the commonly used measures are: the amount of moderate or vigorous leisure time activity, predominant activity level on a typical day, and frequency and time spent walking for fun or

### Leisure-time moderate and vigorous physical activity

The next questions are about physical activity you do in your free time. Do not include any walking you already talked about.

- Over the past 30 days, did you do any hard or vigorous activities in your free time for at least 10 minutes that caused heavy sweating or large increases in your breathing or heart rate? For example, jogging, aerobics class, playing a basketball game, or cycling.‡
- Over the past 30 days, did you do any moderate activities in your free time for at least 10 minutes that caused only light sweating or a slight to moderate increase in breathing or heart rate? For example, raking, vacuuming, or walking (other than the walking you already told me about).‡

‡ Asked only of Alameda County residents.

transport.9

The built environment influences all types of physical activity. Proximity to a park or playground can influence the amount of recreational activity. Safety, quality, or accessibility of available facilities influences the use of these facilities for physical activity. In recent years, there has been increasing interest in public health policies aimed at reducing environmental barriers, rather than changing individual behavior to promote physical activity.

Walking is an activity that is likely to be adopted and maintained over the long term. The potential for working it into daily living patterns is high. However, research indicates that factors such as lack of time or poor health interact with features of the built environment such as lack of safety or lack of space to determine the extent to which people walk for recreation or transport.<sup>9</sup>

#### Walking for Fun or Transport

The next questions are about walking for transportation. I will ask you separately about walking for other reasons like relaxation or exercise.

- During the past seven days, did you walk to get some place that took you at least 10 minutes?
- In the past seven days, how many times did you do that?
- On average, how long did {the walk/each of these walks} usually last? Sometimes you may walk for fun, relaxation, exercise, or to walk the dog.
- During the past seven days, did you walk for at least 10 minutes for any of these reasons? (Please do not include walking for transportation.)
- In the past seven days, how many times did you do that?
- (How long did that walk take?/On average, how long did those walks take)?

### **Activity Level on Typical Day**

• Thinking about what you do during a typical day, not counting your free time, which best describes your activity: Would you say that you sit most of the day, stand most of the day, or walk around a lot?‡

‡ Asked only of Alameda County residents.

# **Physical Inactivity**

- In the county, 18.7% of adults reported being physically inactive, i.e., not engaging in any moderate or vigorous activity at all (Table 21A).
- The proportion of physically inactive adults was highest among seniors 80 and older, and lowest among young adults 18-24. Differences in physical inactivity among successive age groups were not significant.
- Males were less likely than females to be physically inactive (16.3% vs. 18.7%).
- Among major race/ethnic groups, Latinos (24.2%), African Americans (24.1), and Asian/Pacific Islanders (23.7%) were significantly more likely (over twice as likely) than Whites (9.5%) to be physically inactive (Figure 26).
- Prevalence of physical inactivity decreased with

- higher educational attainment; adults who did not attend high school were significantly more likely to be inactive than those with a high school education (Table 21B; Figure 27). The proportion of adults who were physically inactive ranged from 41.4% among those who did not attend high school to 7.8% among those with some graduate school or a master's degree.
- Income was associated with physical activity. Adults from low-income households were significantly more likely (almost three times as likely) to be inactive (33.5%) than those from high-income households (11.3%) (Figure 28).
- A smaller proportion of adults with health insurance were inactive than those lacking insurance (16.5% vs. 23.9%).

Note: Low-income households refers to those 0-99% below the FPL. High-income households refers to those at or above 300% FPL.

Table 21A
Physical Inactivity Prevalence
Age, Gender, and Race/Ethnic Group

Ago, dolladi	, and made/Et	шио стоир	
Population Group	Percent of Group	95% CI	Estimated Number
Age Group			
18-24	11.6	(6.9 - 16.2)	15,424
25-39	17.2	(13.5 - 21.0)	63,013
40-64	16.4	(13.5 - 19.3)	76,332
65-79	24.4	(18.7 - 30.0)	25,598
80+	36.6	(23.5 - 49.7)	13,927
Gender			
Male	16.3	(13.2 - 19.4)	87,407
Female	18.7	(16.3 - 21.2)	106,886
Race/Ethnicity			
White	9.5	(7.6 - 11.3)	43,769
Latino	24.2	(18.2 - 30.2)	48,584
African American	24.1	(18.4 - 29.8)	31,729
Asian/Pacific Islander	23.7	(19.1 - 28.2)	67,414
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	9.7*	(3.4 - 16.0)	1,900
Alameda County Total	18.7	(16.6 - 20.8)	194,294

# Table 21B Physical Inactivity Prevalence Education and Poverty Level and Insurance Status

Luut	ation and rovert	y Lover and	mouranoo otat	uo
Population Gr	oup	Percent of Group	95% CI	Estimated Number
Education Leve	I			
Less than H	ligh School	41.4	(30.8 - 52.0)	39,413
Some HS/H	S Diploma	23.3	(19.5 - 27.1)	73,298
Some Colle	ge/Voc/AA/AS	15.8	(12.1 - 19.6)	41,540
Bachelor's	Degree	10.3	(7.5 - 13.0)	26,697
Some Grad	School/Master's	7.8	(4.9 - 10.7)	10,704
Doctorate o	r Equivalent	6.8*	(1.1 - 12.4)	2,641
Poverty Level				
0-99% FPL		33.5	(25.7 - 41.3)	44,943
100-199%	FPL	24.9	(19.0 - 30.8)	40,531
200-299%	FPL	23.2	(18.0 - 28.4)	33,040
≥300% FI	շլ	11.3	(9.4 - 13.3)	75,779
Insurance Stat	us			
Insured		16.5	(14.6 - 18.5)	158,244
Not Insured		23.9	(16.7 - 31.1)	36,050

<sup>\*</sup> Rate unreliable

<sup>-</sup> Data not reported due to small numbers

Figure 26 Physical Inactivity Prevalence Race/Ethnic Group

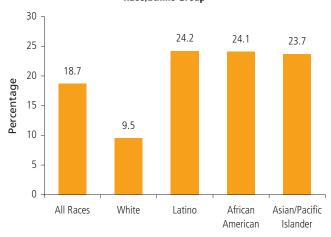


Figure 27 Physical Inactivity Prevalence Education Level

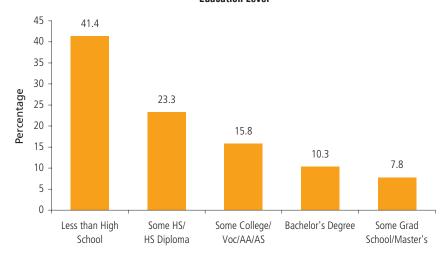
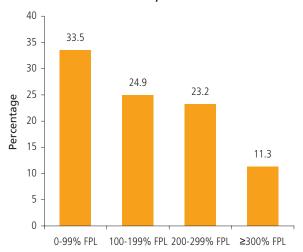


Figure 28
Physical Inactivity Prevalence
Poverty Level



# Walking for Fun/Exercise or Transport

Respondents were asked about whether they walked for fun or transport. In the county, about three-fourths (75.6%) of adults reported walking as an activity (Table 22A). This proportion

was comparable to that for the Bay Area (76.2%) and California (73.0%). There were no significant differences by gender, race/ethnicity, or income in proportion of adults reporting walking as an activity (Table 22B; Figure 29).

Table 22A Any Walking for Fun/Exercise or Transport Age and Gender				
Population Group	Estimated Number			
	Group	95% CI	Nullibel	
Age Group				
18-24	80.3	(73.8 - 86.8)	107,198	
25-39	76.5	(72.7 - 80.3)	279,734	
40-64	76.9	(74.0 - 79.7)	358,118	
65-79	66.9	(60.3 - 73.4)	70,227	
<del>*************************************</del>	57.4	(44.3 - 70.5)	21,848	
Gender				
Male	75.3	(72.0 - 78.5)	404,381	
Female	75.8	(73.2 - 78.4)	432,744	
Alameda County Total	75.6	(73.5 - 77.6)	837,125	
			·	
Bay Area Total	76.2	(75.0 - 77.4)		
California Total	73.0	(72.4 - 73.6)		

Table 22B Any Walking for Fun/Exercise or Transport					
Race/Ethnic Group and Poverty Level					
Percent of			Estimated		
Population Group	Group	95% CI	Number		
Race/Ethnicity					
White	77.3	(74.4 - 80.2)	357,081		
Latino	76.5	(71.9 - 81.1)	153,647		
African American	74.5	(70.0 - 78.9)	98,211		
Asian/Pacific Islander	72.7	(67.7 - 77.8)	207,339		
Amer Indian/Alaska Native	56.9	(23.4 - 90.3)	3,496		
Other	79.5	(50.7 - 100.0)	2,068		
Two+	78.0	(67.7 - 88.3)	15,283		
Poverty Level					
0-99% FPL	75.9	(69.6 - 82.3)	101,901		
100-199% FPL	72.0	(66.5 - 77.6)	117,198		
200-299% FPL	70.5	(64.7 - 76.3)	100,552		
≥300% FPL	77.4	(74.8 - 80.0)	517,475		

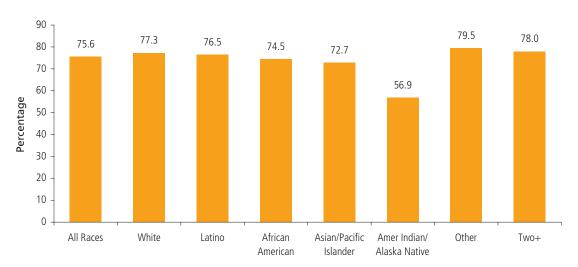
# **Activity Level on Typical Day**

When asked about their level of physical activity on a typical day, 44.7% of adults reported that they move around and a smaller proportion reported that they mostly sit or stand (37.5% and 9.7% respectively) (Table 23).

Table 23 Level of Activity on a Typical Day, Adults 18 or Older			
	Percent	95% CI	Estimated Number
Sit	37.5	(35.1 - 39.9)	415,119
Stand	9.7	(8.2 - 11.1)	107,372
Walk Around	44.7	(42.2 - 47.2)	495,403
Balanced Activ	ty 0.4	(0.2 - 0.6)	4,277
In Bed	0.1*	(0.0 - 0.2)	1,094

<sup>\*</sup> Rate unreliable

Figure 29 Any Walking for Fun/Exercise or Transport Race/Ethnic Group



# Diet

Research shows that good nutrition can help to lower the risk for many chronic diseases, including heart disease, stroke, some cancers, diabetes, and osteoporosis. Numerous studies have shown that diets rich in fruits and vegetables are associated with reduced risk of several chronic diseases. However, a large gap remains between recommended dietary patterns and what Americans actually eat.<sup>11</sup>

One measure of a healthy diet is the number of servings of fruits and vegetables consumed in a day. Five servings of fruits and vegetables a day (5-a-Day) are recommended under current dietary guidelines for Americans. Less than one-fourth of US adults (23%) comsume the recommended 5-a-Day. 13

Dietary guidelines also recommend limiting intake of saturated fats and trans fats, cholesterol, added sugar, salt, and alcohol. Fast food has been linked to higher fat intake and higher overall calorie consumption. Frequent consumption of fast food is of concern because foods eaten away from home tend to be higher in fat and saturated fat, and lower in fiber, calcium, and iron than foods prepared at home.

The location and availability of fruits and vegetables and low-fat options are environmental factors that influence dietary intake. Recent studies suggest that the spatial distribution of fast food restaurants and supermarket outlets that provide options for meeting recommendations for a healthy diet varies by race and poverty in urban communities. Mixed-race or White high-poverty neighborhoods and predominantly Af-

rican American areas (regardless of income) are less likely than predominantly White high-income communities to have access to food that enables individuals to make healthy dietary choices.<sup>14</sup>

### Five-a-Day

Now I am going to ask you about the foods you ate yesterday.

- Yesterday, how many servings of fruit, such as an apple or banana did you eat?‡
- Yesterday, how many servings of vegetables like corn, green beans, lettuce or other vegetables did you eat?‡

#### **Fast Food**

• Yesterday, how many times did you eat fast food? Include fast food meals eaten at school, at home, or at fast food restaurants, carryout or drive thru.‡

‡ Asked only of Alameda County residents.

### Five-a-Day

- In the county, 23.5% of adults reported daily consumption of five fruits and vegetables (5-a-Day) (Table 24A).
- Five-a-Day consumption did not vary significantly by age.
- Males were significantly less likely than females to consume 5-a-Day (20.5% vs. 26.3%).
- Among major race/ethnic groups, African Americans (17.2%) and Latinos (17.3%) were significantly less likely to consume 5-a-Day than Whites (28.8%). 5-a-Day consumption among Asian/Pacific Islanders was 22.6% (Figure 30).
- Five-a-Day consumption was influenced by education level. Adults with a high school education or less were significantly less likely to consume 5-a-Day than those with a bachelor's degree or higher (Table 24B; Figure 31).
- Income influenced the consumption of 5-a-Day. Adults in low-income households were significantly less likely to report consumption of 5-a-Day than those in high-income households (Figure 32).

Note: Low-income households refers to those 0-99% below the FPL. High-income households refers to those at or above 300% FPL.

Table 24A			
Eating Five Fruits and Vegetables a Day, Adults 18 or Older			
Age, Gender, and Race/Ethnic Group			

	Percent of		Estimated
Population Group	Group	95% CI	Number
Age Group			
18-24	23.0	(16.3 - 29.7)	28,676
25-39	22.8	(19.2 - 26.4)	77,120
40-64	23.6	(20.6 - 26.5)	103,529
65-79	25.1	(19.5 - 30.8)	23,893
80+	27.8	(17.5 - 38.1)	9,333
Gender			
Male	20.5	(17.5 - 23.5)	101,326
Female	26.3	(23.6 - 29.0)	141,225
Race/Ethnicity			
White	28.8	(25.6 - 32.0)	127,358
Latino	17.3	(13.5 - 21.2)	31,571
African American	17.2	(13.5 - 20.9)	20,449
Asian/Pacific Islander	22.6	(17.9 - 27.2)	58,704
Amer Indian/Alaska Native	-	-	-
Other	-	-	_
Two+	20.6	(10.6 - 30.5)	3,910
Alameda County Total	23.5	(21.5 - 25.5)	242,551

# Table 24B Eating Five Fruits and Vegetables a Day, Adults 18 or Older Education and Poverty Level

=======================================				
	Percent of Group	95% CI	Estimated Number	
Education				
Less than High School	10.2	(5.7 - 14.7)	1,843	
Some HS/HS Diploma	17.9	(14.3 - 21.5)	5,697	
Some College/Voc/AA/AS	21.5	(17.6 - 25.4)	5,269	
Bachelor's Degree	29.8	(25.2 - 34.3)	6,500	
Some Grad School/Master's	32.3	(26.5 - 38.1)	4,488	
Doctorate or Equivalent	39.0	(28.9 - 49.2)	2,637	
Poverty Level				
0-99% FPL	12.9	(8.7 - 17.2)	15,642	
100-199% FPL	17.4	(12.8 - 22.0)	25,107	
200-299% FPL	21.7	(16.9 - 26.5)	27,964	
≥300% FPL	27.3	(24.5 - 30.1)	173,838	
·				

- Data not reported due to small numbers

# **Fast Food Consumption**

In the county, about one in five adults (20.7%) reported fast food intake one or two times a day (Table 25).

	l able 25		
Daily Fast Food Consumption, Adults 18 or Older			
			Estimated
	Percent	95% CI	Number

	Percent	95% CI	Number
None	72.4	(70.2 - 74.7)	802,619
1-2	20.7	(18.7 - 22.7)	228,995
3 or More	0.7	(0.3 - 1.2)	8,107

Health-Related Behaviors

Diet

Health of Alameda County's Adults Selected Findings from CHIS 2003

Figure 30
Eating Five Fruits and Vegetables a Day, Adults 18 or Older
Race/Ethnic Group

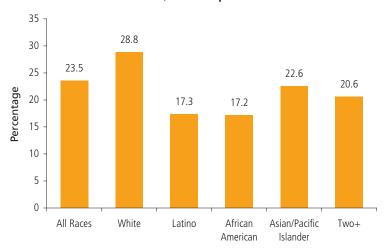


Figure 31
Eating Five Fruits and Vegetables a Day, Adults 18 or Older
Education Level

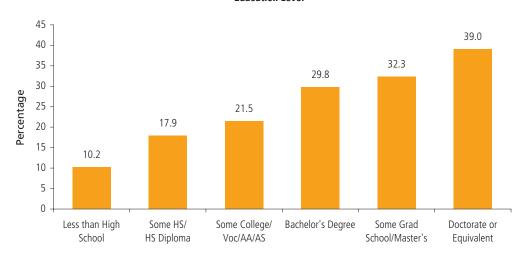
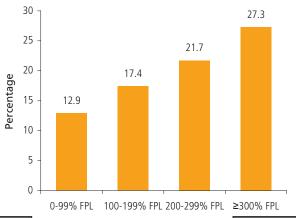


Figure 32
Eating Five Fruits and Vegetables a Day, Adults 18 or Older
Poverty Level



Health of Alameda County's Adults Selected Findings from CHIS 2003 Health-Related Behaviors

Diet

# Smoking and Secondhand Smoke

Cigarette smoking is the major cause of preventable morbidity and mortality in the United States. Smoking leads to an increased risk of the two leading causes of death in the United States—heart disease and cancer. Smoking during pregnancy has also been linked to adverse pregnancy outcomes. Exposure to secondhand smoke increases the risk of heart disease, lung cancer and lower respiratory tract illness among adults, and exacerbates asthma among children and adolescents. Home and workplace environments contribute significantly to widespread exposure to secondhand smoke in the United States.<sup>3,15</sup>

In 2005 an estimated 20.9% of US adults were current smokers. Smoking prevalence is highest among those who went to or completed high school, and decreases with higher education. Among race/ethnic groups, Latinos and Asians have lower prevalence than Whites or African Americans. Males had higher prevalence than females. Smoking was twice as common among the poor as those who were affluent.<sup>10</sup>

In 2003, 16.5% California adults reported being current smokers.5 Males were significantly more likely (20.3%) than females (12.9%) to be current smokers. Latinos (14.8%) and Asians/Pacific Islanders (14.0%) were less likely to be smokers compared to Whites (17.2%), African Americans (19.9%), and American Indian/Alaska Natives (30.1%). Adults below 300% FPL were more likely to be current smokers than

adults at or above 300% FPL (14.2%). Adults who have health insurance reported a significantly lower rate of current smoking than those who were uninsured (15.0% vs. 24.0%). Almost one in four of the uninsured reported being current smokers.

Having a smoker in the home can expose individuals in the home to secondhand smoke. In 2003, 8.9% of adults in California reported that there were smokers in the home.<sup>5</sup> African Americans (16.2%) were most likely of all race/ethnic groups to have a smoker in the home and Latinos were least likely (6.5%). Among other race/ethnic groups 7.4% of Whites, 8.5% of Asian/Pacific Islanders, and 13.1% of American Indian/Alaska Natives reported smokers in the home. Only 5.0% of adults reported that smoking was allowed in their home at any time and at any place. However, smoking was allowed in some places and at some times in the home for 9.2% of adults.

#### **Smoking**

- Altogether, have you smoked at least 100 or more cigarettes in your entire lifetime?
- Do you now smoke cigarettes every day, some days, or not at all?

#### Secondhand Smoke

- During the past week, on how many days did anyone smoke cigarettes, cigars, or pipes anywhere inside your home?
- Which statement best describes the rules about smoking in your home?
  - No one is allowed to smoke anywhere Smoking is allowed in some places at some times

Smoking is permitted anywhere

## **Smoking**

- In the county, 15.8% of adults reported being current smokers (Table 26A). The county's smoking prevalence rate exceeded the Healthy People 2010 objective of 12% or less current smokers. Adult smoking prevalence was similar to that for the Bay Area (14.3%), and that for California (16.5%).
- Seniors 65 and older were significantly less likely to be current smokers than those under 65; smoking prevalence increased with each successive age group up to 65. Adults 40-64 had the highest smoking prevalence of all age groups (17.4%).
- Males had significantly higher smoking prevalence than females (19.3% vs. 12.5%).
- Among major race/ethnic groups, African Americans (24.7%) had over twice the smoking prevalence as Asian/Pacific Islanders (11.0%)

(Figure 33).

- Smoking prevalence was higher among adults with lower education; differences in prevalence by education level were not significant (Table 26B; Figure 34).
- Adults with incomes 100-199% FPL had significantly higher smoking prevalence than those with incomes at or above 300% FPL (20.6% vs. 13.1%) (Figure 35).
- A significantly greater proportion of uninsured adults were current smokers than those who were insured (29.3% vs. 13.7%).
- Only seniors 65 and older, Asian/Pacific Islanders, and those with a bachelor's or higher met the Healthy People 2010 target for smoking.

Note: Current smokers were defined in CHIS 2003 as those who smoked at least 100 cigarettes in their lifetime and currently smoke cigarettes either daily or some days.

Table 26A				
Current Smokers, Adults 18 or Older				
Age, Gender, and Race/Ethnic Group				

Ago, donaor, and nado/Ethino droup					
	Percent of		Estimated		
Population Group	Group	95% CI	Number		
Age Group					
18-24	16.5	(10.8 - 22.3)	22,059		
25-39	17.2	(13.6 - 20.8)	62,890		
40-64	17.4	(14.7 - 20.1)	81,118		
65-79	7.7	(4.7 - 10.7)	8,047		
80+	3.6	(0.3 - 6.9)	1,385		
Gender					
Male	19.3	(16.3 - 22.4)	103,897		
Female	12.5	(10.6 - 14.5)	71,601		
Race/Ethnicity					
White	14.4	(11.9 - 16.8)	66,298		
Latino	19.3	(14.5 - 24.2)	38,818		
African American	24.7	(19.4 - 30.1)	32,616		
Asian/Pacific Islander	11.0	(7.1 - 14.9)	31,303		
Amer Indian/Alaska Native	15.0*	(0.0 - 31.4)	924		
Other	45.7*	(14.0 - 17.7)	1,191		
Two+	22.2	(12.8 - 31.5)	4,347		
Total	15.8	(14.0 - 17.7)	175,498		
Bay Area Total	14.3	(13.3 - 15.3)			

16.5

(16.0 - 17.0)

#### Table 26B Current Smokers, Adults 18 or Older Education and Poverty Level and Insurance Status

Population Group	Percent of Group	95% CI	Estimated Number
Education			
Less than High School	16.6	(8.4 - 24.7)	15,753
Some HS/HS Diploma	20.5	(16.8 - 24.2)	64,507
Some College/Voc/AA/AS	18.6	(14.7 - 22.4)	48,808
Bachelor's Degree	11.6	(8.3 - 14.9)	30,059
Some Grad School/Master's	10.0	(5.9 - 14.1)	13,751
Doctorate or Equivalent	6.7*	(1.7 - 11.7)	2,621
Poverty Level			
0-99% FPL	18.3	(13.3 - 23.3)	24,568
100-199% FPL	20.6	(15.7 - 25.4)	33,455
200-299% FPL	20.7	(15.2 - 26.3)	29,576
≥300% FPL	13.1	(10.8 - 15.5)	87,899
Insurance Status			
Insured	13.7	(11.9 - 15.5)	131,240
Not Insured	29.3	(22.4 - 36.3)	44,258

<sup>\*</sup> Rate unreliable



**HP 2010 Objective 27-1:** No more than 12% of the adult population age 18 and older will smoke cigarettes.

California Total

Figure 33 Current Smokers, Adults 18 or Older Race/Ethnic Group

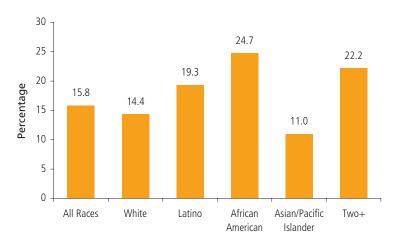


Figure 34 Current Smokers, Adults 18 or Older Education Level

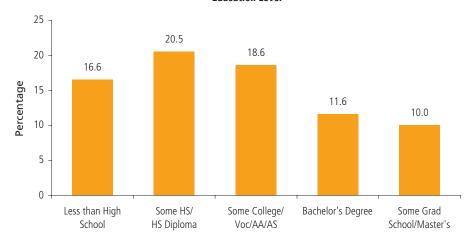


Figure 35 Current Smokers, Adults 18 or Older Poverty Level



Health-Related Behaviors

Health of Alameda County's Adults Selected Findings from CHIS 2003

# **Secondhand Smoke**

Respondents were asked about secondhand smoke and rules about smoking in the home. In the county, 9.6% of adults reported secondhand smoke in their home, 3.9% some days and 5.7% everyday (Table 27A, Table 27B). This percentage is comparable to that for the Bay Area (8.7%) and California (8.9%).

Smoking being allowed at anytime anywhere in the home was less common (4.5%) than it being allowed in some places at some times (10.7%) (Table 28).

Table 27A Smokers in the Home					
Geographic Area Percent 95% CI					
Alameda County Total 9.6 (8.0 - 11.1					
Bay Area Total	8.7	(7.9 - 9.6)			
California Total 8.9 (8.6 - 9.3)					

Table 27B Secondhand Smoke in the Home				
Frequency of Secondhand Estimated				
Smoking	Percent	95% CI	Number	
None	90.4	(88.9 - 92.0)	1,001,792	
Some Days	3.9	(2.7 - 5.1)	43,370	
Everyday	5.7	(4.6 - 6.8)	62,752	

Table 28 Rules About Smoking Inside the Home					
Rules About Smoking Estimated Inside the Home Percent 95% CI Number					
Never Allowed	84.8	(83.1 - 86.6)	939,926		
Allowed in Some Places/ Some Times	10.7	(9.2 - 12.2)	118,628		
Allowed Anywhere and Any Time	4.5	(3.5 - 5.4)	49,359		

# **Alcohol Use**

Alcohol is a leading contributor to death in the United States after tobacco use and diet and physical activity patterns.<sup>8</sup> Alcohol also causes a substantial proportion of injuries nationally. A significant proportion of the US population drinks alcohol. Among current drinkers, 46% report having been intoxicated at least once in the past year, and almost 4% report having been intoxicated weekly.<sup>3</sup>

Binge drinking (defined as five or more drinks on an occasion) is an especially hazardous pattern of alcohol consumption that causes approximately half of the alcohol-related deaths in the United States each year. Adverse effects of binge drinking include intentional injuries (e.g., interpersonal violence and suicide), unintentional injuries (e.g., motor vehicle crashes and drownings), fetal alcohol syndrome/effect, and unintended pregnancy. Binge drinking most commonly occurs among males, younger persons, and persons residing in urban or suburban areas.<sup>16</sup>

In 2003, 15.1% of California adults reported binge drinking during the past month.<sup>5</sup> Adults ages 18-24 were significantly more likely to binge drink (24.2%) than all other age groups. Binge drinking decreased significantly with each age group, dropping from 20.1% in the 25-39 age group to 12.4% in the 40-64 age group, and down to 4.8% among those 65-79. Males reported binge drinking at three times the rate of females (23.8% vs. 6.8%, respectively). Latinos (17.4%), American Indian/Alaska Natives (16.0%), and Whites (15.4%) had substantially higher levels of binge drinking compared to African Americans (9.4%) and Asian/Pacific Islanders (10.6%). Among

income groups, those at or above 300% FPL were significantly more likely to binge drink than those at 200-299% FPL. Adults with health insurance reported significantly lower levels of binge drinking than those without insurance (13.8% vs. 21.8%, respectively).

### **Binge Drinking**

• Considering all types of alcoholic beverages, during the past 30 days about how many times did you have 5 or more drinks on an occasion?

# **Binge Drinking**

- In the county, 13.9% of adults reported having five or more drinks on an occasion (binge drinking) in the past month (Table 29A). This percentage far exceeded the Healthy People 2010 goal of no more than 6% of adults being binge drinkers. Binge drinking prevalence among adults was similar to that for the Bay Area (15.2%) and that for California (15.1%).
- Binge drinking prevalence decreased with each successive age group; adults 40 and older were significantly less likely to report binge drinking than those under 40.
- Males were significantly more likely than females to binge drink (21.4% vs. 6.9%).
- Among major race/ethnic groups, Latinos
   (16.4%) had higher binge drinking prevalence

- than Whites (15.2%), Asian/Pacific Islanders (10.7%), and African Americans (10%) (Figure 36).
- There were no significant differences in binge drinking prevalence by education or income (Table 29B).
- A greater proportion of adults without health insurance reported binge drinking than those with health insurance (18.3% vs. 13.2%).
- Only seniors 65 and older met the Healthy people
   2010 target for binge drinking.

Note: Binge drinking is defined as consuming five or more drinks on an occasion during the 30 days.

Table 29A		
Binge Drinking Past Month, Adults 18 or Older		
Age, Gender, and Race/Ethnic Group		

	Percent of		Estimated
Population Group	Group	95% CI	Number
Age Group			
18-24	20.5	(14.1 - 26.9)	27,353
25-39	19.5	(15.8 - 23.3)	71,418
40-64	10.7	(8.7 - 12.7)	49,828
65-79	4.5	(2.2 - 6.9)	4,753
80+	1.9*	(0.0 - 3.8)	727
Gender			
Male	21.4	(18.4 - 24.4)	114,941
Female	6.9	(5.2 - 8.5)	39,138
Race/Ethnicity			
White	15.2	(12.6 - 17.8)	70,200
Latino	16.4	(12.3 - 20.5)	33,010
African American	10.0	(6.6 - 13.4)	13,245
Asian/Pacific Islander	10.7	(6.8 - 14.5)	30,376
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	18.1*	(6.8 - 29.5)	3,555
Alameda County Total	13.9	(12.2 - 15.6)	154,079

Bay Area Total	15.2	(14.1 - 16.3)
California Total	15.1	(14.6 - 15.7)

# Table 29B Binge Drinking Past Month, Adults 18 or Older Education and Poverty Level, and Insurance Status

	Percent of		Estimated
Population Group	Group	95% CI	Number
Education			
Less than High School	14.8	(7.2 - 22.4)	14,075
Some HS/HS Diploma	15.6	(12.1 - 19.0)	48,883
Some College/Voc/AA/AS	13.1	(9.4 - 16.8)	34,374
Bachelor's Degree	14.3	(10.9 - 17.6)	37,045
Some Grad School/Master's	11.3	(7.8 - 14.7)	15,492
Doctorate or Equivalent	10.8	(4.9 - 16.7)	4,210
Poverty Level			
0-99% FPL	12.6	(8.2 - 17.1)	16,965
100-199% FPL	11.4	(8.5 - 14.4)	18,592
200-299% FPL	13.7	(9.1 - 18.2)	19,529
≥300% FPL	14.8	(12.4 - 17.2)	98,993
Insurance Status			
Insured	13.2	(11.4 - 15.1)	126,442
Not Insured	18.3	(13.5 - 23.1)	27,637

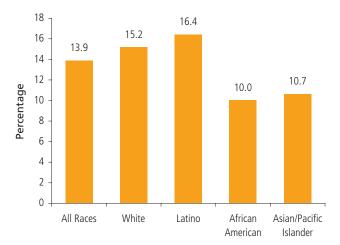
<sup>\*</sup> Rate unreliable

<sup>-</sup> Data not reported due to small numbers



**HP 2010 Objective 26-11c:** No more than 6% of adults age 18 and older will have engaged in binge drinking during the past month.

Figure 36 Binge Drinking Past Month, Adults 18 or Older Race/Ethnic Group



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# Screening and Prevention Services

# Cancer Screening

Screening for cancer saves lives by detecting cancers or pre-malignancies at a time when treatment is most likely to be successful. Five-year relative survival rates for breast, prostate, colorectal, and cervical cancer are 90% if the tumor is discovered before it spreads to other parts of the body. Once the tumor has spread to other parts of the body, survival rates drop to 34% for prostate cancer, 23% for breast cancer, 15% for cervical cancer, and 9% for colorectal cancer. There are dramatic race/ethnic differences among US and California adults in receiving potentially life-saving cancer screening.<sup>1</sup>

The United States Prevention Services Task Force (USPSTF) and American Cancer Society (ACS) recommend that women at average risk should begin annual mammography at age 40.2-4 In 2003 over three-fourths (76.1%) of California women age 40 and older reported having a mammogram in the past two years. Women ages 40-64 (75%) and those age 80 and older (71.3%) were significantly less likely to have had a mammogram in the past two years than women age 65-79 (81.8%). White women had higher screening rates than (78.3%), African-American (76.9%), Asian/Pacific Islander (74.0%), Latino (71.6%) and American Indian/Alaska Native (70.0%) women. Those at or above 300% FPL were more likely to have had a mammogram (81.6%) than women in other income groups. Insured women (78.6%) were significantly more likely to have had a mammogram in the past two years than women who lacked insurance (54.1%).

The prostate-specific antigen (PSA) test is the princi-

pal screening test for prostate cancer. Although this test is sensitive enough to detect prostate cancer, it is also detects cancers of uncertain clinical significance. The ACS recommends annual PSA testing beginning at age 50 for White men and age 40 for African American men, for whom the risk of the disease is higher. The ACS recommends the PSA test annually for men 50 and older for those who have at least a 10-year life expectancy. It also recommends that men at high risk (African-American men and men with a strong family history of one or more first-degree relatives [father, brothers diagnosed before age 65) should begin testing at age 45. Furthermore it recommends that men at even higher risk, due to multiple first-degree relatives affected at an early age, could begin testing at age 40. Depending on the results of this initial test, no further testing may be needed until age 45.3,4 In 2003, 29.4% of California men 40 and older had received PSA screening in the past year.<sup>5</sup> Asian/Pacific Islanders (16.6%) were less likely to be screened compared to Latinos (17.3%), African Americans (32.8%), and Whites (35.8%).

There are a variety of tests used for screening of colorectal cancer. Proctoscopy is a test used to examine the inside of the rectum. Sigmoidoscopy is a specific test in which a tube with a light at the end of it is used to examine the lower rectum. Colonoscopy is a similar test used to examine the full length of the colon. These tests can identify early signs of cancer or blood in the stool, which can be a sign of colon cancer. The Healthy People 2010 objective is that at least half of all adults age 50 and older will have had a

#### **Breast Cancer Screening**

- Have you ever had a mammogram?
- How long ago did you have your most recent mammogram?

#### **Prostate Cancer Screening**

- Have you ever had a PSA test?
- When did you have your most recent PSA test?

sigmoidoscopy, colonoscopy, or proctoscopy to screen for colon cancer in the past 10 years.<sup>6</sup> In 2003, over half of California adults age 50 and older (53.5%) reported having had at least one of these tests to screen for colon cancer in the past 10 years.<sup>7</sup> Only 45.9% of adults ages 50-64 had been screened for colon cancer, and the rate for women (51.7%) was significantly lower than the rate for men (55.6%). Among the major race/ethnic groups, Latinos (36.1%) were less likely to be screened for colon cancer, than Whites (58.7%) and African Americans (54.7%) or Asians (43.9%).

The fecal occult blood test (FOBT) is a non-invasive way to detect presence of blood in the stool. This test can be done using a home test kit. The Healthy People 2010 objective is that 50% of adults age 50 and older should have this test every two years. In 2003 almost 30% of California adults age 50 and older (28.2%) reported having a FOBT in the past two years. Those in the 65-79 age group (35%) were significantly more likely than all other age groups to report having the test. There were no gender differences in FOBT screening rates. Whites (30.8%) and African Americans (30.5%) were more likely than Latinos (22.3%)

and Asians (21%) to report having an FOBT in the past two years. Adults with incomes at or above 300% FPL (29.8%) were significantly more likely than those below 100% FPL (23.2%) to have had the test, and a higher percentage of those with health insurance have had the test (29.4%) than those without insurance (14.1%).

The ACS recommends that all women should begin cervical cancer screening with the PAP smear test about three years after they become sexually active, but no later than when they are 21.34 In 2003, 83.2% of California women reported having a Pap smear test in the past three years for routine screening, follow-up to a treatment or because of a problem.<sup>5</sup> Asian/Pacific Islander women (74.4%) were less likely than African-American (87.4%), Latino (85.0%), or White (83.8%), women to have had a Pap test in the past three years. Women at or above 300% of the FPL (87.7%) were significantly more likely to have had a Pap test than those below 300% FPL, and a greater percentage of women with health insurance (84.4%) reported having a Pap test compared with women who did not have health insurance (76.4%).

#### **Colorectal Cancer Screening**

- Have you ever had a Sigmoidoscopy, Colonoscopy, or a Proctoscopy? These are exams in which a health care professional insert a tube into the rectum to look for signs of cancer or other problems.
- How long ago did you have your most recent exam?

The following questions are about the blood stool test to determine if you have blood in your stool. The test can be done with a home kit. You smear a small amount of stool on cards at home and send the cards back to the doctor or lab.

- Have you ever had a blood stool test, using a home test kit?
- When did you have your most recent home blood stool test?

#### **Cervical Cancer Screening**

- Have you ever had a Pap smear test to check for cervical cancer?
- How long ago did you have your most recent Pap smear test?

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## **Breast Cancer Screening**

- In the county, 78.8% of women 40 and older reported having had a mammogram for breast cancer screening (Table 30A). Women in the county met the Healthy People 2010 goal that 70% of women 40 and older will have had a mammogram in the past two years. Mammography screening rates were significantly higher than those for the Bay Area women (61.6%), and for women in California (60.6%).
- Women 65-74 were most likely to have had a mammogram of all age groups.
- Among major race/ethnic groups, a higher proportion of Asian/Pacific Islander women (82.3%) reported having had a mammogram compared to White (79.2%), African American (77%), or

Latino women (75.8%) (Figure 37).

- Mammography rates increased with higher education level; mammography rates ranged from 75.6% among women who did not go to high school to 86.1% among those with a doctorate or equivalent (Table 30B; Figure 38).
- Women from households with incomes 200% FPL or higher were more likely to have had a mammogram than those with household incomes 100-199% FPL or lower (Figure 39).
- A greater proportion of women with health insurance reported having a mammogram than those lacking insurance (80.2% vs. 64.5%).
- Women from households just above the FPL (100-199%) and the uninsured did not meet the Healthy People objective of 70% mammography screening among women 40 and older.

Table 30A			
Mammogram Past Two Years, Women 40 and Older			
Age and Race/Ethnic Group			

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Population Group	Percent of Group	95% CI	Estimated Number	
Age Group				
40-64	77.8	(74.0 - 81.5)	194,525	
65-79	84.7	(78.6 - 90.8)	46,740	
80+	76.1	(65.8 - 86.4)	17,483	
Race/Ethnicity				
White	79.2	(75.0 - 83.5)	117,576	
Latino	75.8	(66.3 - 85.3)	32,804	
African American	77.0	(69.9 - 84.0)	34,349	
Asian/Pacific Islander	82.3	(75.3 - 89.2)	69,957	
Amer Indian/Alaska Native	-	-	-	
Other	-	-	-	
Two+	60.4	(41.2 - 79.6)	3,341	
Alameda County Total	78.8	(75.7 - 82.0)	258,748	
Bay Area Total	61.6	(59.7 - 63.5)		
California Total	60.6	(59.7 - 61.5)		

#### Table 30B Mammogram Past Two Years, Women 40 and Older Education and Poverty Level and Insurance Status

	Percent of		Estimated
Population Group	Group	95% CI	Number
Education			
Less than High School	75.6	(66.1 - 85.1)	18,327
Some HS/HS Diploma	76.7	(70.3 - 83.1)	77,451
Some College/Voc/AA/AS	77.2	(70.6 - 83.8)	66,867
Bachelor's Degree	83.0	(78.0 - 88.0)	56,253
Some Grad School/Master's	80.8	(71.9 - 89.7)	30,979
Doctorate or Equivalent	86.1	(78.2 - 93.9)	8,871
Poverty Level			
0-99% FPL	71.5	(60.6 - 82.3)	24,722
100-199% FPL	67.8	(58.4 - 77.2)	33,357
200-299% FPL	80.8	(73.5 - 88.0)	39,528
≥300% FPL	82.4	(78.7 - 86.2)	161,141
Insurance Status			
Insured	80.2	(77.1 - 83.2)	240,880
Not Insured	64.5	(48.9 - 80.1)	17,868

- Data not reported due to small numbers



**HP 2010 Objective 3-13:** At least 70% of women age 40 and older will have received a mammogram within the past two years.

Figure 37 Mammogram Past Two Years, Women 40 and Older Race/Ethnic Group

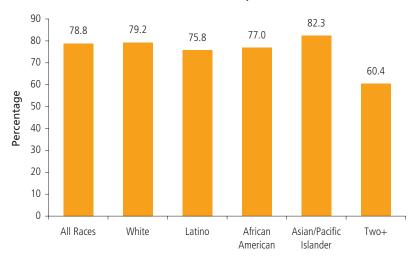


Figure 38
Mammogram Past Two Years, Women 40 and Older
Education Level

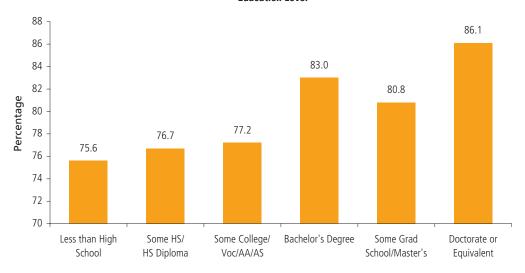
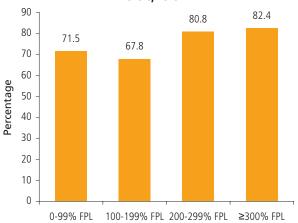


Figure 39 Mammogram Past Two Years, Women 40 and Older Poverty Level



Health of Alameda County's Adults Selected Findings from CHIS 2003 Screening and Prevention Services

Cancer Screening

## **Prostate Cancer Screening**

- In the county, 22.2% of men 40 and older reported having a PSA test in the past year (Table 31A). This percentage is significantly lower than that for men in the Bay Area (28.6%) and California (29.4%).
- Men 65-79 were most likely to have a PSA test (49.2%), significantly higher than for men 40-64 (15.4%).
- Among major race/ethnic groups, White men were most likely to have a PSA test (25.8%) compared to Asian/Pacific Islander men (14.5%). PSA screening rates for African American men were

- 20.6%; the rate for Latino men was not reliable.
- Education influenced the rates of PSA screening—the percentage of men screened increased with higher education level and ranged from 17.9% to 31.3%. Rates among those with less than a high school education were not stable (Table 31B; Figure 40).
- Men from households with incomes 200% FPL or higher were more likely to have had a PSA test than those with household incomes 0-99% FPL.
- Insured men had a PSA screening rate of 23.8%; the rate for the uninsured was not reliable.

Table 31A PSA Test Past Year, Males 40 or Older Age and Race/Ethnic Group					
Percent of Estimated Population Group Group 95% CI Number					
Age Group					
40-64	15.4	(12.0 - 18.9)	33,242		
65-79	49.2	(38.7 - 59.7)	24,532		
80+	29.2	(10.1 - 48.2)	4,402		
Race/Ethnicity					
White	25.8	(20.6 - 31.0)	40,041		
Latino	16.3*	(6.0 - 26.5)	5,225		
African American	20.6	(12.3 - 28.8)	6,253		
Asian/Pacific Islander	14.5	(7.2 - 21.7)	8,036		
Amer Indian/Alaska Native	-	-	-		
Other	-	-	-		
Two+	31.6*	(8.4 - 25.7)	1,892		
Alameda County Total	22.2	(18.6 - 25.7)	62,176		
Bay Area Total	28.6	(26.4 - 30.8)			
California Total	29.4	(28.3 - 30.4)			

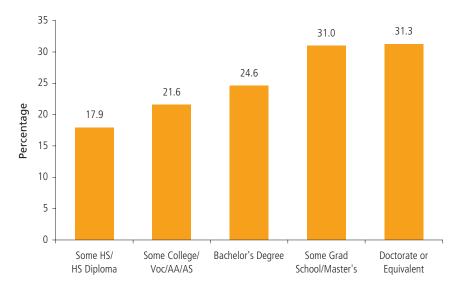
Table 31B		
PSA Test Past Year, Males 40 or Older		
Education and Poverty Level and Insurance Status		

B 141 B	Percent of	05% 01	Estimated
Population Group	Group	95% CI	Number
Education Level			
Less than High School	7.9*	(1.2 - 14.6)	1,951
Some HS/HS Diploma	17.9	(11.1 - 24.8)	12,588
Some College/Voc/AA/AS	21.6	(14.3 - 28.8)	12,818
Bachelor's Degree	24.6	(16.6 - 32.5)	16,930
Some Grad School/Master's	31.0	(20.8 - 41.2)	12,358
Doctorate or Equivalent	31.3	(17.5 - 45.1)	5,531
Poverty Level			
0-99% FPL	16.6	(4.3 - 29.0)	3,633
100-199% FPL	14.7*	(5.6 - 23.8)	5,246
200-299% FPL	25.0	(13.5 - 36.5)	7,320
≥300% FPL	23.7	(19.4 - 28.1)	45,978
Insurance Status			
Insured	23.8	(20.0 - 27.7)	59,783
Not Insured	8.0*	(0.0 - 16.3)	2,393

<sup>\*</sup> Rate unreliable

<sup>-</sup> Data not reported due to small numbers

Figure 40
PSA Test Past Year, Males 40 or Older
Education Level



# **Colorectal Cancer Screening**

## Sigmoidoscopy, Colonoscopy, or Proctoscopy

- In the county, about half (49.9%) of adults 50 and older reported having had a sigmoidoscopy, colonoscopy, or proctoscopy to screen for colon cancer in the past 10 years (Table 32A). The county achieved the Healthy People 2010 objective that at least half of all adults age 50 and older will have had at least one of these tests in the past 10 years. This screening rate is comparable to that for adults in California (53.5%).
- Adults 65-79 were most likely to be screened for colorectal cancer using these tests (59.2%).
- Males were slightly more likely to be screened for colorectal cancer than females (52.6% vs. 47.8%).
- Among major race/ethnic groups, African Americans (58.9%) and Whites (53.8%) were more likely to be screened for colorectal cancer than Latinos or Asian/Pacific Islanders (42.2%)

Table 32A Sigmoidoscopy, Colonoscopy, or Proctoscopy Past 10 Years, Adults 50 or Older Age, Gender, and Race/Ethnic Group

	Percent of		Estimated
Population Group	Group	95% CI	Number
Age Group			
50-64	47.1	(41.5 - 52.3)	109,181
65-79	59.2	(52.9 - 65.9)	62,199
80+	41.3	(28.0 - 54.6)	15,726
Gender			
Male	52.6	(46.3 - 58.9)	88,230
Female	47.8	(42.6 - 52.9)	98,876
Race/Ethnicity			
White	53.8	(48.9 - 58.7)	101,382
Latino	42.2	(29.4 - 55.1)	17,727
African American	58.9	(49.9 - 67.9)	27,106
Asian/Pacific Islander	42.4	(32.4 - 52.4)	38,263
Amer Indian/Alaska Native	90.8	(74.1 - 100.0)	655
Other	-	-	-
Two+	27.4*	(10.7 - 44.0)	1,753
Alameda County Total	49.9	(45.9 - 53.9)	187,106

California Total 53.5 (52.5 - 54.5)

- and 42.4% respectively) (Figure 41).
- Colorectal cancer screening rates using these tests increased with higher education level. The proportion screened ranged from 45.0% among those who did not go to high school to 62.2% among with a doctorate or equivalent (Table 32B; Figure 42).
- There was no clear association of colorectal cancer screening rates with income (Figure 43).
- The proportion screened using these tests among those who were insured was 52.4%; rates for the uninsured were unreliable.
- Seniors 65-79 years, males, Whites, African Americans, those with some graduate education or higher, adults from all income groups except 100-199% FPL, and the insured achieved the Healthy People 2010 goal for colorectal cancer screening using these tests.

#### Table 32B Sigmoidoscopy, Colonoscopy, or Proctoscopy Past 10 Years, Adults 50 or Older Education and Poverty Level and Insurance Status

Percent of	95% CI	Estimated Number
Стопр	0070 01	- Italiiboi
45 N	(29.4 - 60.6)	17,637
		50,659
		44,137
		33,297
57.2		30,184
62.2	(49.5 - 74.8)	11,192
50.7	(38.1 - 63.3)	19,602
39.5	(28.5 - 50.5)	24,005
50.9	(41.3 - 60.4)	24,029
52.4	(47.3 - 57.4)	119,470
52.4	(48.5 - 56.4)	178,132
25.6*	(10.0 - 41.2)	8,974
	6roup  45.0 47.5 49.0 49.0 57.2 62.2  50.7 39.5 50.9 52.4	Group         95% CI           45.0         (29.4 · 60.6)           47.5         (39.3 · 55.6)           49.0         (41.6 · 56.3)           49.0         (40.6 · 57.5)           57.2         (47.1 · 67.2)           62.2         (49.5 · 74.8)           50.7         (38.1 · 63.3)           39.5         (28.5 · 50.5)           50.9         (41.3 · 60.4)           52.4         (47.3 · 57.4)

<sup>\*</sup> Rate unreliable

<sup>-</sup> Data not reported due to small numbers



**Healthy People 2010 Objective 3-12b:** At least half of all adults age 50 and older will have had a sigmoidoscopy, colonoscopy, or proctoscopy in the past ten years.

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Figure 41 Sigmoidoscopy, Colonoscopy, or Proctoscopy Past 10 Years, Adults 50 or Older Race/Ethnic Group

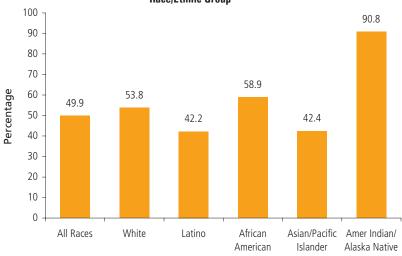


Figure 42
Sigmoidoscopy, Colonoscopy, or Proctoscopy Past 10 Years, Adults 50 or Older
Education Level

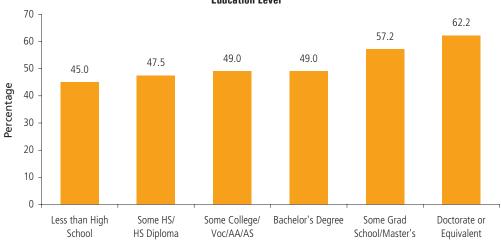
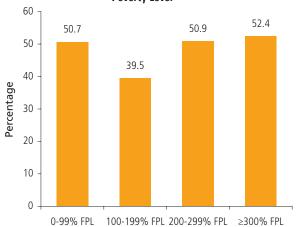


Figure 43
Sigmoidoscopy, Colonoscopy, or Proctoscopy Past 10 Years, Adults 50 or Older
Poverty Level



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#### **Fecal Occult Blood Test**

- In the county, 22.8% of adults 50 and older reported having had a fecal occult blood test (FOBT) to screen for colon cancer in the past two years (Table 33A). The proportion of adults screened using the FOBT in the county was substantially lower than the Healthy People 2010 target of at least 50%. The county's FOBT screening rate was significantly lower than that for California (28.2%).
- Adults 65-79 were most likely to be screened for colorectal cancer using the FOBT (26.4%).
- FOBT screening rates were comparable for males and females.
- Among major race/ethnic groups, African

- Americans had the highest rates of FOBT screening and Asian/Pacific Islanders the lowest (32.1% vs. 19.5%). Whites and Latinos had lower rates of screening than African Americans (22.9% and 22.1% respectively) (Figure 44).
- Differences in FOBT screening using the FOBT by education and income group were not significant (Table 33B).
- Of those who were insured, 23.2% reported screening using the FOBT; rates among the uninsured were not reliable.
- None of the subgroups of the county population met the Healthy People 2010 goal for FOBT screening.

Table 33A			
Fecal Occult Blood Test Past Two Years, Adults 50 and Older			
Age, Gender, and Race/Ethnic Group			

<b>0</b> /	-	•	
Population Group	Percent of Group	95% CI	Estimated Number
Age Group			
50-64	21.4	(17.3 - 25.4)	49,490
65-79	26.4	(20.7 - 32.1)	27,735
80+	21.4	(8.0 - 34.8)	8,148
Gender			
Male	23.4	(18.4 - 28.5)	39,293
Female	22.3	(18.0 - 26.5)	46,080
Race/Ethnicity			
White	22.9	(19.0 - 26.8)	43,170
Latino	22.1	(13.0 - 31.3)	9,293
African American	32.1	(21.0 - 43.2)	14,765
Asian/Pacific Islander	19.5	(11.3 - 27.3)	17,640
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	5.2*	(0.7 - 9.7)	335
Alameda County Total	22.8	(19.5 - 26.0)	85,373
0.17	20.0	(07.4.00.4)	
California Total	28.2	(27.4 - 29.1)	

Table 33B
Fecal Occult Blood Test Past Two Years, Adults 50 and Older
Education and Poverty Level and Insurance Status

Population Group	Percent of Group	95% CI	Estimated Number
Education Level			
Less than High School	27.6	(13.1 - 42.0)	10,799
Some HS/HS Diploma	19.0	(12.9 - 25.1)	20,238
Some College/Voc/AA/AS	21.0	(15.5 - 26.5)	18,926
Bachelor's Degree	22.8	(16.0 - 29.6)	15,512
Some Grad School/Master's	30.2	(21.3 - 39.2)	15,959
Doctorate or Equivalent	21.9	(4.5 - 15.8)	3,940
Poverty Level			
0-99% FPL	32.0	(18.9 - 45.2)	12,380
100-199% FPL	19.0	(10.1 - 27.9)	11,552
200-299% FPL	24.5	(15.6 - 33.4)	11,556
≥300% FPL	21.9	(18.1 - 25.6)	49,885
Insurance Status			
Insured	23.2	(19.9 - 26.4)	78,746
Not Insured	18.9*	(4.1 - 33.8)	6,628

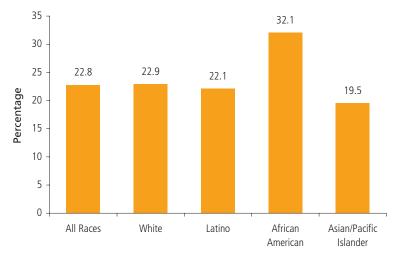
<sup>\*</sup> Rate unreliable

<sup>-</sup> Data not reported due to small numbers



**HP 2010 Objective 3-12a:** At least 50% of adults age 50 and older will have had a fecal occult blood test (FOBT) within the past two years.

Figure 44
Fecal Occult Blood Test Past Two Years, Adults 50 and Older
Race/Ethnic Group



# **Cervical Cancer Screening**

- In the county, 83.7% of women 18 or older reported having had a Pap smear test to screen for cervical cancer in the past three years (Table 34A). This percentage is below the Healthy People 2010 target of 90% of women 18 and older receiving the Pap test for cervical cancer screening. Cervical cancer screening rates were similar to those among Bay Area women (83.8%), and women in California (83.2%).
- Women 25-39 were most likely to have had a Pap smear (90.8%) of all age groups.
- Among major race/ethnic groups, White (87.7%), African American (86.9%), and Latino women

- (85.5%), were significantly more likely to be screened for cervical cancer than Asian/Pacific Islander women (75.3%) (Figure 45).
- Cervical cancer screening rates were generally higher among women with higher education or higher income; most of the differences by education and income were not significant (Table 34B; Figure 46 and 47).
- A greater proportion of women with health insurance reported being screened for cervical cancer than those lacking insurance (84.9% vs. 75.3%).
- Cervical cancer screening rates met the Healthy People 2010 objective only for women 25-39 and those who had a doctorate or equivalent.

Table 34A		
Cervical Cancer Screening Past Three Years, Women 18 or Older		
Age and Race/Ethnic Group		

Percent of Estimated				
Population Group	Group	95% CI	Number	
Age Group				
18-24	69.1	(59.7 - 78.4)	45,790	
25-39	90.8	(87.3 - 94.2)	159,896	
40-64	88.4	(85.4 - 91.5)	221,133	
65-79	73.5	(66.2 - 80.8)	40,551	
80+	45.2	(30.9 - 59.6)	10,394	
Race/Ethnicity				
White	87.7	(84.6 - 90.8)	196,112	
Latino	85.5	(79.8 - 91.2)	87,768	
African American	86.9	(82.2 - 91.7)	64,483	
Asian/Pacific Islander	75.3	(69.4 - 81.3)	116,746	
Amer Indian/Alaska Native	72.5	(42.0 - 100.0)	2,243	
Other	-	-	-	
Two+	84.7	(74.9 - 94.6)	9,873	
Alameda County Total	83.7	(81.4 - 86.1)	477,764	

Bay Area Total	83.8	(82.4 - 85.3)
California Total	83.2	(82.6 - 83.9)

Table 34B
Cervical Cancer Screening Past Three Years, Women 18 or Older
Education and Poverty Level and Insurance Status

Population Group	Percent of Group	95% CI	Estimated Number
Education			
Less than High School	82.8	(76.4 - 89.2)	38,020
Some HS/HS Diploma	77.7	(72.4 - 82.9)	126,479
Some College/Voc/AA/AS	83.0	(78.0 - 87.9)	124,642
Bachelor's Degree	88.6	(84.6 - 92.6)	113,318
Some Grad School/Master's	89.8	(84.2 - 95.4)	62,581
Doctorate or Equivalent	90.5	(82.0 - 99.1)	12,723
Poverty Level			
0-99% FPL	80.3	(73.9 - 86.6)	62,632
100-199% FPL	73.6	(66.7 - 80.4)	66,906
200-299% FPL	79.0	(72.2 - 85.8)	66,380
≥300% FPL	88.7	(85.9 - 91.6)	281,845
Insurance Status			
Insured	84.9	(82.5 - 87.2)	426,153
Not Insured	75.3	(65.8 - 84.9)	51,610

- Data not reported due to small numbers



**HP 2010 Objective 3-11b:** At least 90% of women age 18 and older will have received a Pap test within the past three years.

Figure 45
Cervical Cancer Screening Past Three Years, Women 18 or Older
Education and Poverty Level

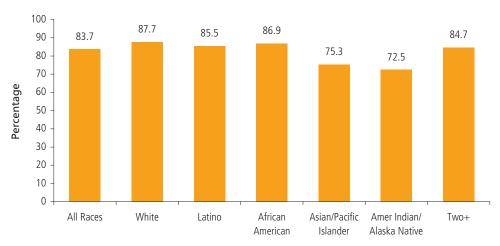


Figure 46
Cervical Cancer Screening Past Three Years, Women 18 or Older
Education Level

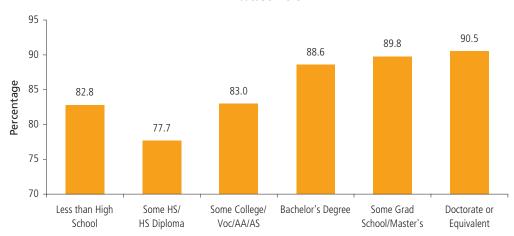


Figure 47 Cervical Cancer Screening Past Three Years, Women 18 or Older Poverty Level



Health of Alameda County's Adults Selected Findings from CHIS 2003 Screening and Prevention Services

Cancer Screening

# Sexually Transmitted Disease Testing

Screening for sexually transmitted diseases (STDs) is recognized as a successful preventive intervention. Screening and treatment of STDs affect both transmission and duration of these diseases. For those diseases that are asymptomatic, screening and treatment can prevent complications. Screening for chlamydia and gonorrhea has been shown to significantly reduce disease burden. Testing for HIV is an effective tool for assisting HIV-infected individuals in coping with their infection and in preventing them from infecting other people.<sup>8</sup>

In CHIS 2003, STD testing rates were measured for adults who were considered at-risk for getting STD. Adults ages 18-35 who reported having at least one sexual partner in the past 12 months, and adults ages 36-70 with more than one sexual partner in the past 12 months, were considered at-risk. In 2003, 30.6% of California respondents in these two risk groups reported being tested for STD in the past 12 months.<sup>7</sup> Fewer at-risk adults 25-39 had been tested than those 18-24 or 40-64. A greater proportion of females than males had been tested (39.2% vs. 22.7%, respectively), and those below 100% of the FPL were more likely to have been tested than those at or above 300% FPL. There was no difference between insured and uninsured at-risk adults in STD testing rates. At-risk African Americans (46.9%) had a significantly higher rate of testing than all other race/ethnic groups, except American Indian/Alaska Natives (39.2%). Thirty percent of Whites, 31.1% of Latinos and 18% of Asians

who were at-risk reported being tested for STD in the past 12 months.

The United States Preventive Services Task Force (USPSTF) strongly recommends that clinicians routinely screen all sexually active women aged 25 years and younger, and other asymptomatic women at increased risk for STD infection, for chlamydia.9 In 2003, of the 30.6% of at-risk California adults who were tested for an STD, 34.0% had been tested for chlamydia.<sup>7</sup> Those ages 18-24 (43.4%) had the highest rate of chlamydia testing, followed by those 25-39 (29.3%) and those 40-64 (19.6%). Testing rates by age group were significantly different from each other. A higher proportion of females (42.4%) reported being tested for chlamydia than males (20.9%). Latinos (26.1%) were less likely than Whites (37.7%) or African Americans (41.0%) to have been tested for chlamydia. There were no significant differences among income groups or between insured and uninsured adults.

The USPSTF recommendation is that clinicians screen all sexually active women, including those who are pregnant, for gonorrhea infection if they are at increased risk for infection.<sup>9</sup>

The USPSTF strongly recommends that clinicians screen for human immunodeficiency virus (HIV) all adolescents and adults at increased risk for HIV infection. In 2003 among at-risk California adults who

#### **Screening for Sexually Transmitted Disease**

- In the past 12 months, have you been tested for a sexually transmitted disease?
- What were you tested for?

Chlamydia

Gonorrhea

**Syphilis** 

HIV/AIDS

Trich (Trichomonas, Trichomoniasis)

Other\_\_\_\_

Screening and Prevention Services

STD Testing

were tested for STD during the past 12 months, 69.0% had been tested for HIV/AIDS.<sup>7</sup> Adults 18-24 were significantly less likely than those 40-64 to have been tested for HIV/AIDS. A greater proportion of males (77.6%) were tested for HIV/AIDS than females (63.5%). There were no differences among race/ethnic groups in HIV testing rates, nor were there any differences by income or insurance status.

#### **Tested for STDs**

- Adults at high risk of sexually transmitted disease (STD) were asked whether they had been tested for a STD. In the county, 28.4% of adults 18-70 reported being tested for STD, which was comparable to the proportion for California (30.6%) (Table 35A).
- Adults 18-24 were most likely to be tested for STD (35.6%); those 25-39 were least likely to be tested for STD (25.9%). Rates for seniors 65-70, a low-risk group, were unreliable.
- Males were significantly less likely than females to be tested for STD (20.6% vs. 37.5%).
- Among the major race/ethnic groups, African Americans were over three times as likely to be tested for STD as Asian/Pacific Islanders (47.7% vs. 15.2%). Whites and Latinos were more likely to have an STD test than Asian/Pacific Islanders

(30.7% and 28.9% respectively).

- Adults with lower education were more likely to be tested for STD than adults with higher education. However, none of the differences in testing rates by education level were significant (Table 35B).
- Adults from lower income households were more likely to be tested for STD than those from higher income households. However, differences in testing rates by income were not significant.
- Among those tested for STD, the proportion of uninsured (29.3%) was higher than the proportion of insured (24.7%).

Note: Adults ages 18-35 who reported having at least one sexual partner in the past 12 months, and adults ages 36-70 with more than one sexual partner in the past 12 months, were considered at-risk

Table 35A
Tested for Sexually Transmitted Disease, Adults 18-70
Age, Gender, and Race/Ethnic Group

Population Group	Percent of Group	95% CI	Estimated Number
Age Group			
18-24	35.6	(26.9 - 44.2)	30,235
25-39	25.9	(20.2 - 31.0)	67,079
40-64	29.7	(19.8 - 39.7)	7,531
65-70	-	-	-
Gender			
Male	20.6	(14.7 - 26.5)	40,950
Female	37.5	(31.9 - 43.1)	64,056
Race/Ethnicity			
White	30.7	(24.0 - 37.3)	33,846
Latino	28.9	(20.1 - 37.6)	28,220
African American	47.7	(35.2 - 60.2)	22,690
Asian/Pacific Islander	15.2	(7.2 - 23.2)	15,379
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	42.7	(20.8 - 64.5)	3,274
Alameda County Total	28.4	(24.2 - 32.5)	105,006
California Total	30.6	(29.4 - 31.8)	

Table 35B

Tested for Sexually Transmitted Disease, Adults 18-70

Education and Poverty Level and Insurance Status

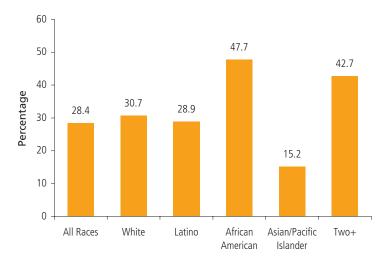
Population Group	Percent of Group	95% CI	Estimated Number
Education Level			
Less than High School	31.6*	(10.4 - 52.8)	11,143
Some HS/HS Diploma	30.2	(22.8 - 37.5)	31,926
Some College/Voc/AA/AS	35.0	(25.5 - 44.5)	28,515
Bachelor's Degree	24.8	(17.9 - 31.7)	22,504
Some Grad School/Master's	18.9	(11.2 - 26.6)	8,916
Doctorate or Equivalent	20.9*	(6.7 - 35.2)	2,003
Poverty Level			
0-99% FPL	30.8	(18.2 - 43.4)	17,115
100-199% FPL	31.2	(22.2 - 40.2)	19,018
200-299% FPL	35.2	(24.6 - 45.8)	16,792
≥300% FPL	25.3	(19.8 - 30.8)	52,081
Insurance Status			
Insured	29.3	(24.5 - 34.1)	86,937
Not Insured	24.7	(17.1 - 32.3)	18,069

<sup>\*</sup> Rate unreliable

76

<sup>-</sup> Data not reported due to small numbers

Figure 48
Tested for Sexually Transmitted Disease, Adults 18-70
Race/Ethnic Group



# **Tested for Chlamydia**

- In the county, 33.3% of at-risk adults who had an STD test reported having been tested for chlamydia; this rate is comparable to that for California (34.0%) (Table 36A).
- Adults 25-39 were more likely to be tested for chlamydia than young adults 18-24 (35.9% vs. 32.2%).
- The rate for males was not reliable; 41.6% of females reported having been tested for chlamydia.
- Among the major race/ethnic groups, Asian/Pacific Islanders were most likely to be tested for chlamydia (50.0%), and Whites were least likely (24.0%). However, differences in testing rates by race/ethnicity were not significant.
- There were no differences in chlamydia testing rates by insurance status (Table 36B).

Note: Adults ages 18-35 who reported having at least one sexual partner in the past 12 months, and adults ages 36-70 with more than one sexual partner in the past 12 months, were considered at-risk.

Table 36A
Tested for Chlamydia, Adults 18-70
Age, Gender, and Race/Ethnic Group

Age, Gender	r, and Race/Eth	inic Group	
Population Group	Percent of Group	95% CI	Estimated Number
Age Group			
18-24	32.2	(20.2 - 44.3)	9,747
25-39	35.9	(24.3 - 47.6)	23,879
40-64	14.7*	(4.8 - 24.6)	1,107
65-70	-	-	-
Gender			
Male	20.3*	(5.1 - 35.6)	8,332
Female	41.6	(32.3 - 51.0)	26,401
Race/Ethnicity			
White	24.0	(14.6 - 33.4)	8,110
Latino	25.1	(10.3 - 39.9)	7,082
African American	40.8	(26.2 - 55.4)	9,250
Asian/Pacific Islander	50.0	(19.8 - 80.2)	7,394
Amer Indian/Alaska Native	35.8*	(0.0 - 99.8)	227
Other	-	-	-
Two+	81.8	(63.5 - 100.0)	2,679
Alameda County Total	33.3	(24.9 - 41.6)	34,732
California Total	34.0	(31.8 - 36.2)	
Gaillottila Total	34.0	(31.0 - 30.2)	

Table 36B Tested for Chlamydia, Adults 18-70 Insurance Status			
Percent of Population Group 95% CI		Estimated Number	
Insurance Status			
Insured	33.7	(24.1 - 43.2)	17,162
Not Insured	31.5	(16.2 - 46.8)	5,698

<sup>\*</sup> Rate unreliable

78

<sup>-</sup> Data not reported due to small numbers

## **Tested for Gonorrhea**

- In the county, 34.6% of at-risk adults who had a STD test reported being tested for gonorrhea (Table 37A).
- Adults 25-39 were more likely than all other age groups to be tested for gonorrhea (35.4%).
- Rates of testing for males were unreliable; 39.7% of females reported having a test for gonorrhea.
- Among the major race/ethnic groups, African Americans were most likely to be tested for gonorrhea (46.7%), and Latinos were least likely (23.6%). Whites had a gonorrhea testing rate of

- 30.4%. Differences in gonorrhea testing rates by race/ethnicity were not significant.
- Among those tested for gonorrhea, the proportion of uninsured (40.4%) was higher than the proportion of insured (33.4%) (Table 37B).

Note: Adults ages 18-35 who reported having at least one sexual partner in the past 12 months, and adults ages 36-70 with more than one sexual partner in the past 12 months, were considered at-risk

Table 37A
Tested For Gonorrhea Past 12 Months, Adults 18-70
Age, Gender, and Race/Ethnic Group

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Population Group	Percent of Group	95% CI	Estimated Number
Age Group			
18-24	33.4	(20.6 - 46.1)	10,086
25-39	35.4	(23.9 - 46.9)	23,516
40-64	33.4	(18.0 - 48.9)	2,519
65-70	-	-	-
Gender			
Male	26.7*	(11.2 - 42.3)	10,943
Female	39.7	(30.5 - 48.9)	25,178
Race/Ethnicity			
White	30.4	(19.8 - 41.0)	10,290
Latino	23.6	(10.4 - 36.8)	6,666
African American	46.7	(31.6 - 61.7)	10,586
Asian/Pacific Islander	47.3*	(16.2 - 78.4)	6,984
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	41.7*	(6.9 - 76.6)	1,367
Alameda County Total	34.6	(26.4 - 42.9)	36,121

# Table 37B Tested For Gonorrhea Past 12 Months, Adults 18-70 Insurance Status

	Percent of		Estimated
Population Group	Group	95% CI	Number
Insurance Status			
Insured	33.4	(24.0 - 42.4)	28,821
Not Insured	40.4	(24.1 - 56.7)	7,300

<sup>\*</sup> Rate unreliable

<sup>-</sup> Data not reported due to small numbers

### **Tested for HIV/AIDS**

- In the county, 65.2% of at-risk adults who tested for STD reported having been tested for HIV/AIDS, which is comparable to the rate for California (69.0%) (Table 38A).
- Adults 40-64 were more likely to have had a test for HIV/AIDS than other age groups (77.7%).
- Males were more likely to have an HIV/AIDS test than females (72.8% vs. 60.4%).
- Among major race/ethnic groups, Asian/Pacific Islanders were most likely to have had a test for HIV/AIDS and Latinos were least likely (77.1% and 58.8% respectively). African Americans and Whites had higher testing rates than Latinos (70.0% and 66.6% respectively) (Figure 49).

- Rates of testing for HIV/AIDS did not vary significantly by education level (Table 38B; Figure 50).
- Low-income adults were less likely to be tested than those with higher incomes; differences in HIV/AIDS testing rates by income were not significant (Figure 51).
- Among those tested for HIV/AIDS, the proportion of uninsured (73.2%) was higher than the proportion of insured (63.6%).

Note: Adults ages 18-35 who reported having at least one sexual partner in the past 12 months, and adults ages 36-70 with more than one sexual partner in the past 12 months, were considered at-risk.

# Table 38A Tested for HIV/AIDS Past 12 Months, Adults 18-70 Age, Gender, and Race/Ethnic Group

Population Group	Percent of Group	95% CI	Estimated Number
	aroup	33 /0 GI	Maninei
Age Group			
18-24	62.6	(47.6 - 77.6)	18,927
25-39	65.0	(53.4 - 76.7)	43,205
40-64	77.7	(63.8 - 91.5)	5,849
65-70	-	-	-
Gender			
Male	72.8	(55.7 - 89.9)	29,812
Female	60.4	(51.0 - 69.7)	38,277
Race/Ethnicity			
White	66.6	(52.8 - 80.3)	22,497
Latino	58.8	(38.9 - 78.6)	16,580
African American	70.0	(55.3 - 84.6)	15,880
Asian/Pacific Islander	77.1	(57.4 - 96.9)	11,394
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	33.7*	(2.8 - 64.6)	1,104
Alameda County Total	65.2	(56.6 - 73.9)	68,089
California Total	69.0	(66.8 - 71.1)	

# Table 38B Tested for HIV/AIDS Past 12 Months, Adults 18-70 Education and Poverty Level and Insurance Status

Population Group	Percent of Group	95% CI	Estimated Number
Education Level			
Less than High School	49.4*	(3.0 - 95.8)	5,503
Some HS/HS Diploma	73.1	(61.3 - 84.9)	23,337
Some College/Voc/AA/AS	63.8	(48.4 - 79.3)	18,198
Bachelor's Degree	60.7	(44.8 - 76.7)	13,341
Some Grad School/Master's	67.1	(45.7 - 88.4)	5,935
Doctorate or Equivalent	90.7*	(75.9 - 100.0)	1,776
Poverty Level			
0-99% FPL	45.2	(21.0 - 69.4)	7,742
100-199% FPL	70.8	(56.3 - 85.3)	13,468
200-299% FPL	67.6	(49.9 - 85.3)	10,985
≥300% FPL	69.1	(57.6 - 80.5)	35,895
Insurance Status			
Insured	63.6	(53.5 - 73.6)	54,855
Not Insured	73.2	(60.9 - 85.6)	13,235

<sup>\*</sup> Rate unreliable

<sup>-</sup> Data not reported due to small numbers

Figure 49
Tested for HIV/AIDS Past 12 Months, Adults 18-70
Race/Ethnic Group

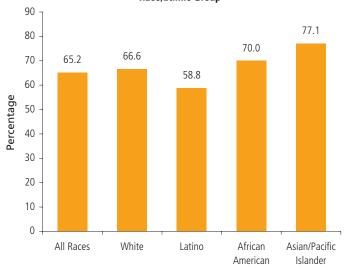


Figure 50
Tested for HIV/AIDS Past 12 Months, Adults 18-70
Education Level

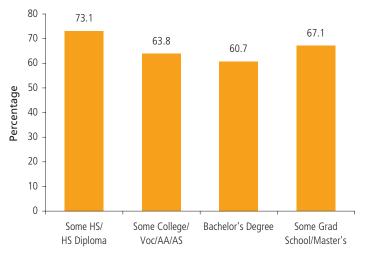
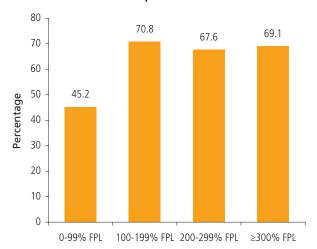


Figure 51
Tested for HIV/AIDS Past 12 Months, Adults 18-70
Poverty Level



Health of Alameda County's Adults Selected Findings from CHIS 2003 Screening and Prevention Services

# **Adult Immunization**

The CDC's Advisory Committee on Immunization Practices (ACIP) develops and reviews the recommended immunization schedules for adults. The flu and pneumonia vaccines are among the most commonly recommended in the general population of adults.<sup>10</sup>

The flu is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness, and at times can lead to death. The best way to prevent the flu is by getting a flu vaccination each year. Every year in the United States, on average, 5% to 20% of the population gets the flu; more than 200,000 people are hospitalized from flu complications and about 36,000 people die from flu. Some people, such as older people, young children, and people with certain health conditions, are at high risk for serious flu complications. The "flu shot", an inactivated vaccine (containing killed virus) that is given with a needle. It is recommended for people six months of age and older, including healthy people and people with chronic medical conditions. About two weeks after vaccination, antibodies develop that protect against influenza virus infection. 10,111

Pneumonia is an inflammation of the lung caused by infection with bacteria, viruses, and other organisms. Pneumonia is often a complication of a pre-existing condition/infection such as a respiratory tract infection or the flu, especially in the elderly. Pneumonia and influenza together are ranked as the seventh leading cause of death in the United States. Approximately 50 percent of pneumonia cases are believed to be caused by viruses and tend to result in less severe illness than bacteria-caused pneumonia. People considered at high risk for pneumonia include the elderly, the very young, and those with underlying health

problems, such as chronic obstructive pulmonary disease, diabetes mellitus, congestive heart failure and sickle cell anemia. Patients with diseases that weaken the immune system, such as AIDS, or those undergoing cancer therapy or organ transplantation, or patients with other chronic illnesses are particularly vulnerable. There are no generally effective treatments for most types of viral pneumonia, which usually heal on their own. However, early treatment with antibiotics can cure or speed recovery from bacterial pneumonia. A vaccine is available for bacterial pneumonia. The pneumococcal vaccine protects against many types of pneumonia-causing bacteria and is effective in approximately 80 percent of healthy adults. The pneumonia vaccine is generally given once. Revaccination is recommended for high-risk adults. The ACIP recommends at least one dose of pneumonia vaccination for adults age 18 and older. 10,12

#### Influenza and Pneumonia Vaccination

- During the past 12 months, have you had a flu shot?
- Have you ever had a pneumonia shot? This shot is given only once or twice in a person's lifetime and is different from the flu shot. It is also called the pneumococcal vaccine

#### Flu Shot

- Adults 40 and older were asked if they had received a flu shot in the past 12 months. In the county, 57.5% of adults reported receiving a flu shot. This rate was comparable to that for the Bay Area (57.0%) and California (54.1%) (Table 39A).
- Seniors 80 and older were significantly more likely to receive a flu shot than younger adults. Immunization rates were significantly different by age group, and ranged from 91.4% to 44.8%.
- Flu immunization rates were not significantly different for males and females (56.8% and 58.1% respectively).
- Among the major race/ethnic groups, Asian/Pa-

- cific Islanders were most likely to receive a flu shot and African Americans least likely (62.9% vs. 50.5%). Whites and Latinos were more likely to receive the flu shot than African Americans (57.4% and 54.1% respectively) (Figure 52).
- Most differences in flu immunization rates by education were not significant (Table 39B).
- Adults from low-income households were significantly more likely to receive the flu shot than those from high-income households (75.5% vs. 55.2%).
- The proportion of those who received the flu shot was 60.7% among the insured; rates for the uninsured were not reliable.

Table 39A
Received a Flu Shot in the Past 12 Months, Adults 40 and Older
Age, Gender, and Race/Ethnic Group

	Percent of		Estimated
Population Group	Group	95% CI	Number
Age Group			
40-64	44.8	(39.6 - 49.9)	103,676
65-79	73.4	(67.3 - 79.5)	77,084
80 <b>+</b>	91.4	(87.1 - 95.7)	34,784
Gender			
Male	56.8	(50.5 - 63.2)	95,304
Female	58.1	(53.1 - 63.1)	120,241
Race/Ethnicity			
White	57.4	(52.4 - 62.3)	108,063
Latino	54.1	(39.6 - 68.5)	22,696
African American	50.5	(40.5 - 60.5)	23,267
Asian/Pacific Islander	62.9	(53.3 - 72.4)	56,754
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	51.9	(31.8 - 72.0)	3,322
Alameda County Total	57.5	(53.5 - 61.5)	215,544

57.0

54.1

(55.0 - 59.1)

(53.1 - 55.0)

Table 39B			
Received a Flu Shot in the Past 12 Months, Adults 40 and Older			
Education and Poverty Level and Insurance Status			

	Percent of		Estimated
Population Group	Group	95% CI	Number
Education Level			
Less than High School	62.4	(45.3 - 79.5)	24,458
Some HS/HS Diploma	59.4	(51.8 - 67.0)	63,375
Some College/Voc/AA/AS	50.2	(42.8 - 57.7)	45,296
Bachelor's Degree	56.1	(47.7 - 64.5)	38,120
Some Grad School/Master's	60.3	(50.6 - 70.0)	31,832
Doctorate or Equivalent	69.2	(57.7 - 80.7)	12,462
Poverty Level			
0-99% FPL	75.5	(66.6 - 84.4)	29,181
100-199% FPL	57.3	(45.5 - 69.2)	34,815
200-299% FPL	54.2	(44.6 - 63.8)	25,612
≥300% FPL	55.2	(50.2 - 60.2)	125,935
Insurance Status			
Insured	60.7	(56.8 - 64.4)	206,104
Not Insured	27.0*	(10.4 - 43.6)	9,440

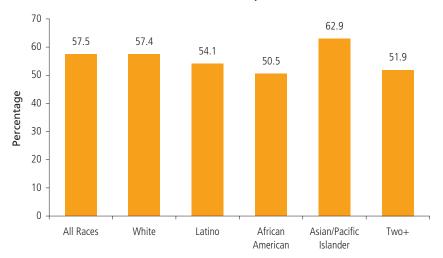
<sup>\*</sup> Rate unreliable

Bay Area Total

California Total

<sup>-</sup> Data not reported due to small numbers

Figure 52
Received a Flu Shot in the Past 12 Months, Adults 40 and Older
Race/Ethnic Group



#### **Pneumonia Shot**

- Adults 40 and older were asked if they had ever received a pneumonia shot. In the county, 36.9% of adults reported receiving a pneumonia shot (Table 40A). This percentage is comparable to that for the Bay Area (37.8%) and for California (36.6%).
- Seniors 80 and older were significantly more likely to receive a pneumonia shot than adults 40-64.
- Males were more likely to receive pneumonia immunization than females (38.8% vs. 35.4%).
   However, gender differences were not significant.
- Among the major race/ethnic groups, African

- Americans were most likely to receive a flu shot (41.2%) and Asian/Pacific Islanders were least likely (28.5%). Whites and Latinos were less likely than African Americans to receive a pneumonia shot (39.7% vs. 35.9% respectively).
- Lower education was associated with higher immunization rates. However, differences in rates by education level were not significant (Table 40B).
- Most differences in pneumonia immunization rates by income were not significant.
- A higher proportion of the insured received a pneumonia shot than the uninsured (38.3% and 23.9% respectively).

Table 40A			
Ever Received a Pneumonia Shot, Adults 40 or Older			
Age, Gender, and Race/Ethnic Group			

	Percent of		Estimated
	Group	95% CI	Number
Age Group			
40-64	19.7	(15.0 - 24.4)	45,604
65-79	62.0	(55.2 - 68.8)	65,118
<b>80</b> +	72.8	(60.7 - 85.0)	27,726
Gender			
Male	38.8	(32.4 - 45.2)	65,138
Female	35.4	(30.7 - 40.1)	73,310
Race/Ethnicity			
White	39.7	(35.0 - 44.5)	74,874
Latino	35.9	(20.5 - 51.3)	15,061
African American	41.2	(30.6 - 50.7)	18,948
Asian/Pacific Islander	28.5	(19.9 - 37.2)	25,742
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	43.8	(24.0 - 63.5)	2,806
Alameda County Total	36.9	(33.1 - 40.8)	138,448

Bay Area Total	37.8	(35.8 - 39.8)
California Total	36.6	(35.7 - 37.5)

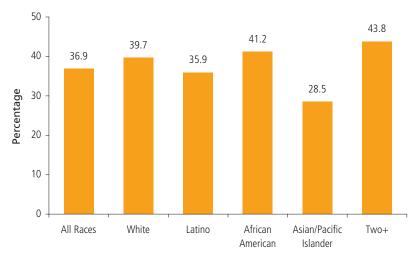
# Table 40B Ever Received a Pnuemonia Shot, Adults 40 or Older Education and Poverty Level and Insurance Status

Percent of	0E% CI	Estimated Number
атопр	3370 GI	Nullibel
45.6	(28.9 - 62.4)	17,881
38.8	(31.2 - 46.3)	41,341
38.1	(31.2 - 44.9)	34,317
33.7	(26.0 - 41.3)	22,855
33.3	(23.5 - 43.1)	17,588
24.8	(12.5 - 37.1)	4,465
38.6	(25.5 - 51.7)	14,933
58.1	(47.6 - 68.7)	35,298
46.3	(36.9 - 55.7)	21,858
29.1	(24.8 - 33.3)	66,358
38.3	(34.5 - 42.1)	130,086
23.9*	(1.5 - 46.2)	8,362
	45.6 38.8 38.1 33.7 33.3 24.8 38.6 58.1 46.3 29.1	Group         95% CI           45.6         (28.9 - 62.4)           38.8         (31.2 - 46.3)           38.1         (31.2 - 44.9)           33.7         (26.0 - 41.3)           33.3         (23.5 - 43.1)           24.8         (12.5 - 37.1)           38.6         (25.5 - 51.7)           58.1         (47.6 - 68.7)           46.3         (36.9 - 55.7)           29.1         (24.8 - 33.3)           38.3         (34.5 - 42.1)

<sup>\*</sup> Rate unreliable

<sup>-</sup> Data not reported due to small numbers

Figure 54
Ever Received a Pnuemonia Shot, Adults 40 or Older
Race/Ethnic Group



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# Social and Neighborhood Characteristics

# Social Support

Social support has been defined "as resources provided by other persons." It has been seen as information leading a person to believe he/she is loved and cared for, is esteemed and valued, and belongs to a social network of communication and mutual obligation. There is considerable evidence that social support has a positive effect on many different aspects of both physical and mental health and that social isolation leads to ill health.<sup>1,2</sup>

Social support is described by social networks and the quality and type of support provided by a member of the network. Social networks are described by the number, frequency, or density of social contacts.

The types of social support described in literature are emotional, instrumental, appraisal, and informational. Emotional support refers to love and caring, sympathy and understanding and/or esteem or value from others. Instrumental support is help or assistance with tangible needs such as getting to an appointment, getting groceries, or household chores. Appraisal support is help in decision-making, giving appropriate feedback, or help deciding what course of action to take. Lastly, informational support is the provision of advice or information for particular needs. Instrumental or informational support may influence health because these types of support improve access to resources and material goods.

There are methodological differences in how the type and quality of social support are measured. The two main methods are to measure: 1) availability (whether there is someone available to provide support should the respondent need it); or 2) received support (how much support the respondent feels he/she has been given).

Among the tools used to assess social support is the one developed for the Medical Outcomes Study.<sup>3</sup> The types of support measured are tangible support, positive social interaction, emotional support, and affectionate support. The CHIS 2003 included items that measured these types of social support.

Another aspect of social support measured in the CHIS was related to religious belief.<sup>4</sup> Research demonstrates the individual health benefits of religious involvement. Attendance at places of worship is associated with reduced mortality and morbidity. Frequent religious attendance has also been shown to predict better physical function, possibly as a result of increased social contacts and better health practices.

#### **Social Support**

How often is someone available...

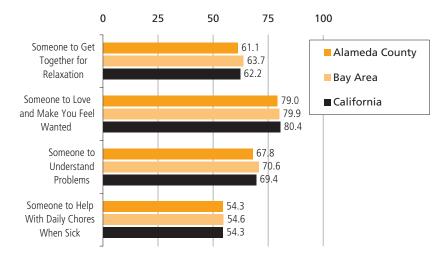
- To help with daily chores if you are sick? Would you say...none of the time, a little of the time, some of the time, most of the time, or all of the time?
- To get together with for relaxation? Would you say...(same response categories as above)
- To understand you problems? Would you say...(same response categories as above)
- To love you and make you feel wanted? Would you say...(same response categories as above)
- During the past seven days did you go to church, temple, or another place of worship for services or other activities?

## **Type of Social Support Available**

- Respondents were asked about availability of social support, an important determinant of health status. Four aspects of social support were measured: tangible support, positive social interaction, emotional support, and affectionate support. In the county, 79.0% reported having someone to love and make them feel wanted (affectionate support). Emotional support (someone to understand your problems) was available to 67.8% of adults. Social support in the form of positive social interaction (someone to get together with for relaxation) was available to 61.1% of adults, and tangible support (someone to help with daily chores when sick) was available to 54.3% of adults. The proportion of adults in the county who reported having these types of support was not substantially different from that in the Bay Area or California (Figure 54).
- The availability of different types of support varied by age group although age differences were not significant. Seniors 80 and older were least likely to have certain types of social support compared to adults who were younger: less than half (48.6%) reported having positive social interactions and about three-fourths (73.9%) reported having someone to love and make them feel wanted. Seniors 65-79 were most likely of all age groups to report having someone to get together with for relaxation (66.0%), someone to understand their problems (71.8%), and someone to help with daily chores (59.3%). Young adults 18-24 were most likely of all age groups to report having someone to love and make them feel wanted (81.6%). Adults 40-64 were least likely of all age groups to have tangible support, i.e., someone to help with daily chores when sick (51.5%) (Figure 55).

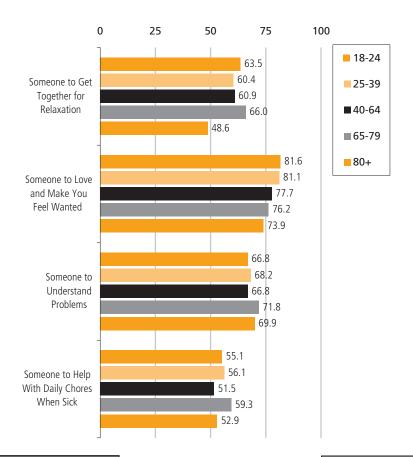
- Gender influenced the availability of social support among adults. Males were significantly more likely than females to have tangible support (60.4% vs. 48.5%) and positive social interactions (65.7% vs. 56.7%). Males were also more likely than females to report having affectionate support (80.1% vs. 78.0%) and emotional support (68.9% vs. 66.9%) (Figure 56).
- Social support varied significantly by race/ethnicity. Among major race/ethnic groups, Whites were most likely to report having all of the types of social support described above. The proportion of Whites reporting positive social interaction (72.2%), emotional support (79.2%), affectionate support (86.2%), and tangible support (64.8%) was significantly higher than all other race/ethnic groups. Latinos were least likely to report emotional and affectionate support (55.2% and 70.1% respectively), and Asian/Pacific Islanders were least likely to report positive social interaction and tangible support (49.1% and 42.2% respectively) (Figure 57).
- Education was strongly associated with social support among adults. Adults who did not go to high school were significantly less likely to report that positive social interaction, emotional support, or affectionate support were available compared to those with a doctorate or equivalent and significantly less likely to have tangible support than those with a bachelor's degree (Figure 58).
- Income influenced the availability of all types of social support among adults. Adults from low-income households had significantly lower levels of all types of social support available to them than those from high-income households (Figure 59).

Figure 54 Social Support Geographic Comparisons



Note: Figures 54-59 show the percentage of adults who report availability of these types of social support "most of the time " or "all of the time."

Figure 55 Social Support Age Group



Social and Neighborhood Characteristics
Social Support

Health of Alameda County's Adults Selected Findings from CHIS 2003

Figure 56 Social Support Gender

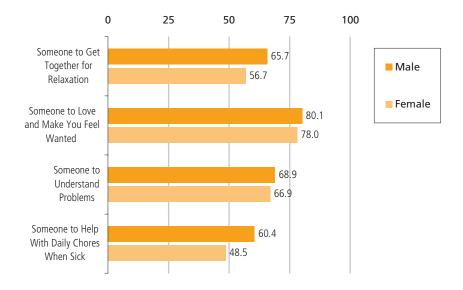


Figure 57 Social Support Race/Ethnic Group

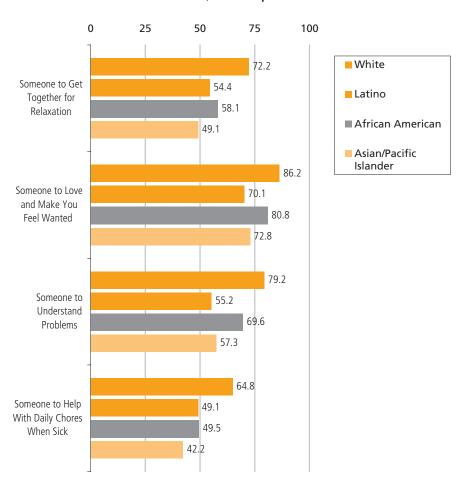
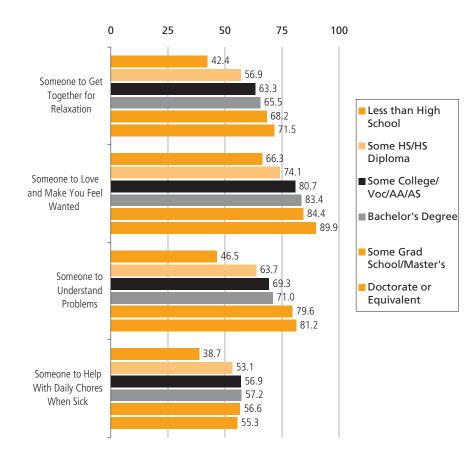
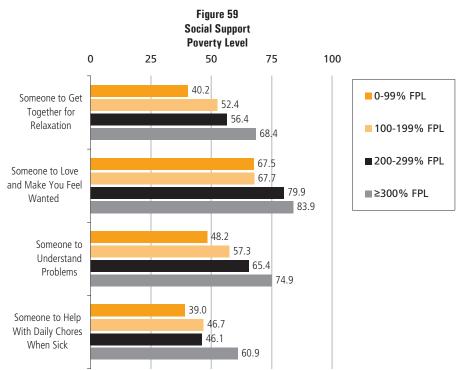


Figure 58 Social Support Education Level





## Went to a Place of Worship

- In the county, 36.2% of adults reported that they went to a place of worship in the past seven days (Table 41A).
- Seniors 65-79 were most likely to visit a place of worship (46.4%) compared to adults in other age groups.
- A smaller proportion of males reported visiting a place of worship than females (34.7% vs. 37.6%). However, this gender difference was not significant
- Among major race/ethnic groups, African
  Americans were significantly more likely to visit a
  place of worship than Whites (47.2% vs. 28.0%).
  Asian/Pacific Islanders and Latinos (42.0% and
  39.4% respectively) were also significantly more
  likely to visit a place of worship than Whites
  (Figure 60).
- There were no significant differences in the percentage of adults who reported visiting a place of worship by education or income (Table 41B).

#### Table 41A Went to Place of Worship in the Past Seven Days Age, Gender, and Race/Ethnic Group

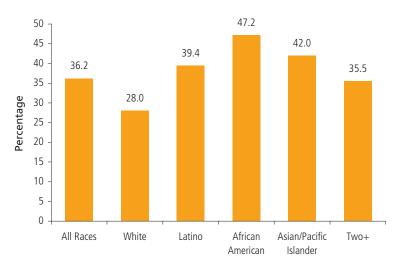
	Percent of		Estimated
Population Group	Group	95% CI	Number
Age Group			
18-24	33.3	(26.0 - 40.6)	44,454
25-39	33.0	(28.5 - 37.5)	120,660
40-64	37.3	(33.7 - 40.9)	173,671
65-79	46.4	(39.5 - 53.3)	48,713
80 ÷	34.9	(23.9 - 45.9)	13,278
Gender			
Male	34.7	(30.8 - 38.6)	186,442
Female	37.6	(34.6 - 40.6)	214,333
Race/Ethnicity			
White	28.0	(24.7 - 31.4)	129,502
Latino	39.4	(33.5 - 45.3)	79,171
African American	47.2	(40.6 - 53.8)	62,281
Asian/Pacific Islander	42.0	(36.5 - 47.5)	119,708
Amer Indian/Alaska Native	33.2*	(3.6 - 62.9)	2,043
Other	42.6*	(7.2 - 78.0)	1,109
Two+	35.5	(23.5 - 47.5)	6,961
Alameda County Total	36.2	(33.8 - 38.6)	400,775

# Table 41B Went to Place of Worship in the Past Seven Days Education and Poverty Level

	Percent of		Estimated
Population Group	Group	95% CI	Number
Education Level			
Less than High School	33.7	(24.4 - 43.1)	32,097
Some HS/HS Diploma	35.9	(31.4 - 40.4)	112,848
Some College/Voc/AA/AS	37.6	(32.4 - 42.8)	98,735
Bachelor's Degree	37.5	(32.5 - 42.5)	97,189
Some Grad School/Master's	35.6	(29.6 - 41.7)	48,956
Doctorate or Equivalent	28.1	(18.9 - 37.4)	10,951
Poverty Level			
0-99% FPL	36.4	(29.5 - 43.2)	48,786
100-199% FPL	38.4	(32.2 - 44.7)	62,508
200-299% FPL	40.3	(34.1 - 46.4)	57,402
≥300% FPL	34.7	(31.5 - 37.9)	232,079

<sup>\*</sup> Rate unreliable

Figure 61 Went to Place of Worship in the Past Seven Days Race/Ethnic Group



# **Housing and Neighborhood**

The physical and social characteristics of neighborhoods are strong predictors of health in communities. They may affect health directly or influence outcomes that predict health.<sup>4,5</sup>

Housing characteristics such as quality, type, stability, and household crowding contribute to health and well-being of a community. Other neighborhood characteristics such as presence of parks or churches reflect and activate the potential of neighborhoods to promote healthy behaviors. Violence in a neighborhood promotes fear and may increase stress or reduce opportunities for physical activity. This in turn has implications for health outcomes such as heart disease and hypertension.<sup>4,5</sup>

Crime prevention programs are designed to organize and mobilize residents of a community around their concerns about crime and safety in their neighborhood. Neighborhood Watch is a specific program which enlists the active participation of community members in cooperation with law enforcement to reduce crime in their neighborhood. Each neighborhood elects a "Block Captain" who coordinates information in their neighborhood and acts as a liaison with the police. The program encourages neighbors to get to know each other and to protect themselves from criminal activity.

Among the key characteristics that describe the collective dimensions of neighborhoods are social cohesion and social capital. Social cohesion refers to the extent of connectedness and solidarity among groups in a community. It can generate social support and useful health-related information in a neighborhood. Social capital is one aspect of social cohesion. It is defined in terms of trust among persons and how much people reciprocate the actions of others in the community. Social capital can be a resource for individuals, and facilitate the process of taking action as a community. At the neighborhood level, social capital may benefit individual and community outcomes. It might also influence health behaviors by promoting the sharing of health information, increasing the likelihood that healthy norms of behavior are adopted, and exerting control over unhealthy or deviant health-related behavior. Neighborhood social capital can also affect health by increasing access to local services and amenities. It may also directly provide social support and promote self esteem and mutual respect among members of a community.5

The combination of mutual trust and shared expectations of intervening on behalf of the common good defines the neighborhood concept of "collective efficacy." Robert Sampson described collective efficacy as the extent to which neighbors are willing

#### **Housing Characteristics**

- Do you own or rent your home?
- Do you live in a house, a duplex, a building with three or more units, or a mobile home?
- How many rooms are in your home, not counting bathroom, porches, balconies, or hallways?

#### **Neighborhood Characteristics**

- While you have lived in your neighborhood, has your home ever been broken into?
- Does your neighborhood have a crime prevention program or neighborhood watch?
- Is there a park or playground close to where you live?
- Is there a place near your home where you could take a walk or exercise if you wanted to do some physical activity?‡

‡ Asked only of Alameda County residents.

to exert social control over deviant behavior.<sup>6</sup> It has been shown that collective efficacy plays an important role in prevention of violent crime in neighborhoods. According to other research studies, a similar process might operate to prevent other forms of unhealthy behaviors such as smoking, or substance use.<sup>4,6,7</sup>

values with them, get along with them and are willing to help them) also walk more for leisure than those in a neighborhood with little social cohesion.<sup>8</sup>

Sampson developed a measure of social cohesion that consisted of five items rated on a four-point Likert scale, and a similar measure of "informal social control" as part of a combined measure of collective efficacy. CHIS 2003 used the social cohesion questions developed by Robert Sampson and used by other researchers to measure neighborhood cohesion.<sup>6</sup>

Perceived neighborhood safety is basic to a sense of well-being in a community. Perceived lack of safety in a neighborhood can impact social interaction and social cohesion. Neighborhood safety and cohesion determines access to amenities such as parks or playgrounds, and determines how active people in the neighborhood are.<sup>4</sup>

Adults who report that their neighborhood has a crime prevention or neighborhood watch program walk more for leisure, on average, than those without such a program. Adults who report living in neighborhoods that has more social cohesion (measured by the extent to which people trust their neighbors, share

#### **Neighborhood Cohesion**

Tell me if you strongly agree, agree, disagree or strongly disagree with the following statements:

- People around here are willing to help their neighbors.
- Most people know each other in this neighborhood.
- People in this neighborhood can be trusted.
- People in this neighborhood generally do not get along with each other.
- People in this neighborhood do not share the same values.

#### **Neighborhood Safety**

- The park or playground closest to where I live is safe during the day.
- The park or playground closest to where I live is safe at night.
- Many people in your neighborhood are afraid to go out at night.
- Is it safe to exercise outdoors in your neighborhood? (Yes/No)‡
- ‡ Asked only of Alameda County residents.

## **Housing Characteristics**

- In the county, 52.7% of adults reported owning the house in which they lived, 43.9% were renting, and 3.4% had other arrangements for housing (Table 42). Home ownership in the county was significantly lower than in the Bay Area (57.5%). The percentage of renters in the county was significantly higher than in the Bay Area (39.2%) and California (40.4%) (data not shown).
- Almost two-thirds (65.5%) of adults lived in a house, 27.6% lived in a building with multiple (three or more) units, 5.8% in a duplex, and 1.1% in a mobile home (Table 43). The proportion of county residents living in multiple-unit housing was significantly higher than in California (24.6%) (data not shown).

Household crowding is defined as more persons than rooms in a home. Over one in five (22.8%) households in the county fitted this definition of crowding (Table 44).

	Table 42 Housing Tenure		
Housing Tenure	Percent	95% CI	Estimated Number
Own	52.7	(50.2 - 55.2)	583,959
Rent	43.9	(41.5 - 46.4)	486,752
Other Arrangement	3.4	(2.4 - 4.3)	37,203

Table 44 Household Crowding				
Household Crowding Percent 95% CI Number				
Crowded**	22.8	(20.4 - 25.1)	252,457	
Not Crowded	77.2	(74.9 - 79.6)	855,457	

Note: \*\*A crowded household is defined as one with more persons than rooms

Table 43 Housing Type				
Housing Type Percent 95% CI Number				
House	65.5	(63.2 - 67.8)	725,753	
Duplex	5.8	(4.6 - 6.9)	64,162	
Bldg With Three or More Units	27.6	(25.5 - 29.8)	305,964	
Mobile Home	1.1	(0.6 - 1.6)	12,034	

# **Neighborhood Characteristics**

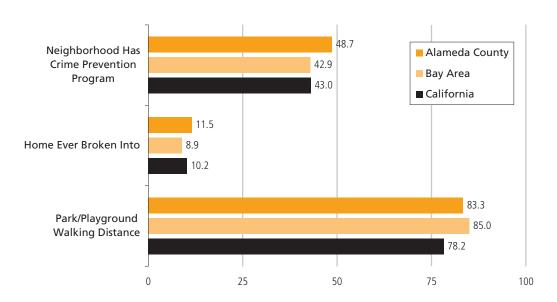
# Crime Prevention, Break-Ins, and Park/Playground

- Respondents were asked to describe characteristics of their neighborhood such as availability of a park, playground, or open space within walking distance, whether their home was broken into, and whether the neighborhood had a crime prevention program or neighborhood watch. A significantly higher percentage of adults in the county reported having a park, playground, or open space in their neighborhood than in California. Adults in the county were also significantly more likely to be living in neighborhoods with a crime prevention program than those in the Bay Area or California (Figure 61).
- Young adults 18-24 were significantly less likely than seniors 65-79 to describe their neighborhood as having a crime prevention program (42.3% vs. 53.8%). Adults 25-39 were significantly less likely than seniors 65-79 to report that their home was broken into (7.1% vs. 16.1%). Young adults 18-24 were significantly more likely than seniors 80 and older to have a park or playground within walking distance of their home (86.6% vs. 67.2%) (Figure 62).
- Males were more likely than females to have a park/playground or open space in the neighborhood (86.4% vs. 80.5%) (Figure 63).

- African Americans were significantly more likely than Latinos to be living in a neighborhood with a crime prevention program (53.4% vs. 37.9%). Asian/Pacific Islanders were least likely to report that their home was ever broken into (7.7%) compared to African Americans or Latinos (12.8%) and Whites (12.6%). Whites were most likely to report having a park/playground or open space in the neighborhood (86.9%) and Asian/Pacific Islanders were least likely (79.0%) (Figure 64).
- Education was associated with neighborhood characteristics. Adults who did not go to high school were less likely than adults at higher education levels to be living in a neighborhood with a crime prevention program, or have a park/play-ground in the neighborhood. They were most likely to report that their home was broken into (Figure 65).
- Adults from low-income households were less likely than those from high-income households to be living in a neighborhood with a crime prevention program or have a park/playground within walking distance of their home (Figure 66).

Note: Low-income households refers to those 0-99% below the FPL. High-income households refers to those at or above 300% FPL.

Figure 61 Neighborhood Characteristics Geographic Comparisons



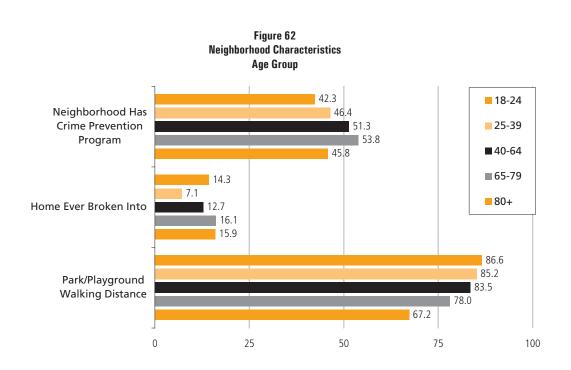
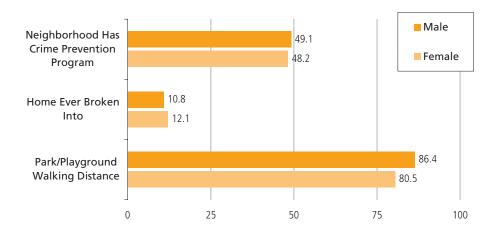
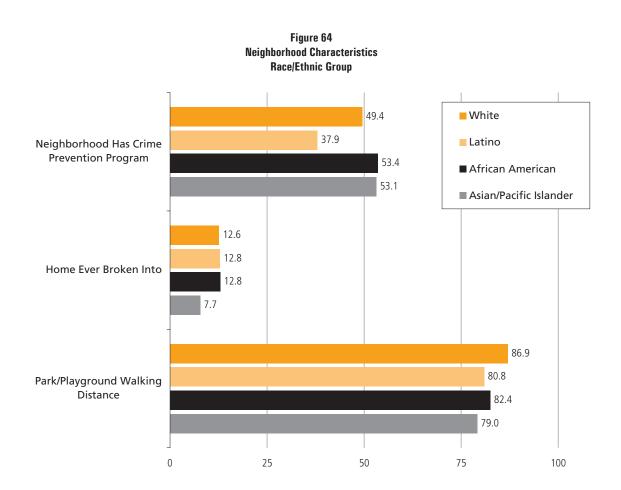


Figure 63 Neighborhood Characteristics Gender





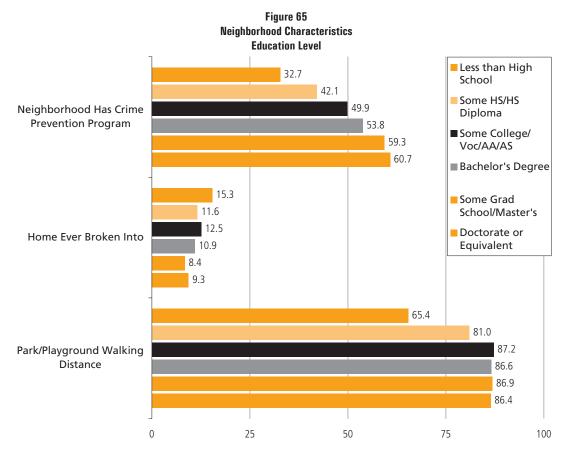
Social and Neighborhood Characteristics

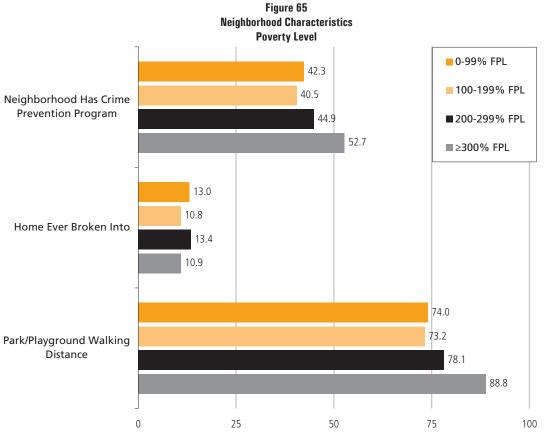
**Housing and Neighborhood** 

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Health of Alameda County's Adults

Selected Findings from CHIS 2003





#### Place Near Home to Walk/Exercise

- In the county, 85.5% of adults reported having a place near home to walk/exercise (Table 45A).
- Adults 40-64 were the most likely to report having a place to walk/exercise near home (88.1%), significantly more than seniors 80 and older (70.2%).
- A higher proportion of males than females reported having a place near home to walk/exercise (87.2% vs. 83.9%). However, this gender difference was not significant.
- Among major race/ethnic groups, Whites were the most likely (92.5%) and Latinos least likely to have a place near home to walk/exercise (77.3%).

- However, race/ethnic differences were not significant (Figure 67).
- Adults from low-income households were significantly less likely than those from high-income households to have a place to walk/exercise near home (72.5% vs. 90.8%) (Table 45B; Figure 68).
- Adults living in buildings with multiple units were less likely than those living in other types of housing to have a place near home to walk/exercise.

Note: Low-income households refers to those 0-99% below the FPL. High-income households refers to those at or above 300% FPL.

Table 45A Place Near Home to Walk/Exercise Age, Gender, and Race/Ethnic Group				
Percent of Estimate Population Group Group 95% CI Number				
Age Group	Стопр	0070 01	124111201	
18-39	85.3	(82.3 - 88.2)	425,450	
40-64	88.1	(85.9 - 90.4)	410,449	
65-79	80.2	(75.1 - 85.4)	84,274	
80+	70.2	(57.5 - 83.0)	26,737	
Gender				
Male	87.2	(84.5 - 89.9)	468,399	
Female	83.9	(81.5 - 86.2)	478,512	
Race/Ethnicity				
White	92.5	(37.0 - 100.0)	427,208	
Latino	77.3	(78.3 - 86.6)	155,230	
African American	78.8	(90.7 - 94.3)	103,931	
Asian/Pacific Islander	82.5	(79.4 - 100.0)	235,012	
Amer Indian/Alaska Native	91.0	(72.2 - 85.5)	5,594	
Other	69.6	(87.6 - 97.3)	1,811	
Two+	92.5	(87.6 - 97.3)	18,124	
Alameda County Total	85.5	(83.7 - 87.2)	946,910	

Table 45B Place Near Home to Walk/Exercise Poverty Level and Housing Type				
Percent of Estimate				
Population Group	Group	95% CI	Number	
Poverty Level				
0-99% FPL	72.5	(66.1 - 79.0)	97,322	
100-199% FPL	76.7	(71.8 - 81.6)	124,839	
200-299% FPL	82.8	(78.1 - 87.6)	118,124	
≥300% FPL	90.8	(88.6 - 92.9)	606,625	
Housing Type				
House	86.4	(84.1 - 88.7)	627,030	
Duplex	85.2	(78.7 - 91.8)	54,676	
Building with 3 or more Units	83.3	(80.0 - 86.6)	254,919	
Mobile Home	85.5	(74.5 - 96.4)	10,285	

Figure 67
Place Near Home to Walk/Exercise
Race/Ethnic Group

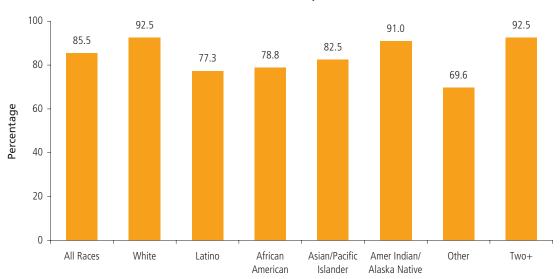
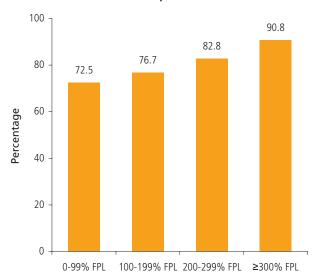


Figure 68
Place Near Home to Walk/Exercise
Poverty Level



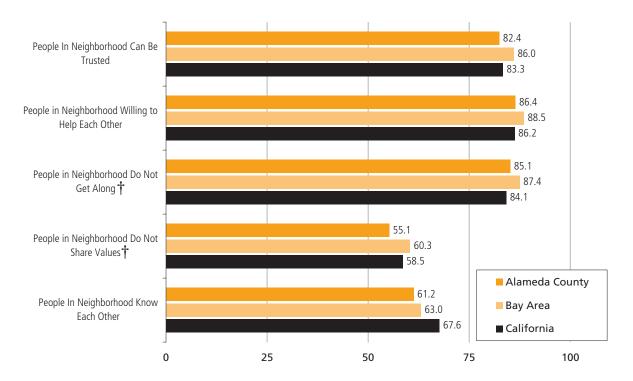
### **Neighborhood Cohesion**

- In the county, the majority of adults reported that people in their neighborhood can be trusted (82.4%), people are willing to help each other (86.4%), and that people know each other (61.2%). The majority of adults (85.1%) disagreed that people in their neighborhood did not get along and about half (55.1%) disagreed that they did not share values. Adults in the county were significantly less likely to report neighborhood trust than Bay Area adults. They were significantly more likely than California adults to be in neighborhoods where people know each other and significantly more likely than Bay Area and California adults to report shared values in their neighborhood. On other measures of cohesion, adults in the county were similar to those in the Bay Area and California (Figure 69).
- Perception of neighborhood cohesion was notably different by age group. Young adults 18-24 were least likely of all age groups to characterize their neighborhoods as cohesive (Figure 70). Seniors 65-79 were significantly more likely than young adults to describe people in their neighborhood as helpful, or to report neighborhood trust. Seniors 80 and older were significantly more likely than young adults to report that people in their neighborhood knew each other. Adults 40-64 were significantly more likely than young adults to describe people in their neighborhood as getting along or having shared values.
- Males were generally more likely to be in cohesive neighborhoods than females. However, gender differences were not significant (Figure 71).
- Among the major race/ethnic groups, Whites were most likely to describe their neighborhoods

- as one where there was trust, people were helpful, got along, and shared values. The percentages were significantly higher than for Latinos, who were least likely of all race/ethnic groups to describe their neighborhoods that way (Figure 72). Latinos were most likely to describe their neighborhood as one where people knew each other, significantly more than Asian/Pacific Islanders, who were least likely to.
- Neighborhood cohesion was clearly associated with education among adults (Figure 73). Adults who did not go to high school were significantly less likely than those with a doctorate or equivalent to report that people in their neighborhood could be trusted, got along, and shared values. They were significantly less likely to perceive people in their neighborhood as helpful than those who had gone to graduate school. This group was significantly more likely than those with a doctorate or equivalent to report that people in their neighborhood knew each other.
- Neighborhood cohesion was also associated with income among adults (Figure 74). Adults from low-income households were generally less likely than adults from high-income households to describe their neighborhoods as cohesive. Adults from low-income households were significantly less likely than those from high-income households to describe their neighborhood as one in which people could be trusted, were willing to help each other, got along, or shared values.

Note: Low-income households refers to those 0-99% below the FPL. High-income households refers to those at or above 300% FPL.

Figure 69 Neighborhood Cohesion Geographic Comparisons



Note: Figures 69-74 show the percentage of adults who strongly agree/agreed with statements describing their neighborhood, except those marked "†". Statements marked "†" show percentage of adults who strongly disagree/disagreed.

Figure 70 Neighborhood Cohesion Age Group

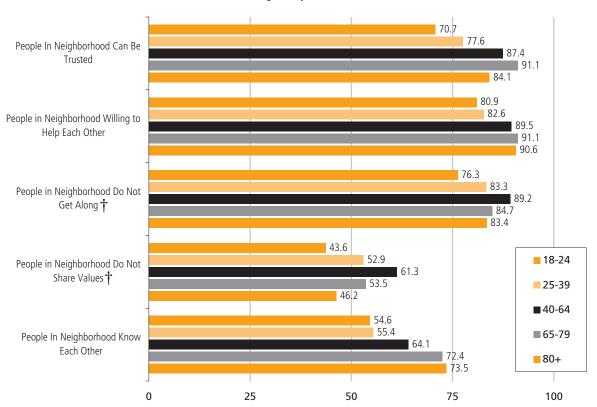


Figure 71 Neighborhood Cohesion Gender

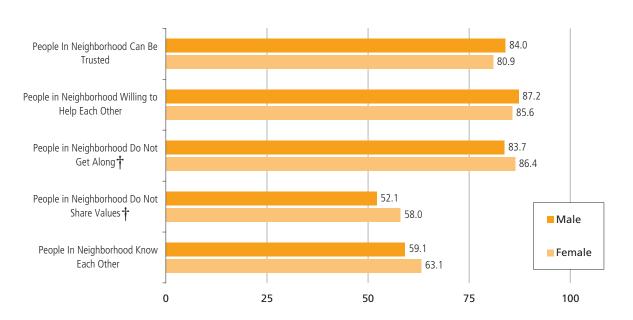


Figure 72 Neighborhood Cohesion Race/Ethnic Group

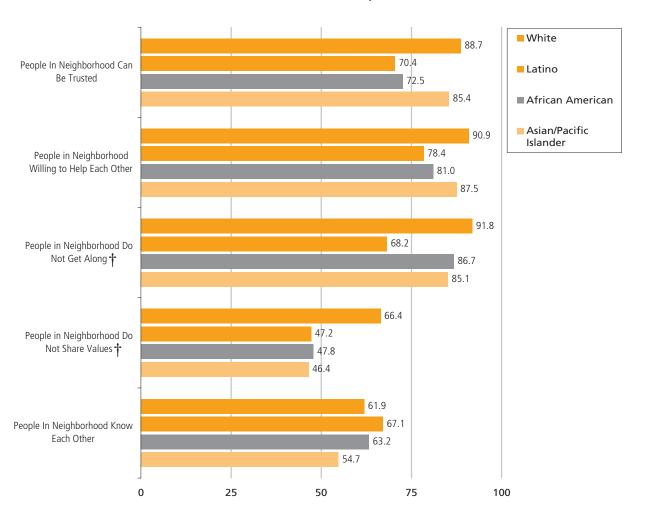
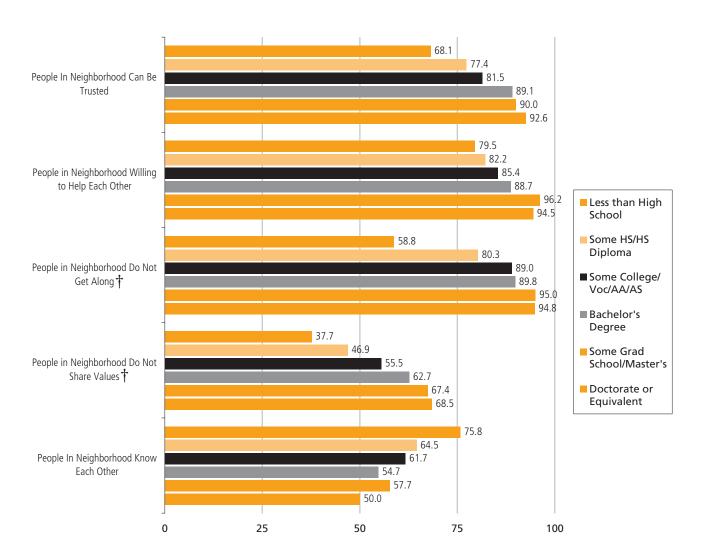
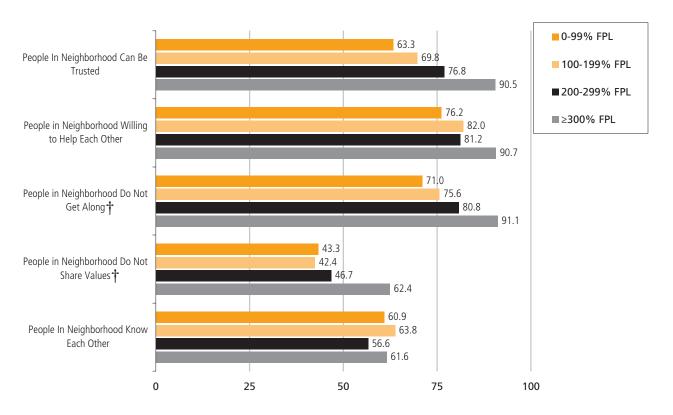


Figure 73 Neighborhood Cohesion Education Level



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Figure 74 Neighborhood Cohesion Poverty Level



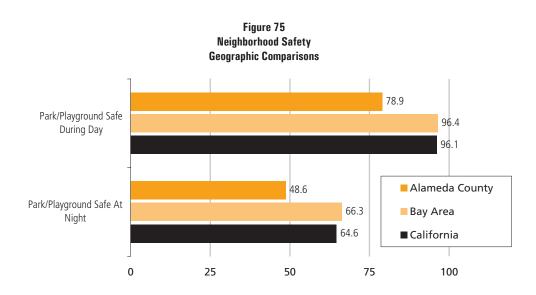
## **Neighborhood Safety**

## Park/Playground Safety

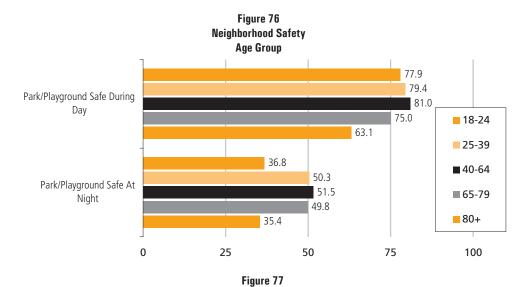
- Respondents were asked about safety of parks and playgrounds in their neighborhood. In the county, over three-fourths (78.9%) of adults reported that their park/playground was safe during the day, and about half (48.6%) reported it being safe at night. Residents in the county were significantly less likely to report safety in their neighborhood than Bay Area or California residents (Figure 75).
- Adults 40-64 were most likely to report park safety during the day (81%). This was significantly more than seniors 80 and older (63.1%). Seniors age 80 and older and young adults 18-24 (35.4% and 36.8% respectively) were much less likely to report park/playground safety at night compared to those in other age groups. About half of adults in the other age groups (25-39, 40-64, and 65-79) perceived their neighborhood park or playground as safe at night (Figure 76).
- A significantly higher proportion of males than females described their neighborhood park/play-

- ground as safe during the day and night (Figure 77).
- Among major race/ethnic groups, Whites were significantly more likely than other groups to describe their neighborhood park/playground as safe during the day and significantly more likely than Latinos or African Americans to report safety at night (Figure 78).
- Adults with higher education were significantly more likely than those with lower education to describe their neighborhood park/playground as safe during the day and night (Figure 79).
- Adults from high-income households were more likely than adults from low-income households to describe their neighborhood park/playground as safe during the night (Figure 80).

Note: Low-income households refers to those 0-99% below the FPL. High-income households refers to those at or above 300% FPL.

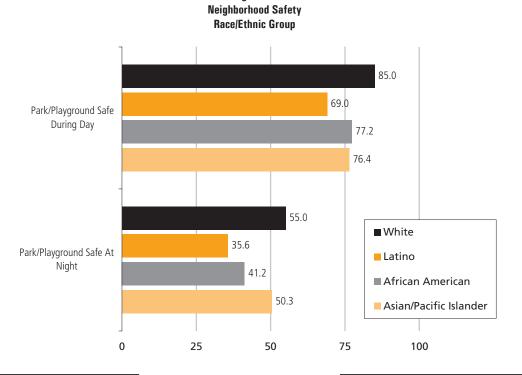


Note: Figures 75-80 show the percentage of adults who strongly agree/agreed with statements describing their neighborhood.



**Neighborhood Safety** Gender 81.8 Park/Playground Safe During Day 76.2 Male 55.5 Female Park/Playground Safe At Night 42.1 0 25 50 75 100

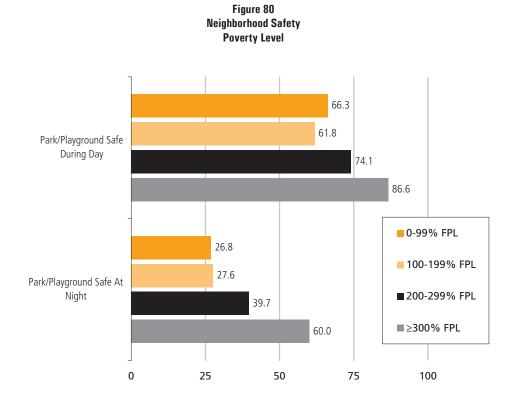
Figure 78



Health of Alameda County's Adults Selected Findings from CHIS 2003 Social and Neighborhood Characteristics

Housing and Neighborhood

Figure 79 **Neighborhood Safety Education Level** 52.9 74.8 83.3 Park/Playground Safe Less than High **During Day** 84.2 School 86.5 Some HS/HS 84.2 Diploma Some College/ Voc/AA/AS 24.0 ■ Bachelor's 43.7 Degree 48.5 Park/Playground Safe At Some Grad Night 55.1 School/Master's 61.0 ■ Doctorate or 62.7 Equivalent 25 50 75 100



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### Afraid To Go Out at Night

- In the county, 72.4% of adults reported that most people were not afraid to go out at night in their neighborhood (Table 46A). This proportion was significantly lower than that for the Bay Area (80.2%) and California (78.6%).
- A significantly higher proportion of adults 40-64 than seniors 65-79 disagreed that people were afraid to go out at night in their neighborhood (77.7% and 62.4% respectively).
- Gender differences in the perception of safety, i.e., fear of going out at night, were not significant.
- Among major race/ethnic groups, the proportion of adults who disagreed that many people in their neighborhood were afraid to go out at night was significantly higher among Whites (79.5%) than among African Americans or Latinos (70.5% and 53.6% respectively).

- Higher education was associated with less perceived fear of going out at night in the neighborhood (Table 46B). The proportion of adults with a doctorate or equivalent who did not perceive fear of going out at night was over twice that of those who never completed high school (88% and 43.8% respectively).
- Income was also associated with perceived fear of going out at night: the proportion of adults who did not perceive fear of going out at night was significantly higher among those from high-income households than for all other income levels. This proportion ranged from 83.4% in the high-income group to 51.1% in the low-income group.

Note: Low-income households refers to those 0-99% below the FPL. High-income households refers to those at or above 300% FPL.

Table 46A		
People In Neighborhood Afraid to Go Out at Night		
Age, Gender, and Race/Ethnic Group		

D 144 0	Percent o	-	Estimated
Population Group	Group	95% CI	Number
Age Group			
18-24	62.4	(55.0 - 69.8)	83,235
25-39	73.1	(69.0 - 77.1)	267,117
40-64	77.7	(74.7 - 80.8)	362,043
65-79	61.7	(55.1 - 68.3)	64,820
80+	64.2	(53.1 - 75.4)	24,455
Gender			
Male	73.6	(70.2 - 77.0)	395,414
Female	71.2	(68.4 - 73.9)	406,256
Race/Ethnicity			
White	79.5	(76.7 - 82.4)	367,273
Latino	53.6	(47.6 - 59.7)	107,731
African American	70.5	(64.7 - 76.3)	92,988
Asian/Pacific Islander	74.4	(69.8 - 78.9)	211,927
American Indian/Alaska Native	84.3	(67.7 - 100.0)	5,186
Other	88.0	(74.4 - 100.0)	2,290
Two+	72.8	(63.0 - 82.7)	14,275
Alameda County Total	72.4	(70.2 - 74.5)	801,670
Bay Area Total	80.2	(79.1 - 81.4)	
California Total	78.6	(78.1 - 79.2)	

# Table 46B People In Neighborhood Afraid to Go Out at Night Education and Poverty Level

Population Group	Percent of Group	95% CI	Estimated Number
Education Level			
Less than High School	43.8	(33.6 - 54.0)	41,700
Some HS/HS Diploma	64.0	(59.4 - 68.5)	201,054
Some College/Voc/AA/AS	75.9	(71.6 - 80.1)	199,302
Bachelor's Degree	80.0	(76.4 - 83.5)	207,362
Some Grad School/Master's	85.8	(82.4 - 89.3)	117,968
Doctorate or Equivalent	88.0	(82.9 - 93.1)	34,283
Poverty Level			
0-99% FPL	51.1	(43.4 - 58.8)	68,575
100-199% FPL	53.0	(46.7 - 59.3)	86,296
200-299% FPL	62.5	(56.4 - 68.5)	89,044
≥300% FPL	83.4	(81.2 - 85.7)	557,755

Note: Percentages shown are of adults who strongly disagreed/disagreed that most people were afraid to go out in their neighborhood.

#### Safe To Exercise Outdoors

- In the county, the majority (85.6%) of adults reported that it was safe to exercise outdoors in their neighborhood (Table 47A).
- Adults 40-64 were most likely of all age groups to describe their neighborhood as being safe to walk/exercise outdoors.
- Males were more likely than females to describe their neighborhood as being safe to walk/exercise outdoors.
- Among major race/ethnic groups, Whites (92.2%) were significantly more likely to describe their neighborhood as safe to walk/exercise than

- Asian/Pacific Islanders (83.2%), African Americans (81.3%), and Latinos (76.3%) (Figure 81).
- Adults from high-income households were significantly more likely to describe their neighborhood as being safe to walk/exercise than those from low-income households (Table 47B).
- Adults living in a house were significantly more likely than those living in a building with multiple units to describe their neighborhood as being safe to walk/exercise outdoors (88.6% vs. 79.2%).

Note: Low-income households refers to those 0-99% below the FPL. High-income households refers to those at or above 300% FPL.

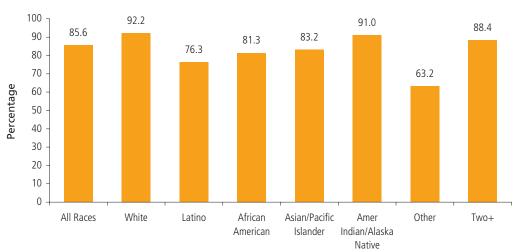
Table 47A	
Safe to Exercise Outdoors in Neighborhood	
Age, Gender, and Race/Ethnic Group	
Age, Gender, and Race/Ethnic Group	

Age, Gender, and Race/Ethnic Group				
Population Group	Percent of Group	95% CI	Estimated Number	
Age Group				
18-39	84.4	(81.4 - 87.3)	420,975	
40-64	88.8	(86.7 - 90.8)	413,467	
65-79	80.4	(74.7 - 86.2)	84,458	
80+	76.1	(66.5 - 85.6)	28,950	
Gender				
Male	88.0	(85.4 - 90.7)	472,971	
Female	83.2	(81.0 - 85.4)	474,878	
Race/Ethnicity				
White	92.2	(90.3 - 94.0)	425,614	
Latino	76.3	(71.7 - 80.9)	153,239	
African American	81.3	(74.6 - 87.9)	107,165	
Asian/Pacific Islander	83.2	(79.5 - 87.0)	237,270	
Amer Indian/Alaska Native	91.0	(79.4 - 100.0)	5,594	
Other	63.2	(30.1 - 96.3)	1,644	
Two+	88.4	(82.5 - 94.2)	17,323	
Alameda County Total	85.6	(83.8 - 87.3)	947,849	

# Table 47B Safe to Exercise Outdoors in Neighborhood Poverty Level and Housing Type

	Percent of		Estimated
Population Group	Group	95% CI	Number
Poverty Level			
0-99% FPL	76.1	(70.5 - 81.7)	102,119
100-199% FPL	74.9	(70.0 - 79.8)	121,920
200-299% FPL	79.2	(74.1 - 84.4)	112,975
≥300% FPL	91.4	(89.3 - 93.5)	610,835
Housing Type			
House	88.6	(86.6 - 90.5)	642,681
Duplex	80.7	(72.0 - 89.3)	51,756
Building with 3 or more Units	79.6	(76.1 - 83.2)	243,646
Mobile Home	81.2	(67.6 - 94.7)	9,766

Figure 81 Safe to Exercise Outdoors in Neighborhood Race/Ethnic Group



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# Access to Health Care

# **Measures of Access to Care**

There are several measures used to describe access to health care. Some of the commonly used measures are health insurance coverage, usual source of care, delays in care, and barriers to health care.<sup>1</sup>

Availability of health insurance is a critical determinant of access to health care. Lack of health insurance is associated with substandard medical care and increased risk of subsequent morbidity and mortality. One in five Californians without insurance coverage for all or part of the year reports that their health is fair/poor and one in 14 reports having asthma symptoms. One in four uninsured adults reports being diagnosed with hypertension. Medical care for these chronic problems is likely to be hindered by lack of health insurance.<sup>2</sup> In 2003, 16.6% of California adults 18 and older did not have health insurance.3 The percentage of uninsured decreased with increasing age: 27.5% of those 18-24 lacked insurance while only 0.7% of those 65-79 reported that they were uninsured. Among those 25-39, 22.6% did not have health insurance and 14.3% of those 40-64 were uninsured. The estimate for adults 80 and older was too small to be reliable. Men (18.6%) were more likely than women (14.6%) to be uninsured. Among race/ethnic groups, Whites (8.5%) were less likely to be insured than African Americans (12.6%), Asian/Pacific Islanders (13.0%), American Indian/Alaska Natives (18.2%), and Latinos (31.8%).

Most adults in the United States have a usual source of care which they use for much of their health care. Regardless of health status, people benefit from having a usual source of health care even if they are uninsured. Not having a usual source of care is linked with race/ethnicity, health insurance status, and family income. Those who have a usual source of care are more likely to receive preventive care, to have access to and utilize medical care, not delay seeking care, receive continuous care, and have lower rates of hospitalization and lower health care costs. Young adults are least likely to have a usual source of care, and the elderly 65 and older are most likely.4 In 2003 the majority of California adults (86.5%) had a "usual place to go to for medical care." The percentage of adults with a usual source of care increased significantly with age until 65 years. Those 18-24 (73.1%) had the lowest percentage with a usual source of care, and those 80 or older (97.5%) the highest. A greater proportion of females (90.4%) had a usual source of care compared to males (82.4%). Latinos (78.5%) were less likely to have a usual source of care than Asian/Pacific Islanders (88.5%), African Americans (90.5%), and Whites (90.6%). Adults in households under 200% of the FPL are less likely to have a usual source of care than those at or above 200% FPL. A significantly higher percentage of those at or above 300% FPL (92.2%) had a usual source of care compared with all other income groups. Adults with health insurance

#### **Health Insurance**

Current insurance was examined using various health insurance questions. Data were analyzed to get a simple breakdown of currently insured versus currently uninsured people.

#### **Usual Source of Care**

The next topic is about where you go and who you see when you want health care for yourself, not for someone else.

• Is there a place that you usually go to when you are sick or need advice about your health?

#### **Delay Getting Medical Care or Prescription Medication**

- During the past 12 months did you delay or not get any other medical care that you felt you needed- such as a specialist, or other health professional?
- During the past 12 months, did you either delay or not get a medicine that a doctor prescribed you?

are almost twice as likely to have a usual source of care compared to those without insurance (93.1% vs. 53.2%, respectively).

In 2003, 14.6% of California adults delayed or did not get "other" needed medical care.3 Those under 65 were more than twice as likely to delay or not obtain other needed medical care or treatment compared to those 65-79 (6.2%) or 80 and older (4.4%). A smaller percentage of men (12.7%) than women (16.5%) delayed or did not get other needed medical care. Whites (16.1%), African Americans (16.3%), and American Indian/Alaska Natives (22.7%) were more likely to delay or not obtain needed care than were Asian/Pacific Islanders (11.5%) and Latinos (12.6%). A smaller percentage of adults at or above 300% FPL (13.6%) delayed or did not get needed medical care compared to those at 200-299% FPL (16.2%) and 100-199% FPL (15.8%). Adults without health insurance (20.4%) were more likely to delay or not obtain care than were those with insurance (13.5%).

In 2003, 11.7% of California adults reported either delaying or not obtaining a doctor-prescribed medication.<sup>3</sup> A significantly higher proportion of women reported delaying or not obtaining prescription drugs (14.2%) than did men (9.1%). Among race/ethnic groups, Latinos (9.6%) and Asian/Pacific Islanders (8.3%) were substantially less likely to report delaying or not obtaining their prescriptions compared to Whites (12.8%), African Americans (17.6%), and American Indian/Alaska Natives (19.5%). Those at or above 300% FPL were significantly less likely to delay or not obtain their prescriptions compared to those at 100-199% FPL.

### **Currently Uninsured**

- In the county, 13.6% of adults were not currently insured (Table 48A). The percentage of uninsured adults was comparable to that for the Bay Area (11.1%), and significantly lower than that for California (16.6%).
- Young adults 18-24 were significantly more likely (27.8%) to be uninsured than older adults.
- Males were more likely than females to be uninsured (15.3% vs. 12.0%).
- Among major race/ethnic groups, Latinos were significantly more likely than Whites (over four times as likely) to be uninsured (30.4% vs. 7.6%). African Americans and Asian/Pacific Islanders were also more likely to be uninsured than

- Whites (12.6% and 12.2% respectively) (Figure 82).
- The proportion of insured adults increased with higher educational attainment: adults who did not go to high school (30.0%) were significantly more likely to be uninsured than those with a doctorate or equivalent (5.0%) (Table 48B; Figure 83).
- Adults from low-income households were significantly more likely to be uninsured than those from high-income households (29.2% vs. 6.1%) (Figure 84).

Note: Low-income households refers to those 0-99% below the FPL. High-income households refers to those at or above 300% FPL.

Table 48A Currently Uninsured, Adults 18 or Older Age, Gender, and Race/Ethnic Group				
D 14: 0	Percent of	050/ 01	Estimated	
Population Group	Group	95% CI	Number	
Age Group				
18-24	27.8	(20.9 - 34.6)	37,061	
25-39	15.4	(12.0 - 18.8)	56,160	
40-64	12.4	(9.4 - 15.3)	57,669	
65-79	-	-	-	
80+	-	-	-	
Gender				
Male	15.3	(12.3 - 18.3)	82,380	
Female	12.0	(9.7 - 14.3)	68,511	
Race/Ethnicity				
White	7.6	(5.4 - 9.8)	35,120	
Latino	30.4	(24.3 - 36.4)	60,968	
African American	12.6	(8.8 - 16.3)	16,558	
Asian/Pacific Islander	12.2	(8.2 - 16.1)	34,646	
Amer Indian/Alaska Native	-	-	-	
Other	-	-	-	
Two+	14.8*	(4.2 - 25.3)	2,896	
Alameda County Total	13.6	(11.7 - 15.5)	150,890	
Bay Area Total	16.6	(16.0 - 17.2)		
- "				

Currer	ntly Uninsured, Adults 1	18 or Older	
l	Education and Poverty I	Level	
	Percent of		Е
Population Group	Group	95% CI	

Table 48B

	Percent of		Estimated
Population Group	Group	95% CI	Number
Education Level			
Less than High School	30.0	(20.1 - 39.8)	28,510
Some HS/HS Diploma	19.1	(15.1 - 23.2)	60,156
Some College/Voc/AA/AS	13.0	(9.2 - 16.8)	34,099
Bachelor's Degree	7.7	(5.0 - 10.5)	20,069
Some Grad School/Master's	4.5	(2.1 - 6.8)	6,122
Doctorate or Equivalent	5.0	(1.8 - 8.1)	1,935
Poverty Level			
0-99% FPL	29.2	(22.1 - 36.2)	39,119
100-199% FPL	28.0	(21.4 - 34.5)	45,526
200-299% FPL	18.0	(12.7 - 23.4)	25,732
≥300% FPL	6.1	(4.4 - 7.8)	40,513

<sup>\*</sup> Rate unreliable

Note: The majority of seniors 65 and older have Medicare coverage.

11.1

(10.1 - 12.2)

California Total

<sup>-</sup> Data not reported due to small numbers

Figure 82 Currently Uninsured, Adults Race/Ethnic Group

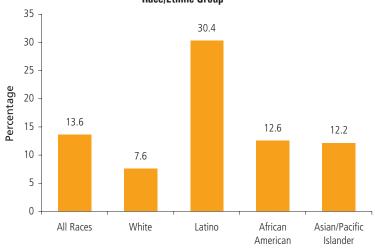


Figure 83 Currently Uninsured, Adults Education Level

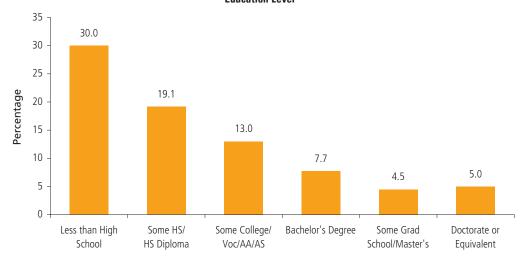
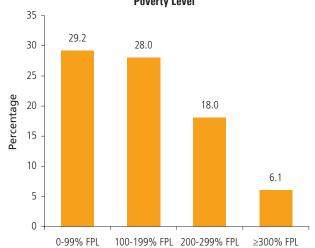


Figure 84 Currently Uninsured, Adults Poverty Level



#### **Usual Source of Care**

- In the county, 87.2% of adults reported that they had a usual place to go when sick or needed health advice (usual source of care) (Table 49A). This percentage was similar to that for the Bay Area (89.3%) and California (86.5%). The county does not meet the Healthy People 2010 target that 96% of adults have a usual source of care.
- Seniors 65-79 and those 80 and older were most likely to have a usual place to go for medical care (98.9% and 98.1% respectively), and young adults 18-24 were least likely (69.3%).
- Males were significantly less likely than females to have a usual source of care (82.4% vs. 91.8%).
- Among the major race/ethnic groups, Latinos (75.3%) were significantly less likely to have a usual source of care than African Americans (91.7%), Whites (89.7%), or Asian/Pacific Islanders (89.3%).

The proportion of adults with a usual source of care was not significantly different by education level (Table 49B).

- Income was associated with having a usual source of care: adults from low-income households were significantly less likely to have a usual source of care than adults from high-income households (79.4% vs. 91.3%).
- The insured were significantly more likely to have a usual source of care than the uninsured (93.7% vs. 46.1%).
- Only seniors 65 and older met the Healthy People 2010 target of 96% of adults having a usual source of care.

Note: Low-income households refers to those 0-99% below the FPL. High-income households refers to those at or above 300% FPI

#### Table 49A Has a Usual Source of Care, Adults 18 or Older Age, Gender, and Race/Ethnic Group

-				
	Population Group	Percent of Group	95% CI	Estimated Number
	Age Group			
	18-24	69.3	(62.2 - 76.4)	92,507
	25-39	84.2	(80.9 - 87.5)	307,790
	40-64	91.2	(88.6 - 93.7)	424,782
	65-79	98.9	(98.0 - 99.7)	103,831
	<del>*************************************</del>	98.1	(95.4 - 100.0)	37,328
	Gender			
	Male	82.4	(79.3 - 85.5)	442,641
	Female	91.8	(90.0 - 93.5)	523,598
	Race/Ethnicity			
	White	89.7	(87.3 - 92.1)	414,302
	Latino	75.3	(69.5 - 81.1)	151,261
	African American	91.7	(88.4 - 94.9)	120,881
	Asian/Pacific Islander	89.3	(86.1 - 92.6)	254,621
	Amer Indian/Alaska Native	92.4	(80.1 - 100.0)	5,680
	Other	72.5	(40.0 - 100.0)	1,885
	Two+	89.8	(79.6 - 100.0)	17,608
	Alameda County Total	87.2	(85.4 - 89.0)	966,238
ì	Bay Area Total	89.3	(88.4 - 90.3)	
	O III T T T	00.0	(00.1 00.0)	

## Table 49B Has a Usual Source of Care, Adults 18 or Older Education and Poverty Level and Insurance Status

	Percent of		Estimated
Population Group	Group	95% CI	Number
Education Level			
Less than High School	74.3	(64.7 - 83.8)	70,676
Some HS/HS Diploma	85.3	(81.8 - 88.8)	268,193
Some College/Voc/AA/AS	88.9	(85.4 - 92.5)	233,669
Bachelor's Degree	90.9	(88.3 - 93.5)	235,739
Some Grad School/Master's	90.9	(86.7 - 95.1)	124,904
Doctorate or Equivalent	84.8	(76.3 - 93.4)	33,058
Poverty Level			
0-99% FPL	79.4	(73.6 - 85.2)	106,486
100-199% FPL	77.9	(71.9 - 84.0)	126,811
200-299% FPL	86.0	(81.4 - 90.6)	122,605
≥300% FPL	91.3	(89.3 - 93.3)	610,336
Insurance Status			
Insured	93.7	(92.4 - 95.0)	896,654
Not Insured	46.1	(38.6 - 53.6)	69,584



**HP 2010 Objective 1-4c:** At least 96% of adults age 18 and older will have a usual source of ongoing medical care.

86.5

(86.0 - 87.0)

California Total

#### **Delay in Getting Needed Medical Care**

- Respondents were asked if they delayed or did not get any other needed medical care. Screening tests, visits to medical specialists for needed treatment, urgent care or emergency care needs are examples of "other needed medical care." In the county, 15.3% of adults reported delays in getting needed medical care in the past 12 months (Table 50A). This percentage does not meet the Healthy People 2010 objective of no more than 7% of the population experiencing difficulties or delays in obtaining needed medical care. The percentage of adults who reported delays in care in the county was comparable to that for the Bay Area (14.2%), and for California (14.6%).
- Seniors 65-79 were significantly more likely to delay needed care than younger adults.
- Males were less likely than females to delay needed care (14.3% vs. 16.3%).

Table 50A

Delay in Getting Needed Care, Past 12 Months, Adults 18 or Older

Age, Gender, and Race/Ethnic Group

Population Group	Percent of Group	95% CI	Estimated Number
Age Group			
18-24	15.4	(10.5 - 20.3)	20,540
25-39	17.2	(13.8 - 20.7)	62,995
40-64	17.6	(14.7 - 20.4)	81,756
65-79	3.6	(1.8 - 5.5)	3,832
80+	1.9*	(0.0 - 4.0)	741
Gender			
Male	14.3	(11.5 - 17.1)	76,665
Female	16.3	(14.1 - 18.5)	93,200
Race/Ethnicity			
White	17.8	(14.9 - 20.8)	82,309
Latino	15.1	(10.8 - 19.4)	30,332
African American	15.6	(12.2 - 18.9)	20,535
Asian/Pacific Islander	11.4	(7.9 - 15.0)	32,628
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	15.1	(7.6 - 22.6)	2,956
Alameda County Total	15.3	(13.6 - 17.1)	169,865

14.2

14.6

(13.2 - 15.2)

(14.2 - 15.1)

- Among major race/ethnic groups, Whites were most likely to delay needed care, and Asian/Pacific Islanders least likely (17.8% vs. 11.4%). Differences in the proportion of persons delaying needed care by race/ethnicity were not significant.
- The proportion of adults who reported delays in care increased with higher educational attainment (Table 50B).
- There were no significant differences in the proportion of adults experiencing delays in needed medical care by income.
- The uninsured were significantly more likely to experience delays in seeking or getting needed medical care than the insured (23.7% vs. 14.0%).
- Only seniors age 65-79 met the Healthy People 2010 target of no more than 7% of the population experiencing delays in getting needed medical care.

Table 50B

Delay in Getting Needed Care, Past 12 Months, Adults 18 or Older
Education and Poverty Level and Insurance Status

	Percent of		Estimated
Population Group	Group	95% CI	Number
Education Level			
Less than High School	8.8	(3.6 - 13.9)	8,335
Some HS/HS Diploma	10.7	(8.0 - 13.3)	33,493
Some College/Voc/AA/AS	16.5	(12.9 - 20.1)	43,347
Bachelor's Degree	18.9	(14.4 - 23.5)	49,144
Some Grad School/Master's	20.2	(15.5 - 24.9)	27,805
Doctorate or Equivalent	19.9	(12.6 - 27.1)	7,741
Poverty Level			
0-99% FPL	15.6	(10.1 - 21.1)	20,877
100-199% FPL	17.4	(12.9 - 21.9)	28,374
200-299% FPL	12.5	(8.7 - 16.4)	17,880
≥300% FPL	15.4	(13.0 - 17.7)	102,734
Insurance Status			
Insured	14.0	(12.2 - 15.8)	134,142
Not Insured	23.7	(17.5 - 29.8)	35,723

- \* Rate unreliable
- Data not reported due to small numbers



**HP 2010 Objective 1-6:** No more than 7% of families will experience difficulties or delays in obtaining health care or not receive needed care for one or more family members.

Access to Health Care

Measures of Access to Care

Bay Area Total

California Total

#### **Delay in Getting Prescription Drugs**

- In the county, 10.4% of adults reported delays in getting prescription medication in the past 12 months (Table 51A). The percentage of adults who reported delays in getting prescription medication in the county was comparable to that for the Bay Area (11.0%), and for California (11.7%).
- Adults in the age groups 25-39 and 40-64 were significantly more likely (11.4% and 12.4% respectively) to experience delays in getting prescription medication than young adults 18-24 or seniors 65-79 (5.8% and 4.7% respectively).
- Males were less likely than females to experience delays in getting prescription medication (14.3% vs. 16.3%).
- Among major race/ethnic groups, African Amer-

- icans were most likely of all groups to experience delays in getting prescription medication (15.9%). Whites were significantly less likely (9.9%) to experience delays in getting prescription medication than African Americans (15.9%). Whites and Asian/Pacific Islanders (9.9% and 9.7% respectively) were slightly more likely to experience delays in getting prescription medication than Latinos (9.0%).
- The proportion of adults who reported delays in getting prescription medication was not significantly different by education level, income or insurance status (Table 51B).

Table 51A

Delay in Getting Prescription Medication, Past 12 Months,

Adults 18 or Older

Age, Gender, and Race/Ethnic Group

	Percent of		Estimated
Population Group	Group	95% CI	Number
Age Group			
18-24	5.8	(3.6 - 8.0)	7,705
25-39	11.4	(8.3 - 14.4)	41,498
40-64	12.4	(10.3 - 14.5)	57,773
65-79	4.7	(2.7 - 6.7)	4,953
80+	8.9*	(3.2 - 14.6)	3,386
Gender			
Male	8.5	(6.4 - 10.6)	45,642
Female	12.2	(10.4 - 14.0)	69,674
Race/Ethnicity			
White	9.9	(8.2 - 11.6)	45,647
Latino	9.0	(5.5 - 12.5)	18,066
African American	15.9	(12.0 - 19.9)	21,022
Asian/Pacific Islander	9.7	(6.2 - 13.2)	27,682
Amer Indian/Alaska Native	-	-	-
Other	-	-	-
Two+	9.5	(3.9 - 15.1)	1,861
Alameda County Total	10.4	(9.0 - 11.8)	115,316
D. A. Tall	44.0	(40.4.44.0)	
Bay Area Total	11.0	(10.1 - 11.8)	
California Total	11.7	(11.3 - 12.1)	

Table 51B

Delay in Getting Prescription Medication, Past 12 Months,
Adults 18 or Older

Education and Poverty Level and Insurance Status

	Percent of		Estimated
Population Group	Group	95% CI	Number
Education Level			
Less than High School	13.5*	(5.0 - 21.9)	12,806
Some HS/HS Diploma	7.9	(5.8 - 10.1)	24,937
Some College/Voc/AA/AS	10.5	(8.2 - 12.9)	27,650
Bachelor's Degree	11.4	(8.3 - 14.4)	29,518
Some Grad School/Master's	11.8	(8.5 - 15.1)	16,209
Doctorate or Equivalent	10.8	(6.2 - 15.4)	4,196
Poverty Level			
0-99% FPL	11.1	(6.7 - 15.5)	14,908
100-199% FPL	11.1	(8.1 - 14.1)	18,038
200-299% FPL	11.2	(7.2 - 15.2)	15,976
≥300% FPL	9.9	(8.1 - 11.7)	66,394
Insurance Status			
Insured	10.6	(9.1 - 12.1)	101,201
Not Insured	9.4	(5.6 - 13.1)	14,115

<sup>\*</sup> Rate unreliable

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<sup>-</sup> Data not reported due to small numbers

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## **Methodology**

The California Health Interview Survey (CHIS) is the largest population-based state health survey in the United States. It is a collaborative effort of the UCLA Center for Health Policy Research (CHPR), the California Department of Health Services, and the Public Health Institute, and is designed as a broad public health surveillance system capable of providing state and local health data for California. Its purpose is to collect health information on the state's diverse population for use by public health researchers, planners, and state and local health care officials. Every county in the state is included in the CHIS sample. The survey is administered by telephone using a random digit dial (RDD) protocol, and is conducted every two years. CHIS 2003 was the second cycle of data collection, following CHIS 2001. Households from every county in the state are scientifically sampled and interviews are conducted with one randomly selected adult from each household. In households with children, one adolescent and one child are also randomly selected for interviews. The child interviews are conducted with the adult who is most knowledgeable about the child's health, usually a parent, while the adolescent is interviewed directly. The CHIS 2003 RDD sample is representative of California's non-institutionalized population and is comprised of 42,044 adults. To capture the rich diversity of the California population, interviews are conducted in five languages: English, Spanish, Chinese (Mandarin and Cantonese dialects), Vietnamese, and Korean. Without this language capability, CHIS would exclude people with no or limited English proficiency from participating in the survey. Data collection for the CHIS is performed under contract with UCLA-CHPR by Westat, Inc., a social science research firm based in Rockville, MD.1 CHIS 2003 was implemented in Alameda County under an agreement with the UCLA-CHPR with an enhanced sample design and additional questions on diet, physical activity, and weight management.

#### Sample Design

The goals of the CHIS 2003 Alameda County sample design were to enable calculation of prevalence estimates for health outcomes of interest by race/ethnicity for the county, and the cities of Oakland and Hayward. The RDD sample design used for the statewide CHIS sample was enhanced in Alameda County. Details about the statewide sample design and the implementation of RDD methods are described in CHIS documentation.<sup>2,3</sup>

The number of interviews required to meet the sampling goals described above were calculated based on the Census 2000 race/ethnic distributions for these geographic areas. The county sample that was part of the statewide RDD sample is referred to as the "base" sample. The enhanced sample design (oversample) targeted a higher number of households in the county and two cities than could be obtained from the base RDD sample for each of these geographic areas. Telephone numbers were selected for this sample using the methods used for the statewide sample. Implementing the oversample involved conducting extra interviews from the cities of Oakland and Hayward, and the rest of Alameda County (excluding these two cities) to achieve the target number of interviews required to meet the sampling goals.

Table 52 shows selected characteristics of the Alameda County CHIS 2003 sample. The distributions by age group, gender, race/ethnic group, education level, and poverty level for the sample and the adjusted (weighted) estimates are described. A total of 4,647 adult interviews were completed in the county. The first two columns show the sample size or number of respondents and unweighted percent in each subgroup of the Alameda County sample. The CHIS 2003 sample was weighted to the California Department of Finance estimates of the number of persons

by age, gender, and race/ethnicity for 2003. The third and fourth columns (estimated number and weighted percent) show the population estimates for each subgroup after weighting the CHIS sample. Detailed descriptions of the methods used for weighting the CHIS sample are further described in CHIS documentation.<sup>4</sup>

#### **Questionnaire Development**

The health topics included in the CHIS 2003 survey were chosen through consultation with public health professionals and potential data users through the CHIS Advisory Board, four technical advisory committees and several workgroups. The content was

Table 52
Alameda County Sample Characteristics

		Alameda County Sample		Population Estimates	
		Sample Size	Unweighted %	Estimated #	Weighted %
All Adults		4,647	100.0	1,107,914	100.0
Age Group	18-24	381	8.2	133,483	12.0
	25-39	1,296	27.9	365,535	33.0
	40-64	2,196	47.3	465,795	42.0
	65-79	573	12.3	105,034	9.5
	80+	201	4.3	38,066	3.4
Gender	Male	1,877	40.4	537,239	48.5
	Female	2,770	59.6	570,674	51.5
Race/Ethnicity	White	2,194	47.2	461,818	41.7
	Latino	795	17.1	200,857	18.1
	African American	746	16.1	131,872	11.9
	Asian/Pacific Islander	745	16.0	285,014	25.7
	American Indian	23	0.5	6,149	0.6
	Other	13	0.3	2,602	0.2
	Two+	131	2.8	19,603	1.8
Education Level	Less than High School	287	6.2	95,157	8.6
	Some HS/HS Diploma	1,218	26.2	314,312	28.4
	Some College/Voc/AA/AS	1,158	24.9	262,733	23.7
	Bachelor's Degree	1,074	23.1	259,335	23.4
	Some Grad School/Masters	677	14.6	137,413	12.4
	Doctorate or Equivalent	233	5.0	38,963	3.5
Poverty Level	0-99% FPL	494	10.6	134,180	12.1
	100-199% FPL	708	15.2	162,711	14.7
	200-299% FPL	617	13.3	142,576	12.9
	≥300% FPL	2,828	60.9	668,446	60.3

determined by the interests and needs of sponsoring agencies and partners. It was also driven by concerns about burden to the respondent, response rates, and cost. Topics included health conditions and limitations, cancer screening, health-related behaviors, sexual health, dental health, health access, utilization and insurance.

After the development of the questionnaire in English, it was translated into Spanish, Korean, Mandarin, Cantonese, and Vietnamese and modified based on input from bilingual/bicultural experts. The instruments were also culturally adapted for interviews with these race/ethnic groups. They were pilot tested to identify problems with wording, response categories, or other issues. Details of questionnaire development are described in CHIS documentation.<sup>5</sup>

The Alameda County Public Health Department (ACPHD) funded the addition of questions to the CHIS 2003 instrument to collect data that could inform chronic disease prevention efforts. A module of 15 questions on diet, physical activity, and weight management was developed collaboratively by ACPHD and UCLA-CHPR. It was translated and culturally adapted by a process similar to the statewide instrument and administered only to Alameda County residents. The questions included in the ACPHD module are highlighted by "‡" in this report.

#### **Data Collection and Processing**

CHIS interviewers underwent extensive training prior to data collection. Interviews in Engligh, Spanish, and Vietnamese were conducted using Westat's computer-assisted telephone interviewing (CATI) system. Korean, Mandarin, and Cantonese telephone interviews were done using paper-and-pencil methods. The average time for adult interviews across all languages was 32 minutes. Interviews in the non-English languages took longer to complete. In 2003, approximately 11.3% of the CHIS adult interviews were completed in a language other than English.

To maximize the survey's response rate, an advance letter (in five languages) was mailed to all sampled telephone numbers for which an address was available from a reverse directory. Approximately 64% of the sample was mailed an advance letter. Response rates were slightly higher in households that received an advance letter. A subset of questions were identified as appropriate for proxy interviews among frail and ill persons over the age of 65 who could not be interviewed in person.

To maximize the likelihood of reaching individuals in the sample, households were contacted at different times over a range of time periods (days, evenings, weekends, etc.) with at least 17 attempts if needed. A toll-free number was also given so that respondents could call to schedule a convenient interview appointment time. Households that did not initially agree to participate when screened but did not firmly decline received a special follow-up letter stressing the importance and purpose of the survey and requesting their participation. ACPHD conducted a widespread public information campaign about CHIS in the county to promote participation.

CHIS data are processed for quality checks, coding, and construction of weights for analysis. Missing values for responses are imputed to maximize the information available for analysis. A detailed description of data collection, response rates, and data processing procedures is provided in CHIS documentation.<sup>6-8</sup>

#### **Weighting and Analysis**

Data gathered from a sample of the population, such as in a survey, can be biased. Some of the bias is directly related to the design and administration of the survey, and some of it is related to who agrees to participate. To reduce bias, weights are applied to the sample data before conducting analysis. Sample weighting was carried out in CHIS 2003 primarily to achieve the following: 1) Adjust for different probabilities of selection for households and persons. E.g., households with listed addresses that were eligible for

an advance letter, had a higher probability of selection compared to unlisted households. 2) Reduce biases that can occur due to the difference between respondents and respondents. 3) Adjust for the populations not covered in the sample. The methods used to contstruct weights for analysis are described in CHIS documentation. 1,9,10

To produce estimates of prevalence and the number of persons with specific health conditions from the CHIS 2003 data files, each completed adult, adolescent and child interview is assigned a sampling or estimation weight which must be used to produce population estimates from the survey. Weights are variables in data files that can be applied using specialized statistical software programs, such as SU-DAAN, SAS, or STATA. When the weight variable in the CHIS 2003 adult survey data file is applied, data estimates get adjusted so they approximate the age and sex distribution of adults in living in households as projected by the California Department of Finance in 2003 for the state or counties. A detailed description of the use of weights in analysis is provided in CHIS documentation.9

This report presents estimates of health and social conditions by demographic characteristics, and SES, and confidence intervals for these estimates for the county. The data was weighted, or adjusted to obtain estimates of prevalence, populations affected, and the variance of these estimates. The analysis was done using SUDAAN and SAS software.

## Interpretation of Findings

#### **Unstable Estimates**

CHIS prevalence estimates presented in this report are percents based on weighted estimates of the population with a given condition. CHIS findings are based on a random sample of the population, and have a certain level of error. One way of describing this error is by variance of estimates.

Coefficient of variation (CV)—the standard error of an estimate divided by the mean—is one measure of variance. It allows the comparison of variance of populations with different means.

If the CV of an estimate is equal to or greater than 30% it is considered unreliable (i.e., unstable). When an estimate is based on a small number of cases, the probability that the variance observed is due to chance increases. <sup>1, 11, 12</sup> Confidence intervals are derived from the variance of an estimate. The width of the confidence interval—i.e., the difference between the lower and upper limits—varies with the sample size and variance. In general, the smaller the sample size, the higher the variance, and the wider the confidence interval of an estimate. In this report, estimates with a CV equal to or greater than 30% are decribed as unreliable and are indicated by "-" in the tables. Estimates based on a sample size of five or fewer interviews are also not reported.

#### **Using Confidence Intervals**

The confidence interval uses the margin of error (related to variance as discussed above) to describe an upper and lower limit of an estimate. In this report 95% confidence intervals are presented. This means that there is a 95% chance that the true value of an estimate is within this interval. Confidence intervals provide an easy way to determine if differences among groups are statistically significant. If the confidence intervals of two different estimates (i.e., the percents) do not overlap, it can be concluded that the difference is statistically significant and not due to chance. However, if the intervals overlap or share a boundary, the difference between the two estimates (percents) is assumed not to be statistically significant. This is a conservative approach used to describe the significance of difference between groups and has been applied to other analyses of CHIS data.<sup>1,13</sup>

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# Health of Alameda County Adults Selected Findings from the 2003

**California Health Interview Survey** 

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