



Community Health Profile 2013

County of Riverside
Department of Public Health

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EXECUTIVE SUMMARY

The mission of the County of Riverside Department of Public Health (DOPH) is to promote and protect the health of all county residents and visitors. This report, the *2013 Community Health Profile*, will help guide our efforts and highlight areas where we can improve the health and well-being of Riverside County residents.

The residents of Riverside County could be healthier. Better diet, more physical activity, and less substance use can significantly improve health outcomes and advance the quality of life.

- ◆ Fast food consumption has risen in Riverside County, with more residents consuming fast food four or more times during the recent survey week. By comparison, fewer residents ate five or more servings of fruits and vegetables.

- ◆ Nearly three-quarters of Riverside County children were physically active for at least three days each week, however, only one-quarter were physically active for at least one hour each day. Physical activity levels may be hindered by an excessive amount of television viewing, because 90 percent of children report 2-5 hours of screen time during the weekend.

- ◆ In terms of substance use, binge drinking rates have remained stable for the past few years, while tobacco use has increased since 2005.

The *2013 Community Health Profile* and other community health assessments will be used to set health priorities. Addressing risk factors of chronic disease such as poor nutrition, physical inactivity, tobacco use and exposure, and the physical/built environment will be key priorities. DOPH looks forward to working with our community partners and residents to realize our vision of a healthy Riverside County.

Susan Harrington, MS RD
Director of Public Health

EXECUTIVE SUMMARY

As 2013 begins, the County of Riverside Department of Public Health (DOPH) is positioning itself for a new era of community involvement and population health improvement. The *2013 Community Health Profile* will serve as the foundation to assess the health of the community and is a starting point for our joint efforts to affect change. Let's work together to make Riverside County a healthier place to live.

I look forward to 2013 and to the many fruitful collaborations it will bring.

Cameron Kaiser, MD
Interim Public Health Officer

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We appreciate any questions or comments that you may have about this report and welcome recommendations for improving subsequent reports. If you have any comments to share please contact us at:

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INTRODUCTION

The *Community Health Profile 2013* is a report summarizing the health of the residents of Riverside County. Herein, health is described with a valuable look at the health issues and risk factors affecting Riverside County residents. The report is divided into three sections: (a) Demographic and Social Indicators, (b) Health Status, and (c) Health Behaviors. These sections provide an overview of the health of Riverside County residents measured by an array of indicators. These indicators include births, deaths, illness, and behavioral measures to name a few.

Data described in this report come from multiple sources, including California's Birth and Death Statistical Master Files, the California Health Interview Survey (CHIS), the US Census Bureau, and the California Department of Public Health. These data provide an opportunity to highlight the County's successes as well as areas where challenges remain.

To best understand the data reported for Riverside County, where possible and appropriate, Riverside County is compared to California and Healthy People 2020 national objectives. This practice allows for better contextualization of outcome measures as well as the circumstances that contribute to such measures. An asterisk (*) may be present on graphics to indicate the statistical instability of a rate. The instability may be due to the small population size of the group being measured. In this instance, the rate is considered statistically unreliable and should be interpreted with caution. For further information on rate stability, refer to the Technical Notes in the Appendix.

Health disparities are illustrated across differing race and ethnic groups, sex, and ages. Health disparities are differences in the incidence, prevalence, mortality, and survival of a disease.¹ These disparities are most often the result of inequalities in the social determinants of health, where we live, work and play. The relationship between the social determinants of health and health outcomes will be investigated further in subsequent reports.

The release of the 2013 edition of the *Community Health Profile* is an important first step in improving the health for all in Riverside County and realizing our vision of Healthy People, Healthy Community!

I. DEMOGRAPHIC AND SOCIAL INDICATORS



Demographics are ways to measure the characteristics of a population. The makeup of a population, such as its race and ethnic profiles, sex, age groups, and many additional social factors helps in examining trends and determining needs for the community.

This section of the report will describe the demographic profile of the population of Riverside County. Indicators such as race and ethnicity, sex, education, poverty, unemployment, health insurance status, and commuting practices will be described here in brief.

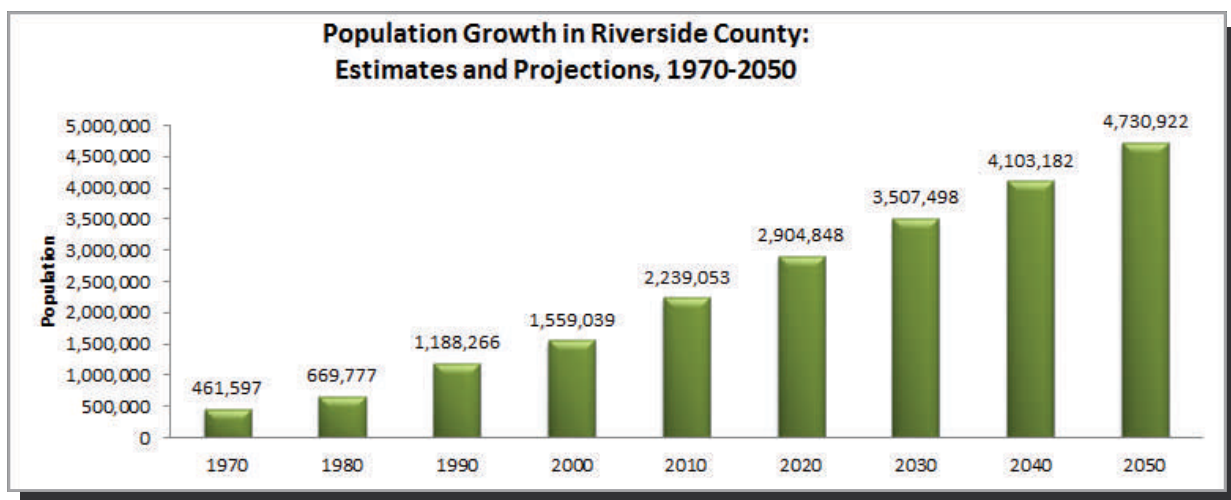
A PROFILE OF RIVERSIDE COUNTY

Spanning 200 miles across and encompassing beautiful fertile river valleys, magnificent mountains, deserts, foothills, and rolling plains, Riverside County is the fourth largest county in California comprising over 7,200 square miles. The County covers the same land area as the state of New Jersey. The County shares borders with Imperial, Orange, San Diego and San Bernardino counties; as well as the State of Arizona.



Established in 1893, Riverside County has grown from a population of 18,000 to 2.2 million residents. Within the last decade, the County has experienced a 44% increase in population, placing the County in fifth place for population growth in the US.²

There are 28 incorporated cities in Riverside County. Since the 2008 Community Health Profile, two additional cities have been incorporated. These include Eastvale, which was incorporated on October 1, 2010 and Jurupa Valley, which was incorporated on July 1, 2011. Nearly 20% of the County's growth between 2001 and 2010 occurred in the two cities of Temecula and Murrieta.³ If current projections continue, the population of Riverside County will reach 2.9 million in 2020 and 4.7 million in 2050.



POPULATION CHANGES

Overview

Population demographics is an indicator used to measure changes in the age, gender, and racial and ethnic distribution of a population.

Why does this matter to health?

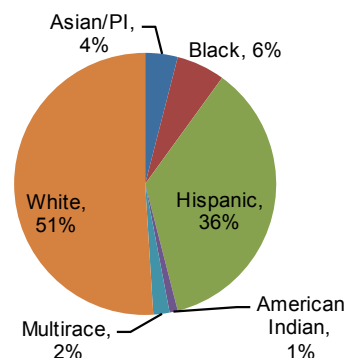
Monitoring demographic indicators is critical in anticipating levels of demand and utilization of the health care system. Changes in the age distribution, racial and ethnic groups, those who identify as LGBT, and those with disabilities illustrate social, economic, educational, and cultural diversity that will impact health planning. Health disparities among diverse groups exist at elevated levels.

On average, more than 32,000 babies are born and nearly 14,000 deaths occur each year in Riverside County. In addition to the 44% increase in population between 2000 and 2010, Riverside County has experienced changes in its racial and ethnic composition.

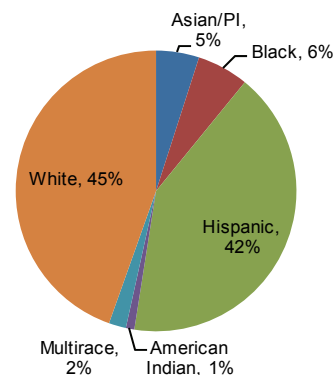
During the last decade, the proportion of those identifying as Hispanic increased from 36% to 42%. The proportion of Whites decreased from 51% to 45%. For the other racial and ethnic groups within the County, there was little to no change in population proportions.

- ◆ Based on current projections, the groups that will experience the greatest changes include those of Hispanic origin and Whites.
- ◆ By 2020, Riverside County population will be primarily comprised of Hispanics and Whites (46% and 40%, respectively).
- ◆ Between 2009 and 2010, Riverside County's population increased by almost 40,000 residents. Approximately 6,000 of those residents (15%) were in the Riverside and Corona areas.²

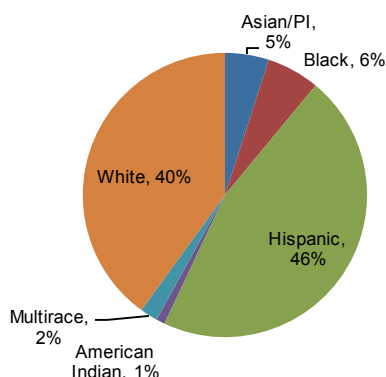
Riverside County Population by Race/Ethnicity, Years 2000, 2010, and 2020⁴



Year 2000 Population: 1,559,039



Year 2010 Population: 2,239,053



Year 2020 Population Projection: 2,904,848

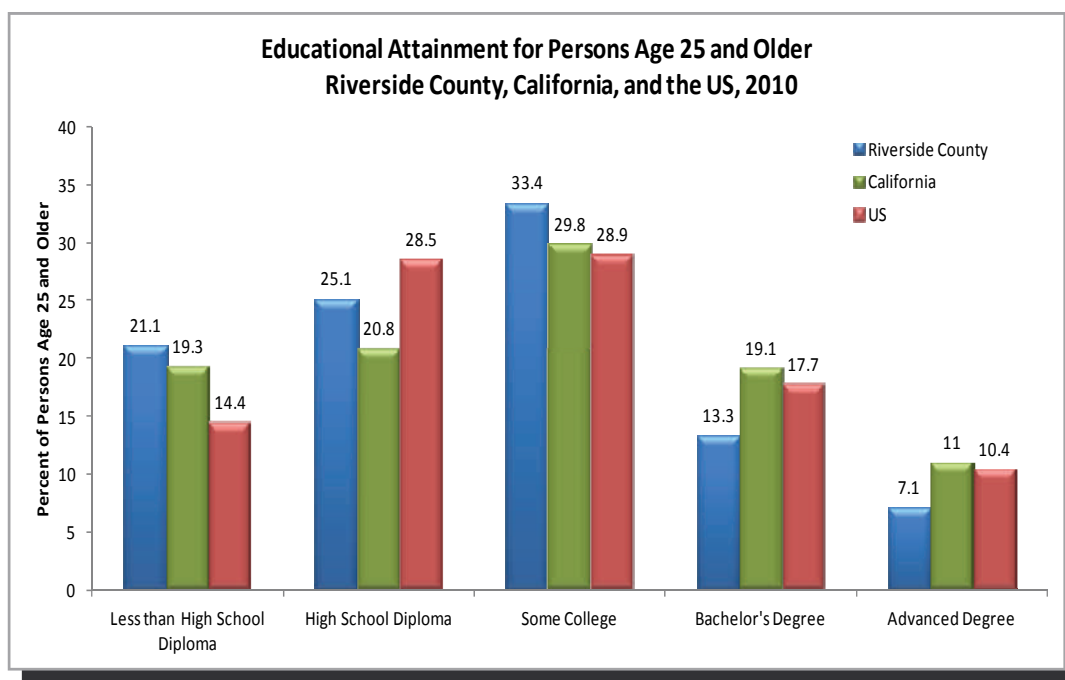
EDUCATION

Overview

Educational attainment is an indicator used to measure the percent of residents 18 and older who have completed various levels of education. Riverside County trails the state in the proportion of residents with bachelor's and advanced college degrees. Nearly one-quarter of residents have less than a high school diploma.

Why does this matter to health?

It is well documented that education is a positive predictor of income which in turn is correlated with better access to resources such as healthy foods, knowledge of healthier eating practices, and health care. These can have a positive effect on health outcomes. The rate of poverty for adults over the age of 25 is nearly six times higher among those with no high school diploma compared to those with a bachelor's degree or higher.



When compared to California, Riverside County has a greater proportion of its population with high school education completion. About 50% of Riverside County residents 18-24 years old have a high school education or less. Fewer (4.4%) residents 18-24 years have a bachelor's degree or higher, compared to those in California (7.8%) and in the US (9.2%). Twenty percent of residents 25 years and older have a bachelor's degree or higher. This is higher than the rate among those 24 years and under, where only 4.4% have bachelor's degrees or more. According to census data for Riverside County, fewer males are high school graduates or above compared to females.

Completing high school positively affects the choice to attend and complete college. The high school dropout rate for Riverside County is 3.7%. This rate is lower than California's rate of 4.2%. Asian students have the lowest drop out rate (1.4%), while Black students have the highest rate (5.3%).

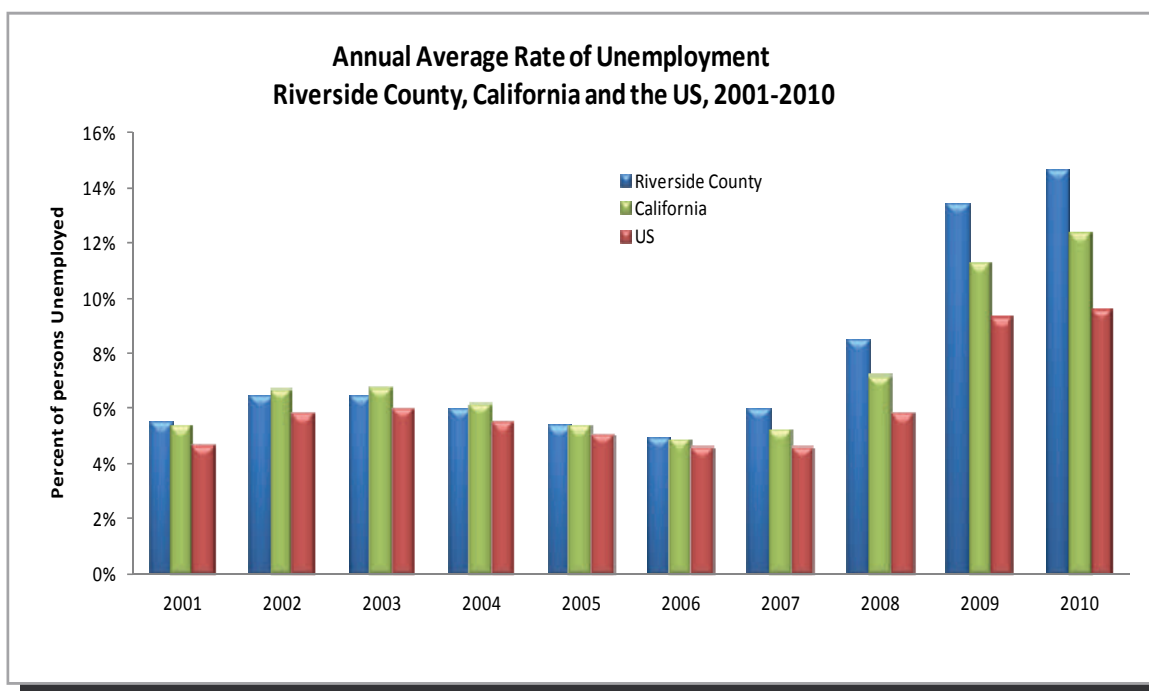
UNEMPLOYMENT

Overview

The health of an economy is gauged by the strength of its employment. Strong employment boosts the economy and helps support community services. High unemployment may lead to an increase in the need for community services. Riverside County has elevated rates of unemployment compare to California and the US. Between 2008 and 2010, the county lost 151,900 jobs. Nearly half of the jobs that were lost were in construction and manufacturing.

Why does this matter to health?

Employment is positively related to health. Those who work often report better physical health when compared to those who are unemployed or retired.⁴ In a study by the Harvard School of Public Health, workers who lost a job, through no fault of their own were twice as likely to report developing an ailment such as high blood pressure, diabetes, or heart disease over the following year and a half, compared to those who maintained continuous employment.⁵



Rates of unemployment in Riverside County, California and the US have been on a steady increase since 2007 reaching its peak in 2010. Since 2007, the unemployment rate in Riverside County more than doubled, from 6% to 14.7%. Between 2000 and 2010, rates of unemployment in Riverside County have exceeded the rates for California and the US (except in years 2002, 2003, and 2004).

In the Inland Empire* the unemployment rate for 2010 was 15.3%, with the lowest rate among Asians (9.8%) and the highest rate among Blacks (21.6%). In 2010, Inland Empire residents with less than a high school diploma experienced unemployment at a rate 2.5 times higher than those with a bachelor's degree or higher (18.9% and 7.1% respectively).

* Inland Empire refers to Riverside and San Bernardino Counties. Data solely for Riverside County was not available.

POVERTY

Overview

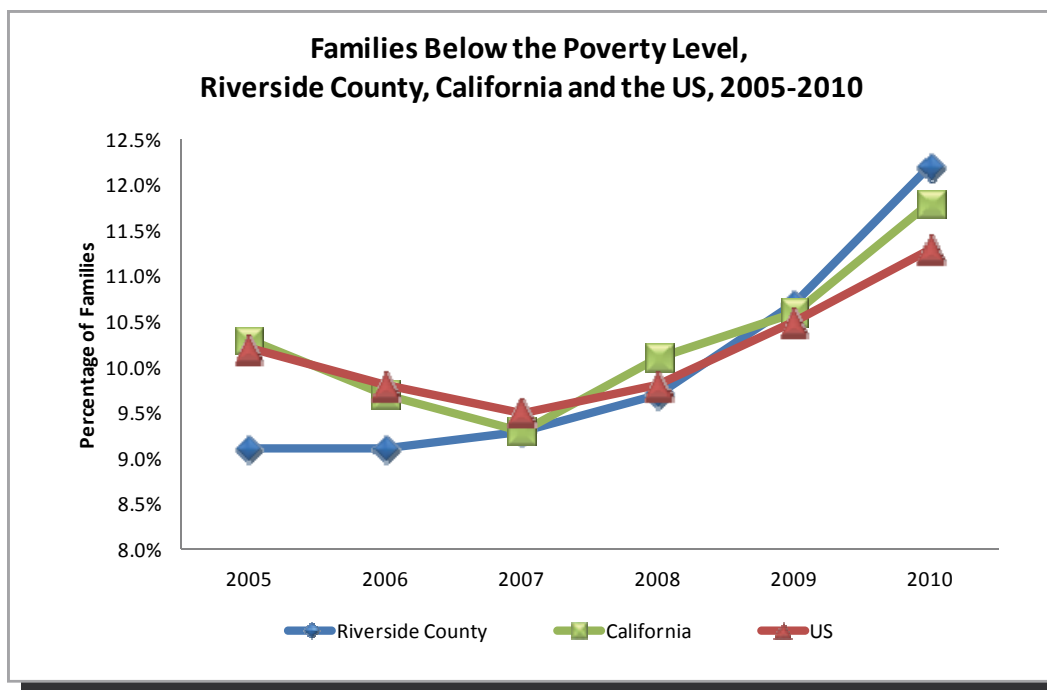
Poverty is defined as having little or no money, food, or many other resources. Poverty is estimated based upon reported income and family size.

Why does this matter to health?

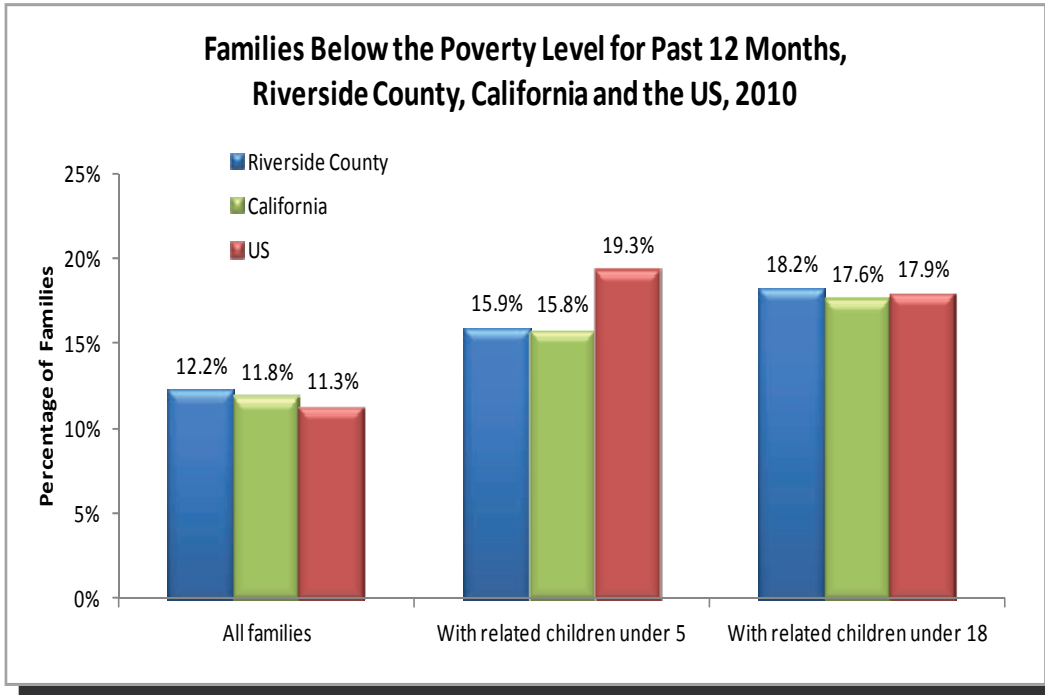
It is well established that an individual's health is based on the combined effect of many different factors acting on each other. Poverty and health are closely intertwined. Poverty has a negative effect on health by limiting access to healthier food, better housing and safer environments.

Federal Poverty Measure

Poverty is measured by the federal government using poverty guidelines. More specifically, the US Census Bureau uses a set of income thresholds to determine poverty status based upon family size. When a family's income is less than the threshold set for the family's size, the family and all members are considered at or below poverty. For example, according to the 2010 poverty thresholds, a family of four with an annual household income of \$22,314 or less is considered at or below the federal poverty level.



In 2005, the percent of families below the poverty level was lower in Riverside County compared to the rate for California and the US. For Riverside County, California and the US, the percentage of families below the poverty level has been increasing steadily since 2007; however, the increase has been much greater in Riverside County compared to the other areas. In 2010, Riverside County, California, and the US maintained similar rates of families in poverty (12.2%, 11.8%, and 11.3%, respectively).



Poverty is experienced disproportionately by families with children. Families with children fare poorly, with poverty rates much higher than the rates for all families. This is particularly important because children in poverty can experience learning difficulties, and social, emotional and behavioral problems.

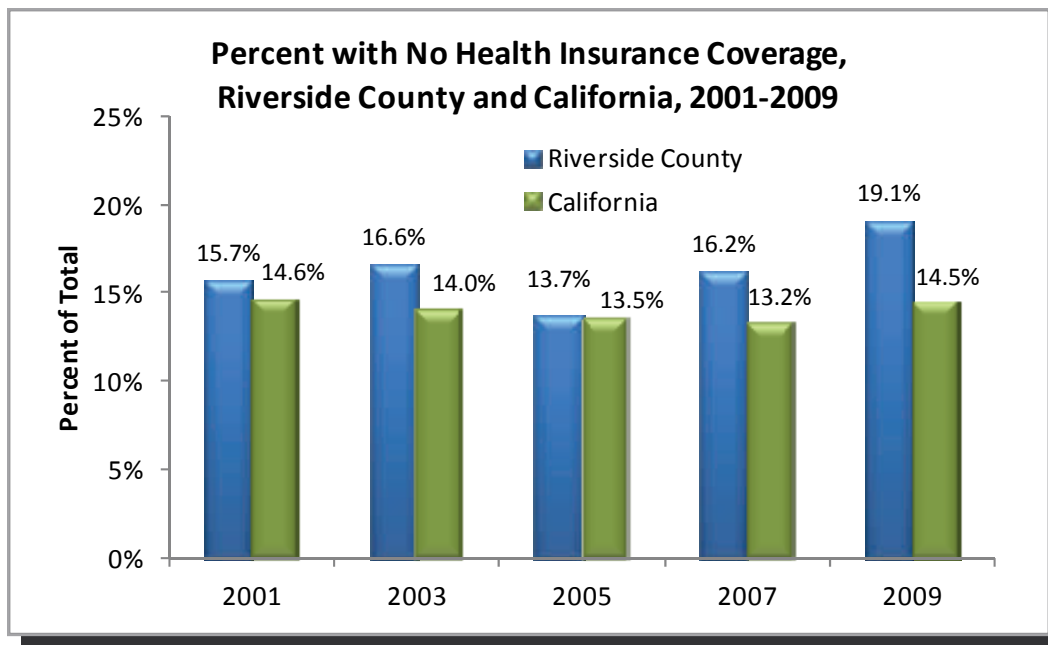
HEALTH INSURANCE

Overview

Health insurance is important in assisting with health care expenses that may result from significant illness. Having health insurance also effects a person's ability to access health care services.

Why does this matter to health?

According to Healthy People 2020, people without health insurance are more likely to lack a usual source of medical care and are more likely to avoid routine care. This may increase the likelihood of serious or disabling health conditions. Further, when the uninsured seek care, they often have large medical bills and out-of-pocket expenses.



The proportion of Riverside County residents with no health insurance coverage has increased from 15.7% in 2001 to 19.1% in 2009. This means Riverside County residents have lower health insurance coverage. Residents of Riverside County have consistently maintained lower health insurance coverage rates, compared to residents of California. In 2009, one in five (19.1%) Riverside County residents reported no health insurance coverage, up from 15.7% in 2001.

Differences across racial and ethnic groups in Riverside County for years 2007 and 2009:

- ◆ 74.5% of Hispanics had health insurance coverage, while 88.5% of Whites had health Insurance coverage.

Differences in health insurance coverage between children and adults

- ◆ Since 2001, the rate of children (ages 0-17) with health insurance coverage has increased from 89.9% to 96.2% in 2009.
- ◆ Conversely, the rate of adults (ages 18-64) with health insurance coverage has decreased from 78% in 2001 to 70.5% in 2009.

These differences may reflect an increase in children qualifying for programs such as Healthy Families and the loss of employee sponsored health coverage through job loss.

COMMUTING TO WORK

Overview

Commuting, also described as Journey to Work, refers to a worker's travel from home to their place of work. The US Census Bureau conducts surveys that obtain information on the means of transportation as well as the departure times, travel distance, commuting expenses, and average travel time.

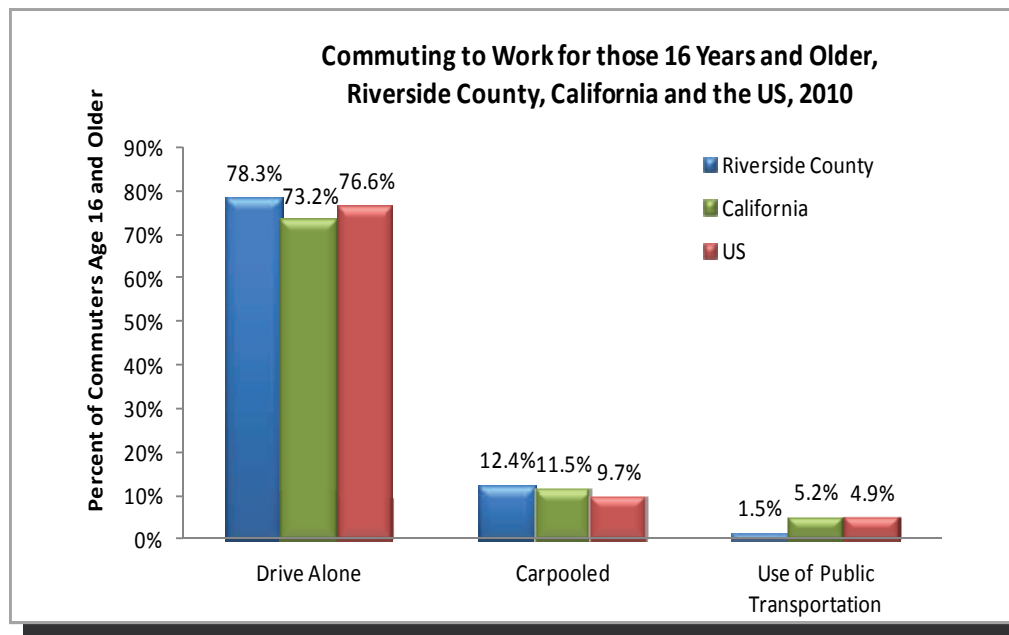
Why does this matter to health?

Increased time spent commuting has been linked to increases in obesity due to more time spent away from home, less time available to prepare meals, and less engagement in physical activity. Further, studies have linked long drive times to sleep disturbances, increased stress, exhaustion, poor self-rated health, and illness.⁶

In Riverside County, the average travel time to work is:

- ◆ 31.7 minutes each way
- ◆ 15% higher (4.8 minutes longer) than the average for California
- ◆ 20% higher (6.4 minutes longer) than the average for the US

Employed residents of Riverside County spend, on average, more than 30 minutes commuting to work, which is higher than commute times for California and the nation. Since 2008, the average travel time has remained stable in Riverside County, California and the US.



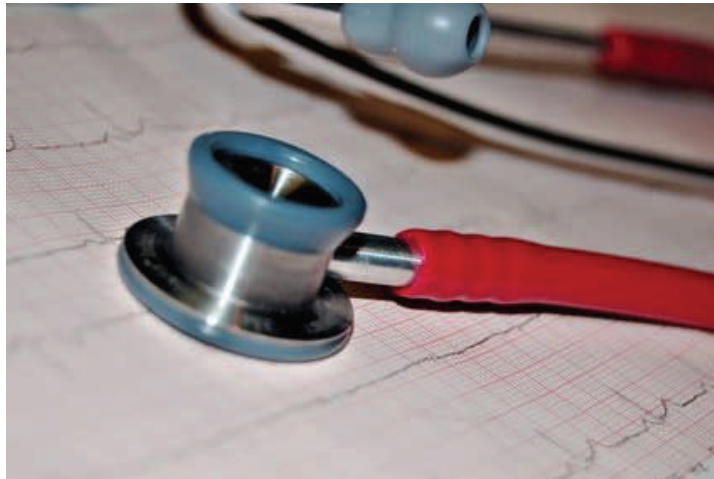
Among commuting residents (16 yrs. and older) in Riverside County:

- ◆ Most (78.3%) drive alone; rates have increased 3% since 2008.
- ◆ Only 1.5% use public transportation.
- ◆ Since 2008, the proportion of those using public transportation have remained stable; 4 percentage points lower than rates for California and the US.
- ◆ More Riverside County residents carpool compared to those in California and the nation; however rates have decreased 2 percentage points (1% drop for CA & US).

References:

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2. US Census Bureau. (2011). *Population Distribution and Change: 2000 to 2010*. 2010 Census Briefs. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-01.pdf>
3. State of California Department of Finance (2011). *E-4 Population Estimates for Cities, Counties and the State, 2001-2010, with 2000 & 2010 Census Counts*. Retrieved from <http://www.dof.ca.gov/research/demographic/reports/estimates/e-4/2001-10/view.php>
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II. HEALTH STATUS



Measures of health status provide information about the health of populations. Over the past four decades the health of the nation has been monitored through the Healthy People initiative by the use of health indicators. These indicators are useful in determining the effectiveness of health strategies and indicating where the nation can strive for improvement. According to the CDC, life expectancy and overall health have improved for most Americans in recent years, but not all Americans have benefited equally.

This section will describe the health trends for Riverside County residents using health status indicators. These indicators include: fertility rates, birth rates, mortality rates, as well as incidence and prevalence rates. Where possible and appropriate, Riverside County data is compared to that of California and the nation's Healthy People indicators. This is done to best illustrate differences, similarities, and where there have been successes or where there are needs for improvement.

FERTILITY, BIRTHS AND INFANT MORTALITY

Overview

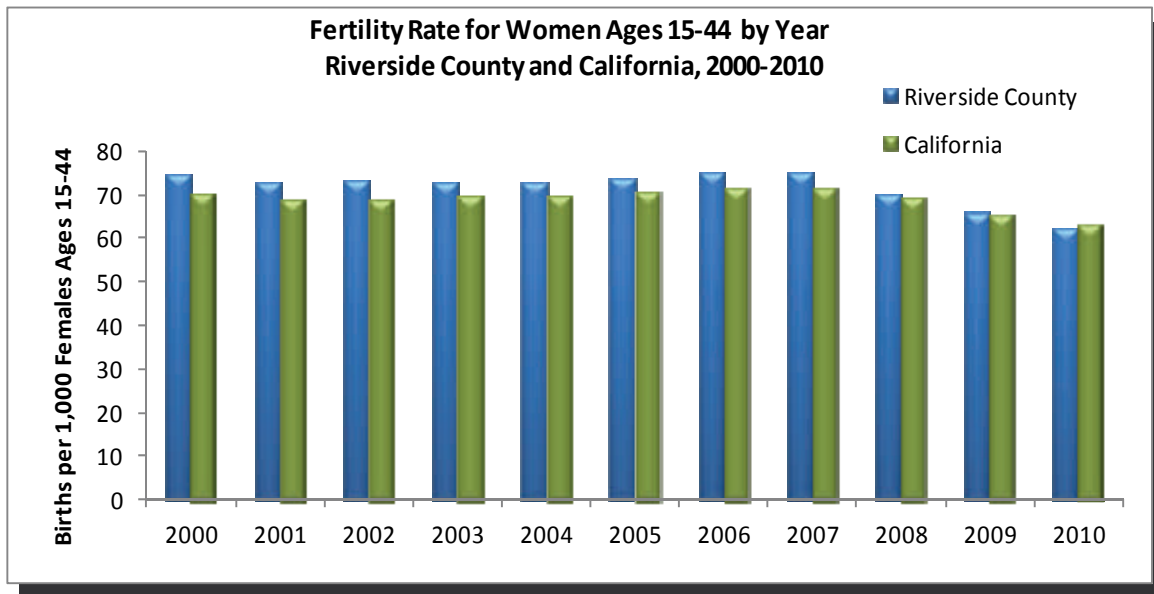
Trends in fertility, births, and infant mortality are predictors of population growth and change.

Why does this matter to health?

Monitoring these trends are important in planning and resource allocation. Infant mortality is an indicator of the health of newborns as well as their mothers. High fertility results in elevated birth rates, which in turn effect the need to plan for child care and schools.¹ Conversely, lower fertility rates, sustained over a period of time, result in the aging of a population, which changes our planning and the allocation of resources.

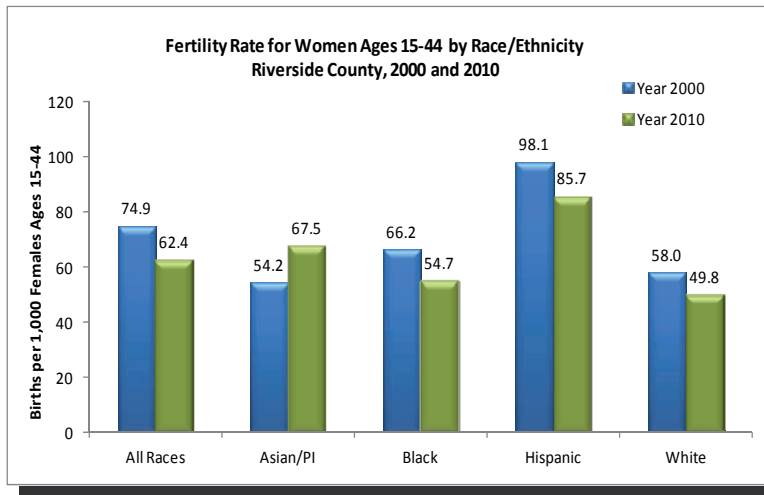
Healthy People 2020

A goal of Healthy People 2020 is to improve the health and well-being of women, infants, children, and families. The 33 objectives developed for this topic aim to address the health risks and factors that affect the health of the next generation by taking a life course perspective to promote health and prevent illness.²

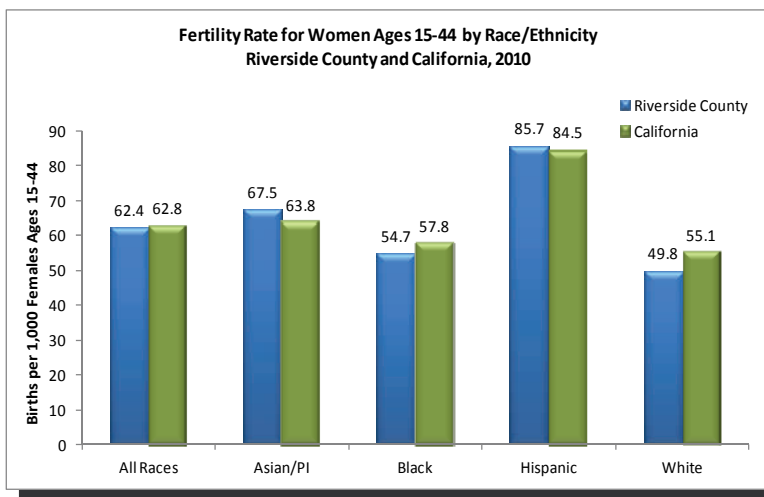


Fertility rates are the rate of live births for every 1,000 women of childbearing age (15-44 years). This indicator is important in providing insight into potential population changes, such as growth. These rates are derived from births which are fueled by changes in population subgroups. Historically, migration was the dominating contributor to the growth of states like California, but based upon the magnitude of the State's size, current growth is propagated primarily by natural increase, more births than deaths.³

Riverside County's fertility rate is at its lowest in a decade, 62.4 births for every 1,000 women ages 15-44 years. The fertility rate has decreased by 17% since its peak of 75.3 births for every 1,000 women ages 15-44 years in 2006. For the past decade, the fertility rates for Riverside County have been higher than the rates for California. This trend has begun to change. In 2010 the fertility rate in California was 63.0 per 1,000 live births to females ages 15-44 years and the rate for Riverside County was 62.4.



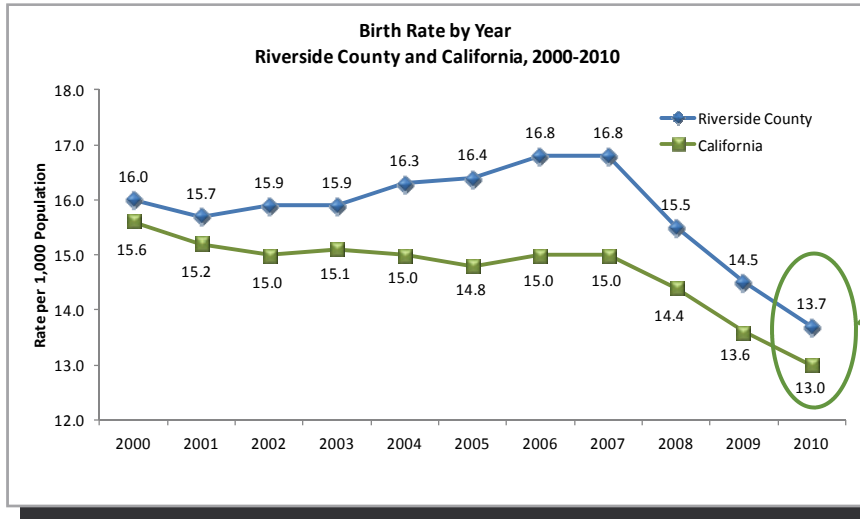
Since the year 2000, fertility rates have dropped in Riverside County and across most racial and ethnic groups. Asian/Pacific Islanders were the only group that experienced an increase in fertility rate from the year 2000 to the year 2010 (54.2 and 67.5 live births per females ages 15-44, respectively).



In Riverside County, the fertility rate remains highest among Hispanics and lowest among Whites. Asian/Pacific Islanders have the second highest fertility rates. Nearly 60% of all births in Riverside County were to Hispanic women, followed by 28% to Whites.

Asian/Pacific Islanders, Blacks, and Whites are more likely to have babies when they are between the ages of 30-34 years; while Hispanic women are more likely to have babies when they are between the ages of 25-29 years.

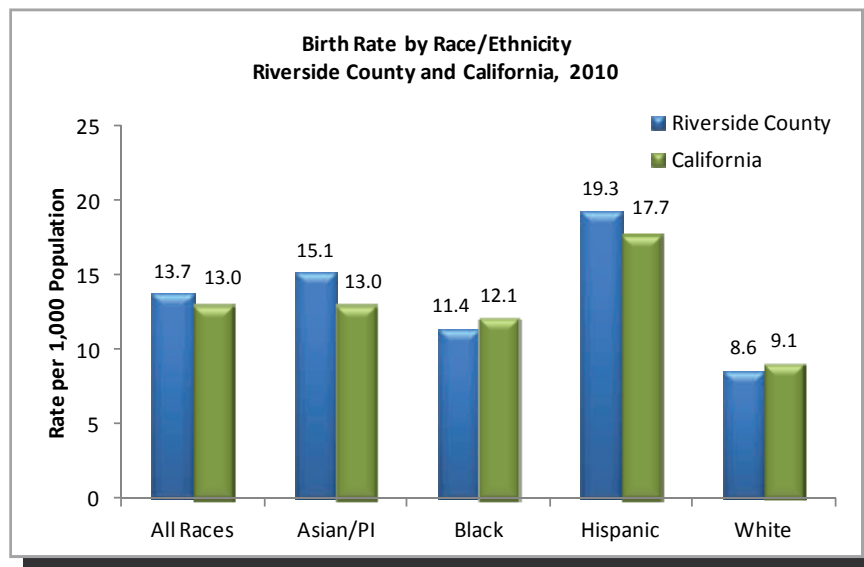
BIRTHS

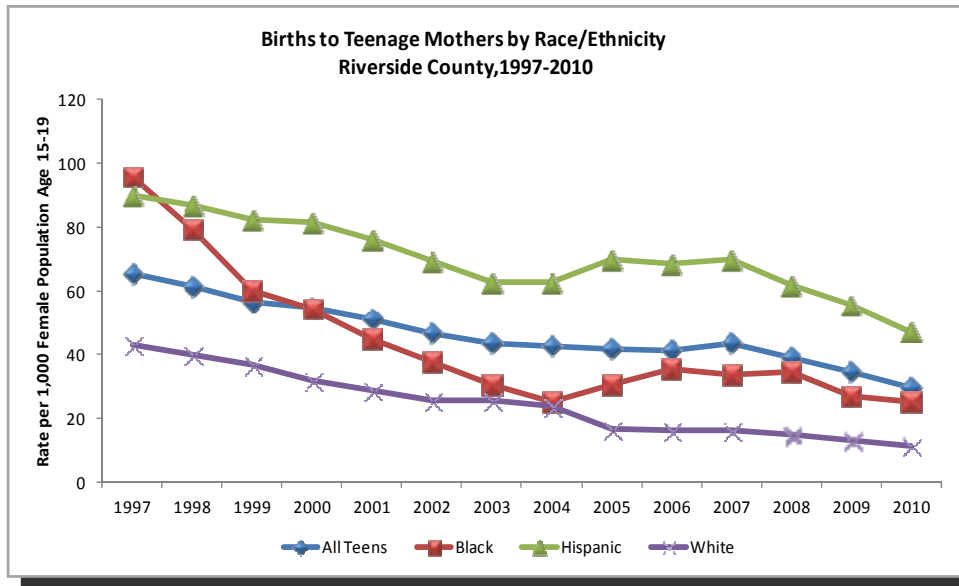


The lowest birth rates in more than 10 years.

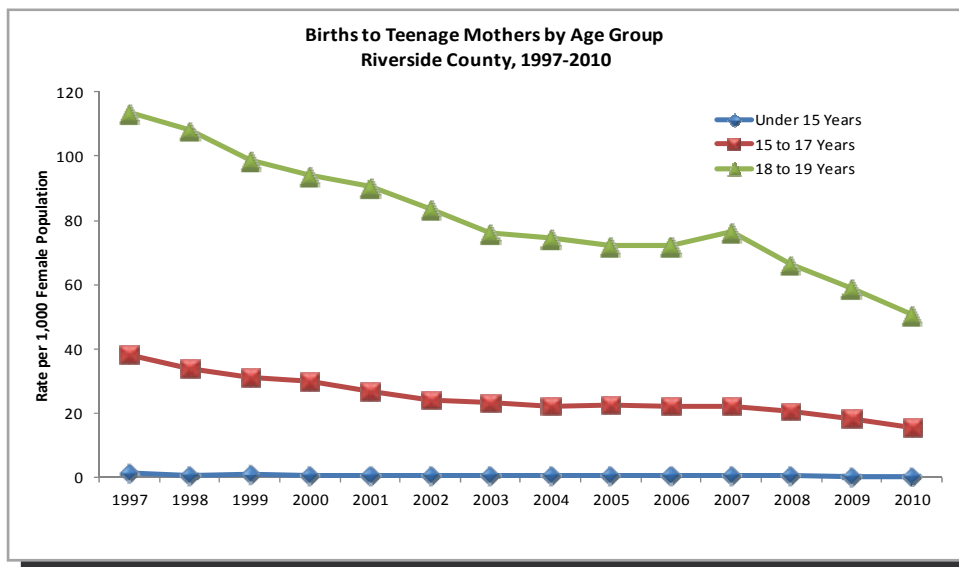
The birth rate is the rate of live births for every 1,000 females (regardless of age). This indicator, along with fertility rates, is used to indicate population trends and can be used to examine and describe many social issues. The birth rates in Riverside County and California have dropped over the past five years.

Since its peak in 2007 of 16.8 births for every 1,000 residents, the birth rate has dropped 18.5%, to its lowest rate of 13.7 births for every 1,000 residents. In 2010, the birth rate in Riverside County was highest among Hispanics and lowest among Whites, 19.3 and 8.6 per 1,000 population, respectively.





Teen births have been on a gradual decline. Between 1997 and 2010, the rate of teen births has dropped 54.3%. Since 1997, the largest drop in teen births was among Blacks and Whites, 73.7% and 73.5%, respectively. These declines mirror national trends in teen births. Among teen births, Whites have the lowest rate, while Hispanic teens have the highest rate of birth.



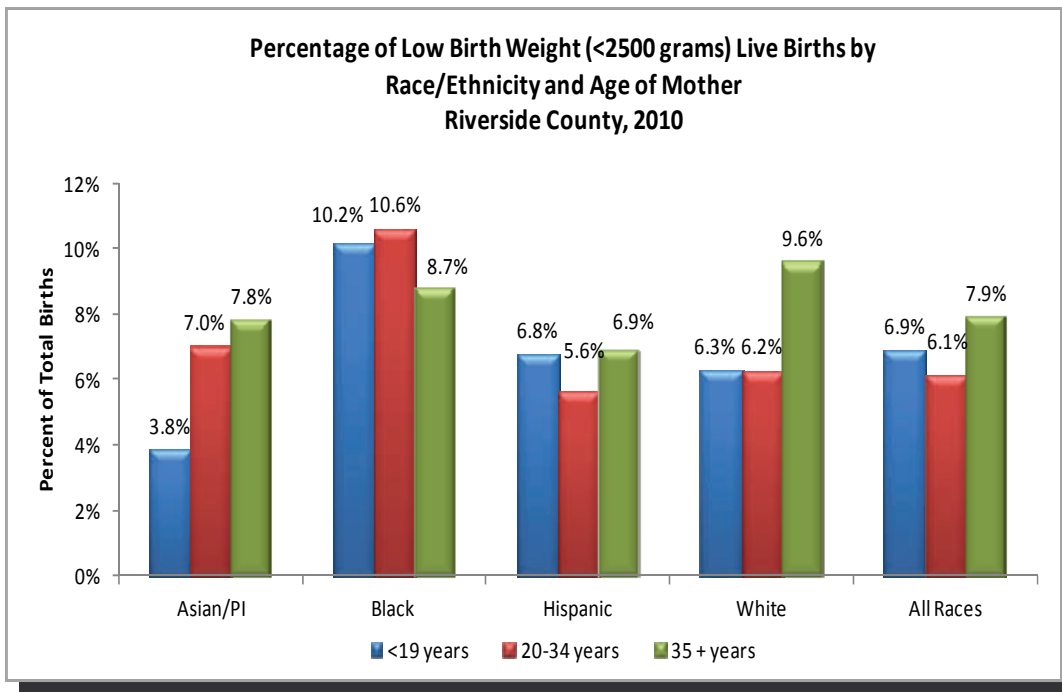
Teen births are more likely to occur among older teens (18-19 years). Since its peak in 1997, births among older teens have dropped 56%.

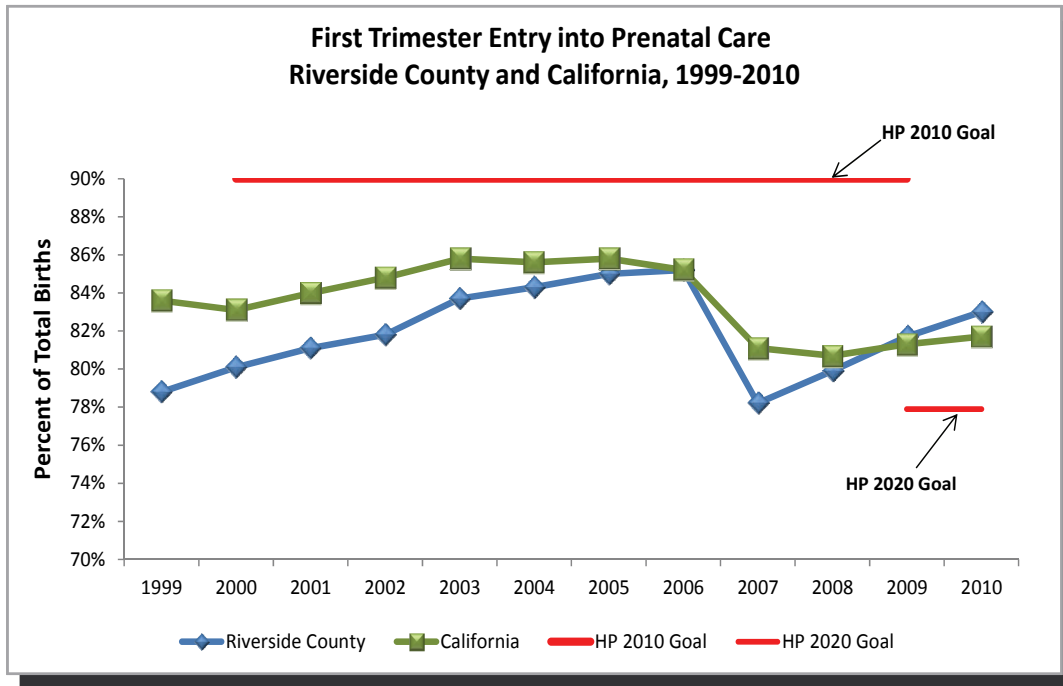
Reduction in teen births is important in reducing poor birth outcomes observed among infants of teen moms as well poor maternal outcomes such as incomplete schooling, single parentage, and inadequate prenatal care.

LOW BIRTH WEIGHT AND PRENATAL CARE

Infant birth weight is a well established predictor of health outcomes. Low birth weight infants are more likely to die within the first year of life, compared to infants of normal weights. The percent of low birth weight delivery increases with age, except among Blacks where the risk decreases with older maternal age.

Since 2001, the percentage of low birth weight deliveries has remained lower in Riverside County compared to California. Over the past decade low birth weight deliveries in Riverside County has remained stable, from 6.3% in 2000 to 6.5% in 2010, lower than the HP 2020 goal of 7.8% (not illustrated).

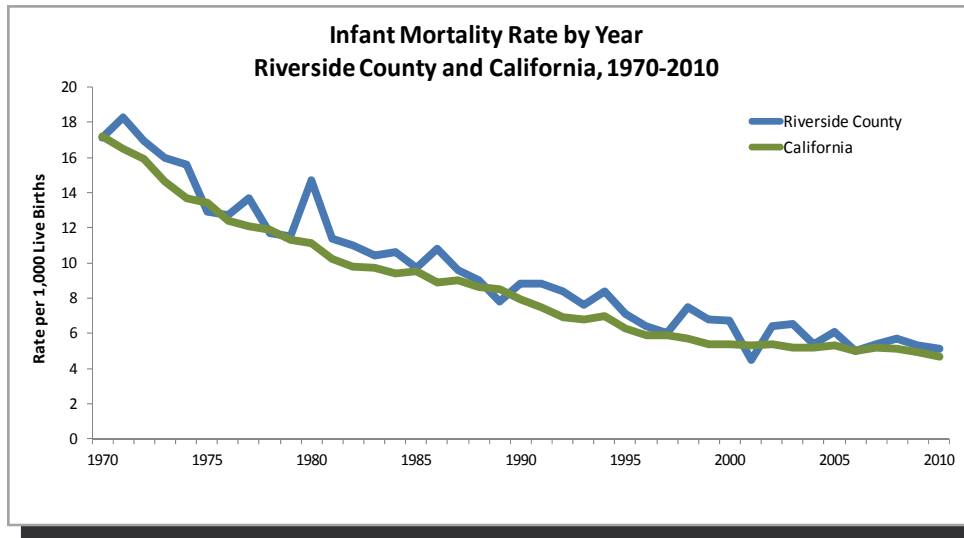




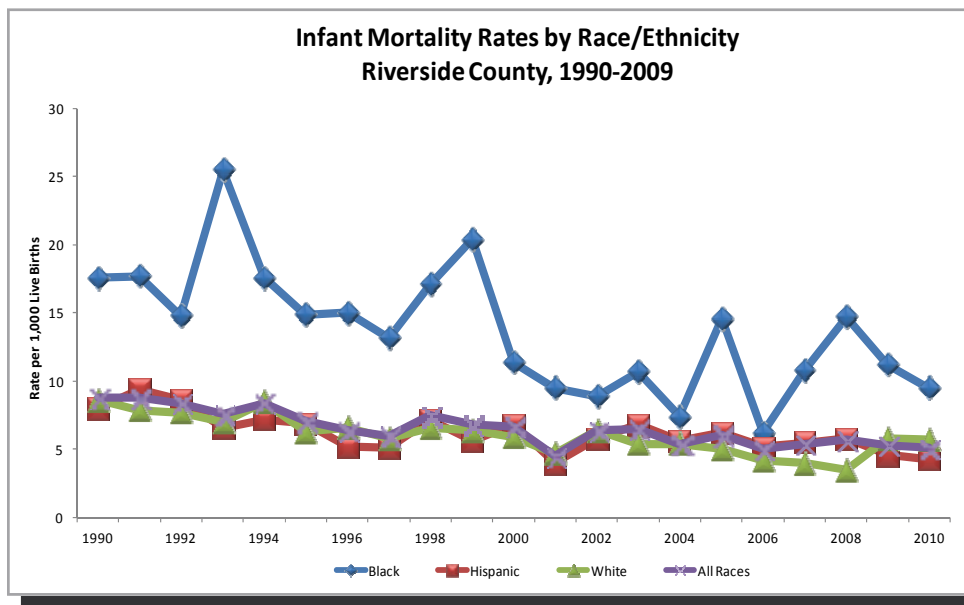
Prenatal care is important in ensuring the delivery of a healthy baby. Infants of mothers who do not get prenatal care are three times more likely to have a low birth weight infant and five times more likely to die than those infants born to mothers who do receive prenatal care.⁴

Since 1999, there have been small changes in the percentage of births to women that received prenatal care during the first trimester of pregnancy. There was a 2.3% dip in the rate among Riverside County women and a 5.3% increase among women in California overall. In 2010, more mothers in Riverside County received prenatal care, compared to mothers in California (83.05 and 81.7%, respectively). These rates were both higher than the Healthy People 2020 goal of 77.9%.

INFANT MORTALITY



The rate of deaths among infants under 1 year of age for every 1,000 live births is referred to as infant mortality. This is a predictor of health or development as well as an indicator of success or failure of interventions. It is often utilized as a marker of a community's ability to provide adequate prenatal care, labor and delivery services, and education on the needs of a developing infant. This measure is an important indicator of the overall health of a community. Infant mortality in Riverside County and California has dropped significantly over the past four decades, dropping 70% since its rate in 1970 of 17.1 infant deaths per 1,000 live births. The 2010 infant mortality rate in Riverside County was slightly higher than the Healthy People 2010 objective of 4.5 and lower than the Healthy People 2020 objective of 6 infant deaths per 1,000 live births.



Large disparities in rates of infant mortality remain, with Blacks bearing a significant burden of the mortality. Infant mortality rates among Blacks are double the County's overall rate as well as that of all other subgroups.

MORTALITY

Overview

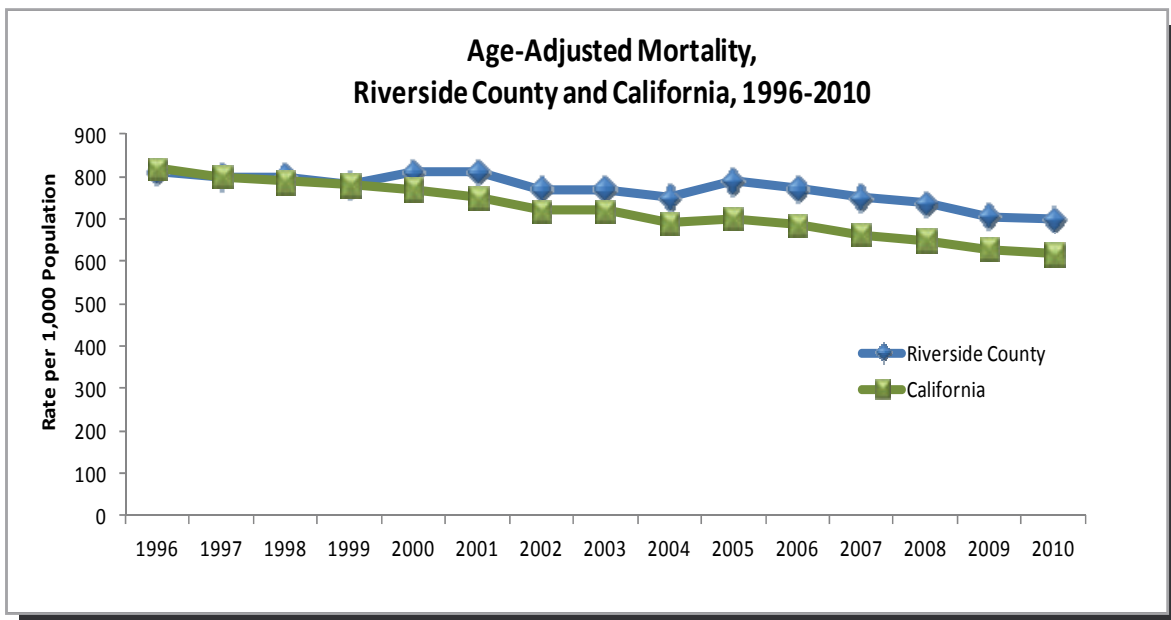
Mortality is one of the most reliable measurements of a population's health status. Reduction in mortality, which is measured in death rates, is used as an indicator of the effectiveness of various public health strategies to improve health.⁵ Since changes in mortality are small over the short term, several years of data must be used to identify true changes.

Why does this matter to health?

When studying subpopulations by ethnicity, age, sex, or other classifications, mortality data reveals a great deal about unequal health outcomes. Of most concern to public health are premature and preventable deaths, resulting in significant loss in years of productivity. Additionally, disparate rates of mortality across subpopulations is of significant public health concern and continues to be addressed through targeted prevention and intervention efforts.

Healthy People 2020

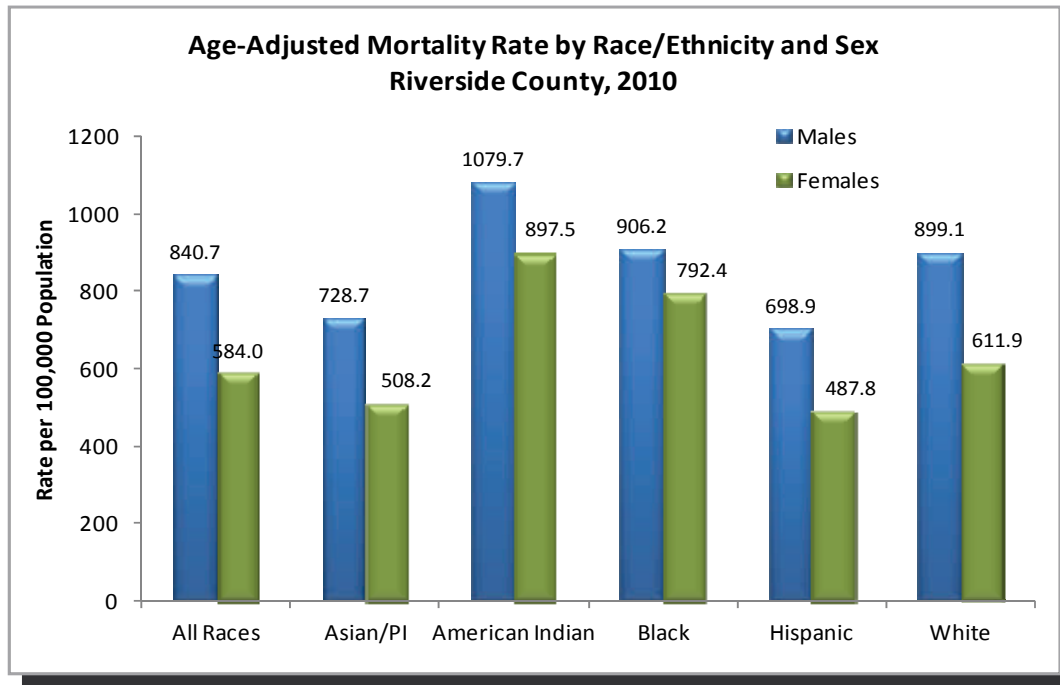
An overarching goal of Healthy People 2020 is to attain high-quality, longer lives free of preventable disease, disability, injury, and premature death. Nearly 80 national objectives address mortality.⁶



Since 1996, Riverside County's age-adjusted mortality rate has dropped 14% to a low of 699.4 deaths per 100,000 in the year 2010. In Riverside County and California people have been living longer. However, since 2000 mortality rates in Riverside County have remained slightly higher than rates for California. Factors contributing to the differences in mortality between Riverside County and California, such as differences in health behaviors; diagnosis and treatment of chronic conditions; as well as environment, need to be explored.

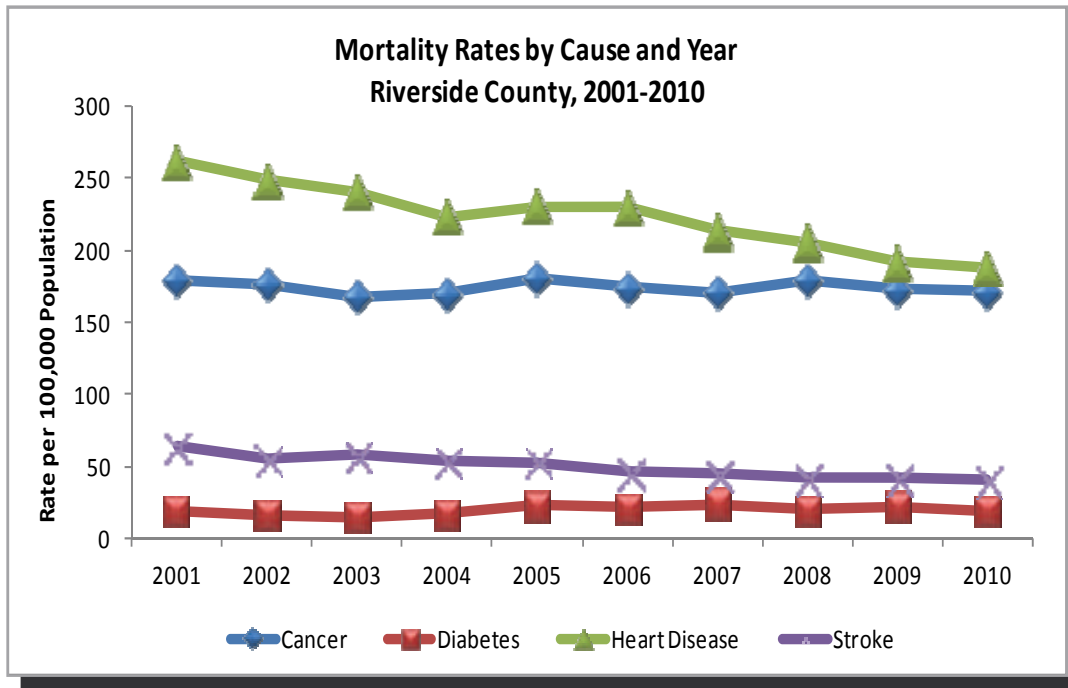
When comparing all-cause mortality for Riverside County to other California Counties, Riverside is ranked 39 out the 58 counties in California. The four leading causes of death were coronary heart disease, cancer, chronic lower respiratory disease (CLRD), and stroke; where Riverside County ranked 54th, 47th, 45th, and 42nd, respectively.⁷

In 2010, there were 13,976 deaths in Riverside County; 6% of California’s 233,143 deaths. The actual risk of death (crude death rate) was 642.2 per 100,000 population. This risk is equivalent to one death for every 160 residents.



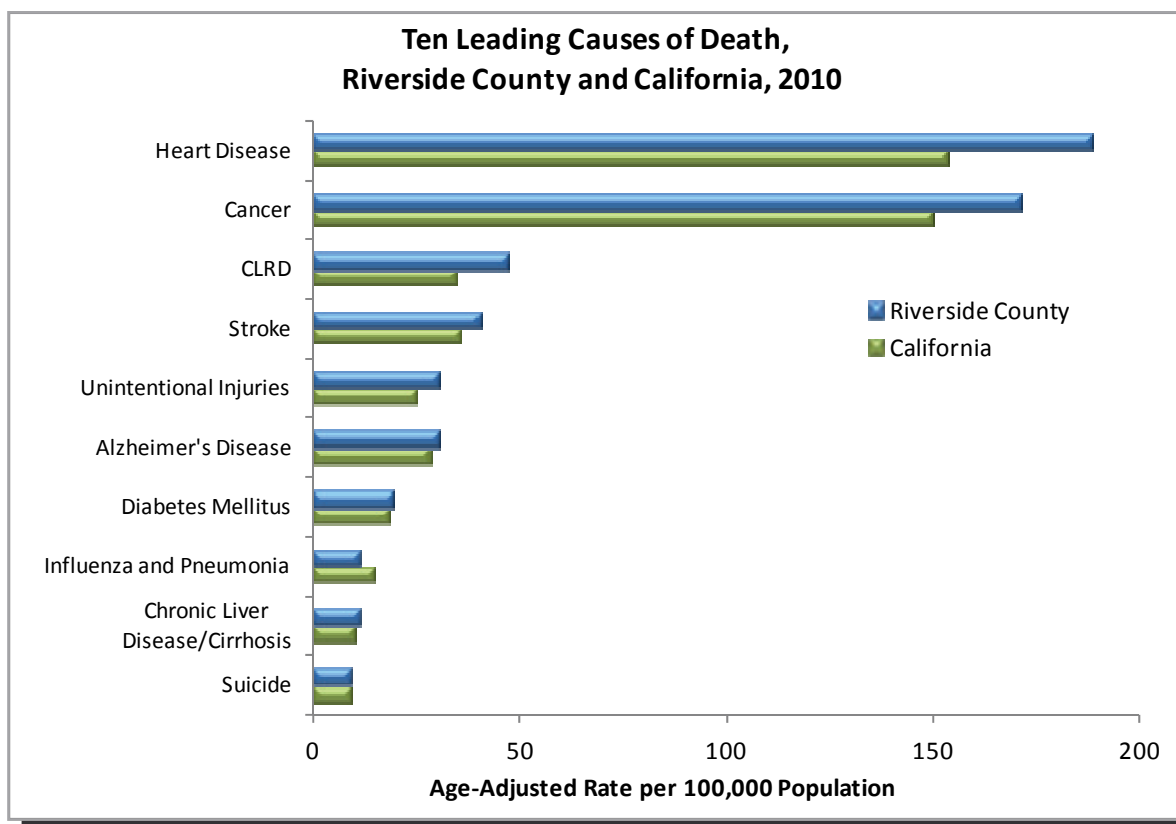
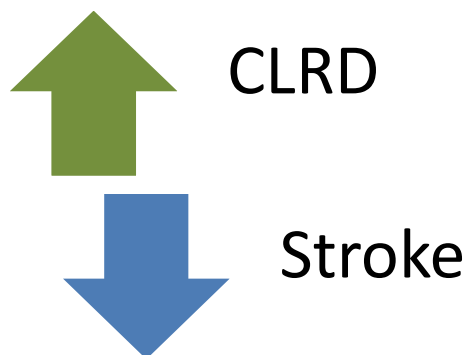
Hispanic males have a mortality rate one-third lower than American Indian males who have a rate of 1079.7 per 100,000 population; the highest rate among all males.

Since 2005, the mortality rate among Black males improved, dropping from a rate of 1130 to 906.2 per 100,000 population in 2010. The mortality rate for males is 44% higher than the rate for females. This disparity is evident among all racial and ethnic subgroups. The largest gender disparity is among Whites, where the mortality rate among White males is 47% higher than the rate for White females.



Mortality rates for cancer, diabetes and stroke have remained relatively stable, while heart disease mortality rates have declined 28% over the past decade. In 2010, heart disease mortality reached a low of 188.2 deaths for every 100,000 residents. This is a decline from its peak of 261.3 deaths for every 100,000 residents in 2001.

The ten leading causes of death have remained relatively stable over the past half decade. Between 2005 and 2010, Chronic Lower Respiratory Disease (formerly referred to as Chronic Obstructive Pulmonary Disease (COPD)) has moved up from fourth to the third leading cause of death, switching rankings with stroke.



Cause-specific mortality rates for Riverside County were higher than rates for California, with the exception of rates for CLRD, influenza and pneumonia, and suicide. The top ten causes for mortality were responsible for 79.4% of all deaths in 2010. Fifty percent of deaths were caused by heart disease and cancer, a total of 7,086 deaths. Two out of every three deaths in 2010 resulted from a chronic illness. The most notable chronic health conditions include heart disease, cancer, CLRD, stroke, and diabetes.

Differences in the Leading Causes of Death

Five Leading Causes of Death by Race/Ethnicity, Riverside County 2010					
Ranking	1	2	3	4	5
Riverside County	Heart Disease	Cancer	Lung Disease	Stroke	Unintentional Injuries
Asian/PI	Cancer	Heart Disease	Stroke	Lung Disease	Unintentional Injuries
American Indian	Heart Disease	Cancer	Unintentional Injuries	Diabetes	Chronic Liver Disease
Black	Heart Disease	Cancer	Stroke	Lung Disease	Unintentional Injuries
Hispanic	Cancer	Heart Disease	Unintentional Injuries	Stroke	Diabetes
White	Heart Disease	Cancer	Lung Disease	Stroke	Alzheimer's Disease

In 2010, the top five causes of death in Riverside County included heart disease, cancer, lung disease (CLRD), stroke, and unintentional injuries. These causes comprised 68% of all deaths.

- ◆ There were slight differences in the leading causes of death when stratified by racial and ethnic subgroups.
- ◆ **Diabetes** is ranked as a fourth leading cause of death for American Indian's and fifth for Hispanic's. For Riverside County overall diabetes is ranked as the seventh leading cause of death.
- ◆ **Chronic liver disease** is the fifth leading cause of death for American Indian's; however it is ranked ninth for the County overall.
- ◆ **Alzheimer's disease** is the fifth leading cause of death for Whites; yet ranks as the sixth leading cause of death for Riverside County.

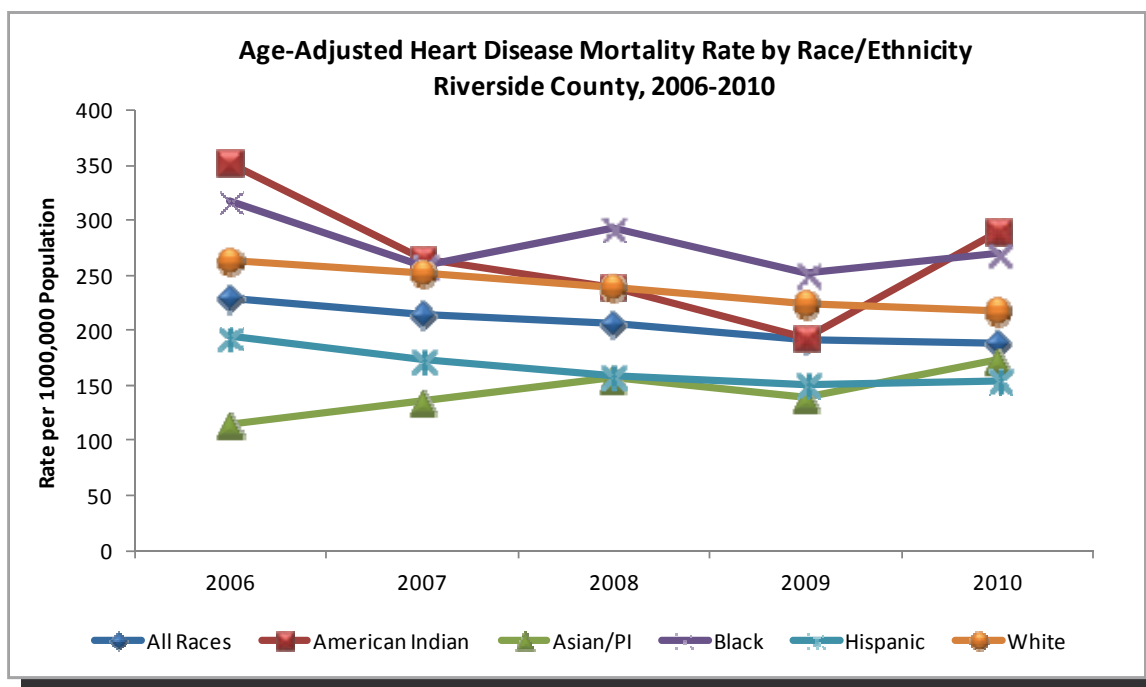
HEART DISEASE

Overview

Heart disease includes diseases and conditions of the heart and arteries such as coronary heart disease, heart failure, heart attack, arrhythmias, angina, and many others. The most common forms of heart disease result from excess lipids (fats) and cholesterol in the blood stream.

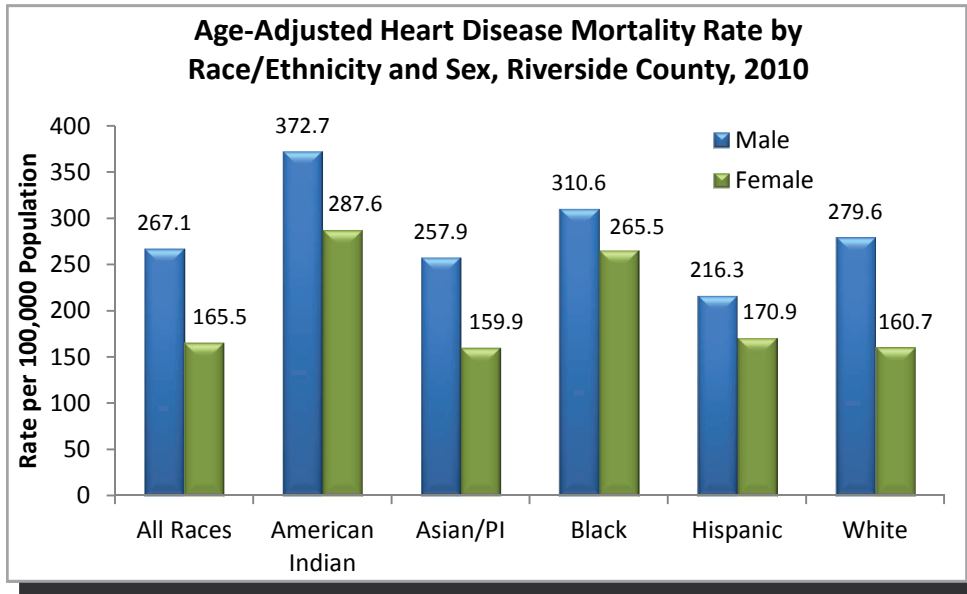
Why does this matter to health?

Of all deaths in Riverside County, 27% (n=3,574) in 2010 were attributed to heart disease, down from 34% in 1999. According to the American Heart Association, more than one in three American adults have one or more types of cardiovascular disease (illness of the heart and vessels). They further estimate that 80% of heart disease and stroke can be prevented.⁸

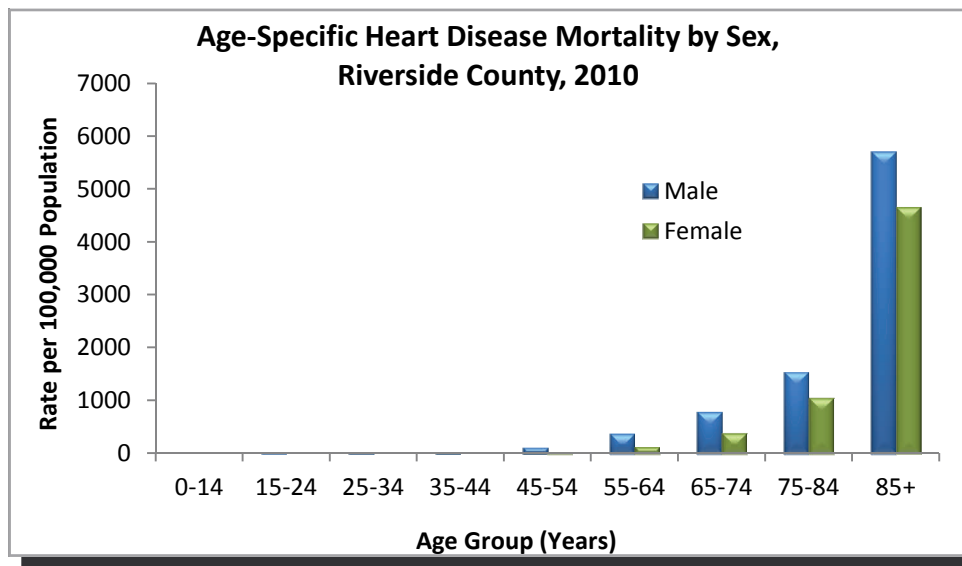


Heart disease mortality rates among Whites mirrors that of the County, with an 18% drop. Most racial and ethnic subgroups experienced declines in heart disease mortality, with one exception. The mortality rate for Asians and Pacific Islanders rose 51.4% from 114.1 per 100,000 in 2006 to 172.8 per 100,000 in 2010.

In 2010, the highest rates of heart disease were among American Indians (289.6 per 100,000) and Blacks (269.3 per 100,000). These rates were much higher than the overall County rate of 188.2 per 100,000 population.



There is a gender disparity in heart disease mortality. The mortality rate is 61.4% higher among males compared to the rate among females. Among males, the highest heart disease mortality rates were among American Indians and Blacks (372.7 and 310.6 per 100,000, respectively). The lowest rate was among Hispanic males (216.3 per 100,000). The lowest rate for males was still 31% higher than the overall rate for females. Among females, the highest heart disease mortality rates were among American Indians and Blacks (287.6 and 265.5 per 100,000, respectively). The lowest rate for females was among Asian/Pacific Islanders and Whites (159.9 and 160.7 per 100,000, respectively).



As we age the risk of death increases. The risk of heart disease-related death is disparately higher among males in all age groups. As expected, there is a sharp increase in mortality among those 65 and older. Those 85 and older have the greatest heart disease mortality rates. In 2010, heart disease mortality rate for males age 85 and older was 5,724.4 and for females was 4,669.8 per 100,000 population.

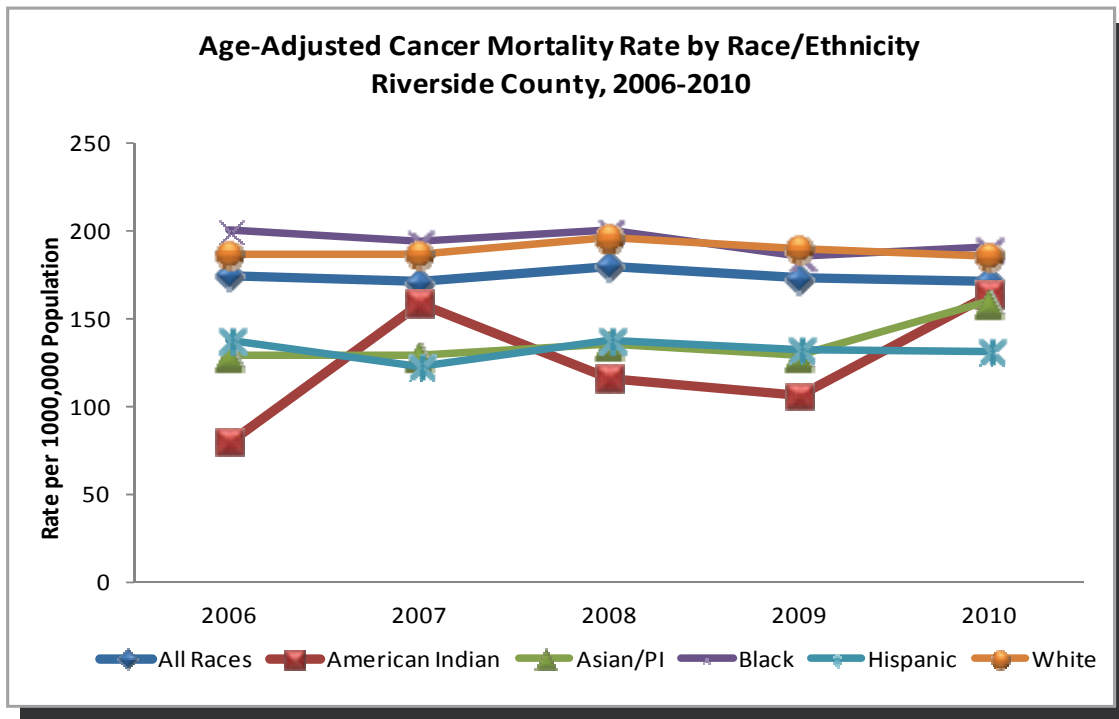
CANCER

Overview

Cancer is the uncontrolled growth of abnormal cells. It is the second leading cause of death in the US, California, and Riverside County. As a chronic disease many cancers are associated with lifestyle factors such as poor dietary choices, sedentary behaviors and smoking.

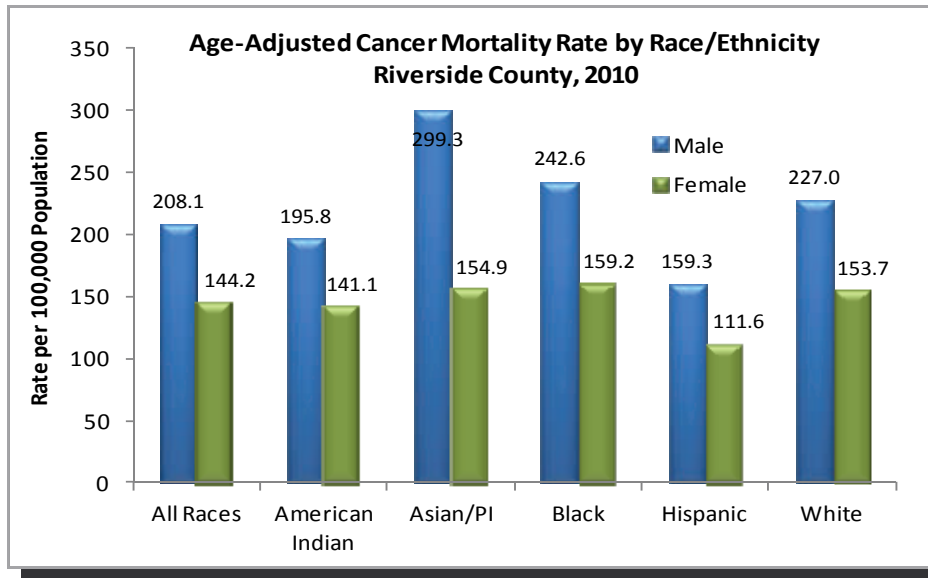
Why does this matter to health?

In 2010, one in four (n=3,332) deaths in Riverside County was attributed to cancer. Cancer surveillance is key in monitoring trends in cancer incidence, prevalence, cancer-related health behaviors, and screening practices. Further, surveillance allows for the prevention of and early intervention against cancer resulting in longer life free of disease and disability.



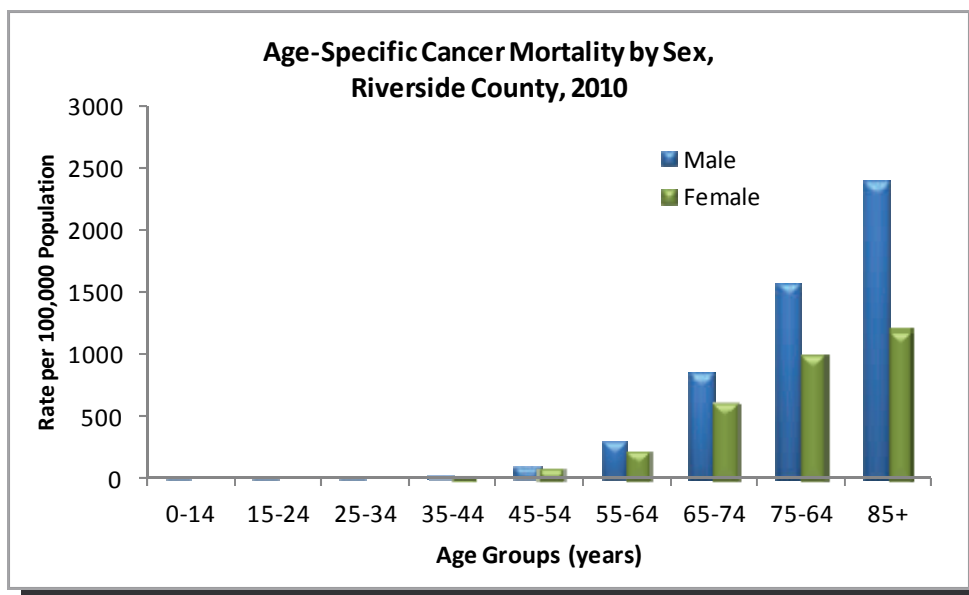
Cancer mortality has remained relatively stable over the past half decade. In 2010 the cancer mortality rate was 171.2 per 100,000 population.

Most racial and ethnic groups experienced stable cancer mortality rates over the past decade; however, the cancer death rate for American Indians doubled from a low of 79.7 per 100,000 in 2006 to a high of 163.9 per 100,000 in 2010. This large increase may be a reflection of the small population size where numerically small changes may reflect large rate changes. In 2010, Blacks and Whites had cancer mortality rates higher than the County rate (191.1 and 185.1 per 100,000, respectively).



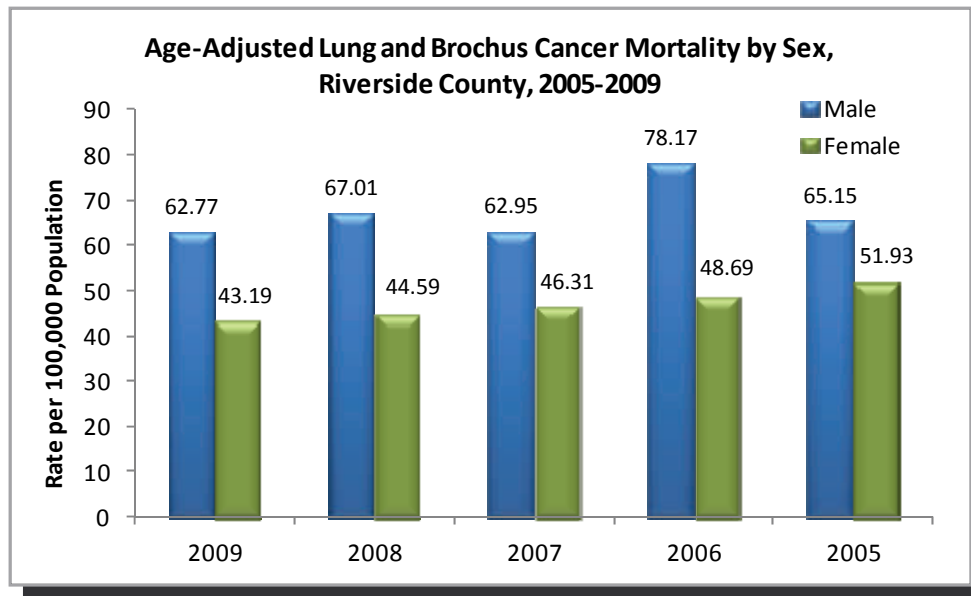
In 2010, cancer mortality was 31% lower among females compared to males (144.2 and 208.1 per 100,000, respectively). Among females, cancer mortality rates are comparatively similar across racial and ethnic groups; however, all rates are lower than the overall County rate. This indicates that cancer mortality among males drives the County's overall mortality. Hispanic females maintain the lowest cancer mortality rate of 111.6 per 100,000 population. Among males, the highest cancer mortality rate was among Asians and Pacific Islanders (299.3 per 100,000), nearly double the lowest rate which was among Hispanic males (159.3 per 100,000).

Cancer mortality increases sharply with age, most notably among males. Mortality rates for males and females are similar through age 54. Beginning at age 55, rates soar, increasing gradually among females. The increases in mortality among males is double the increase among females. This gender disparity is greater than that of heart disease and stroke.



Leading Causes of Cancer Mortality by Sex, Riverside County, 2005-2009					
Males			Females		
Site	# of Deaths	% of Total	Site	# of Deaths	% of Total
All Cancers	8,321	100%	All Cancers	7,593	100%
Lung and Bronchus	2,182	26%	Lung and Bronchus	1,844	24%
Prostate	955	11%	Breast	1,235	16%
Colon and Rectum	778	9%	Colon and Rectum	733	10%
Pancreas	558	7%	Pancreas	463	6%
Miscellaneous	500	6%	Ovary	449	6%

From 2005-2009, there were more cancer deaths among males than females. One quarter of all cancer deaths were lung and bronchus cancers, followed by prostate cancers for males and breast cancer for females. Ten percent of all cancers were colon and rectal cancers.



Males consistently have higher rates of cancers of the lung and bronchus. The difference in mortality rates for lung and bronchus cancers between males and females may reflect the difference in risk behaviors, particularly the use of tobacco. Males smoke more cigarettes per day and begin smoking at a younger age than females. This difference in tobacco exposure may explain the difference in mortality.

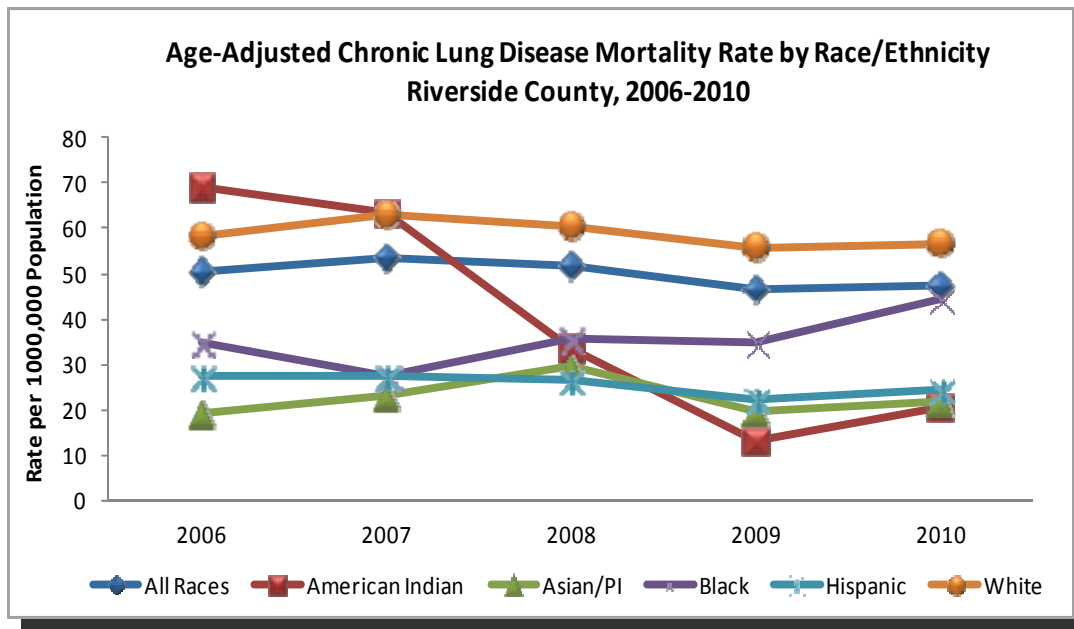
CHRONIC LUNG DISEASE

Overview

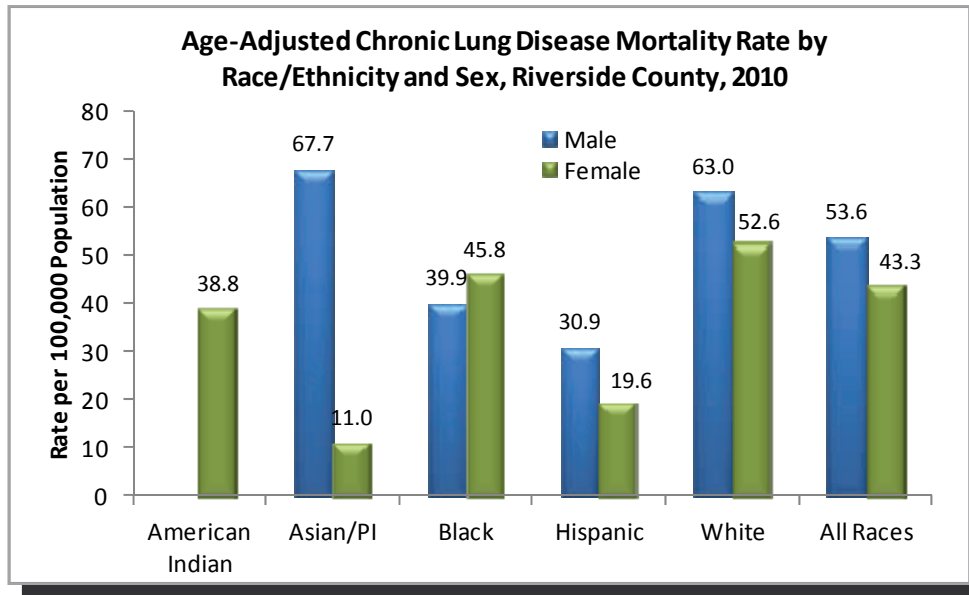
Chronic Lung Disease, often referred to as chronic lower respiratory disease (CLRD) and chronic obstructive pulmonary disease (COPD), includes asthma, chronic bronchitis, emphysema, and other lower respiratory illnesses.

Why does this matter to health?

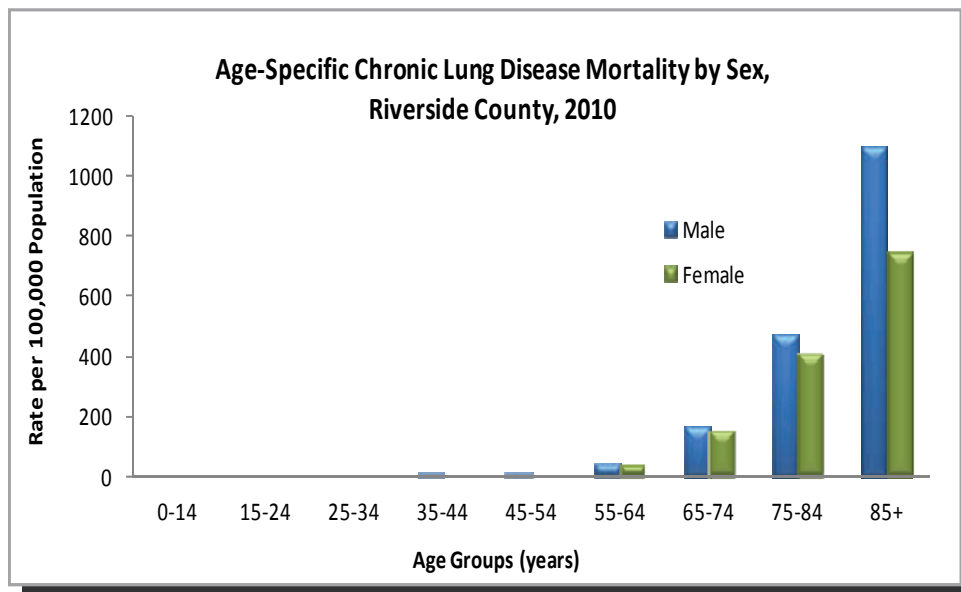
According to the American Lung Association, deaths from chronic lung disease are on the rise surpassing stroke as the third leading cause of death in the US.⁹ In 2010, CLRD contributed to the death of nearly seven percent (n=918) of Riverside County residents. CLRD is the third leading cause of death for Riverside County and the fourth leading cause for California.



CLRD mortality has remained relatively stable over the past half decade. In 2010 the CLRD mortality rate was 47.4 per 100,000 population. Most racial and ethnic subgroups experienced stable CLRD mortality rates over the past decade; however, CLRD mortality rate for American Indians dropped from a high of 69.3 per 100,000 in 2006 to a low of 20.7 per 100,000 in 2010. This large decline may be a reflection of the small population size where numerically small changes may reflect large rate changes. Whites maintained CLRD mortality rates higher than all other groups.



In 2010, CLRD mortality was lower among females compared to males (43.3 and 53.6 per 100,000, respectively). Among females, CLRD mortality rates varied across racial and ethnic subgroups; with Blacks having the highest rate (45.8 per 100,000) and Asian/Pacific Islanders having the lowest rate (11.0 per 100,000). Among males, the highest CLRD mortality rate was among Asian/Pacific Islanders (67.7 per 100,000) followed by Whites (63.0 per 100,000). The rate among Asian/Pacific Islander males is six times the rate among Asian/Pacific Islander females. The elevated mortality among Asian/Pacific Islander males should be interpreted with caution. The reason behind such an increased rate is unknown and requires further investigation.



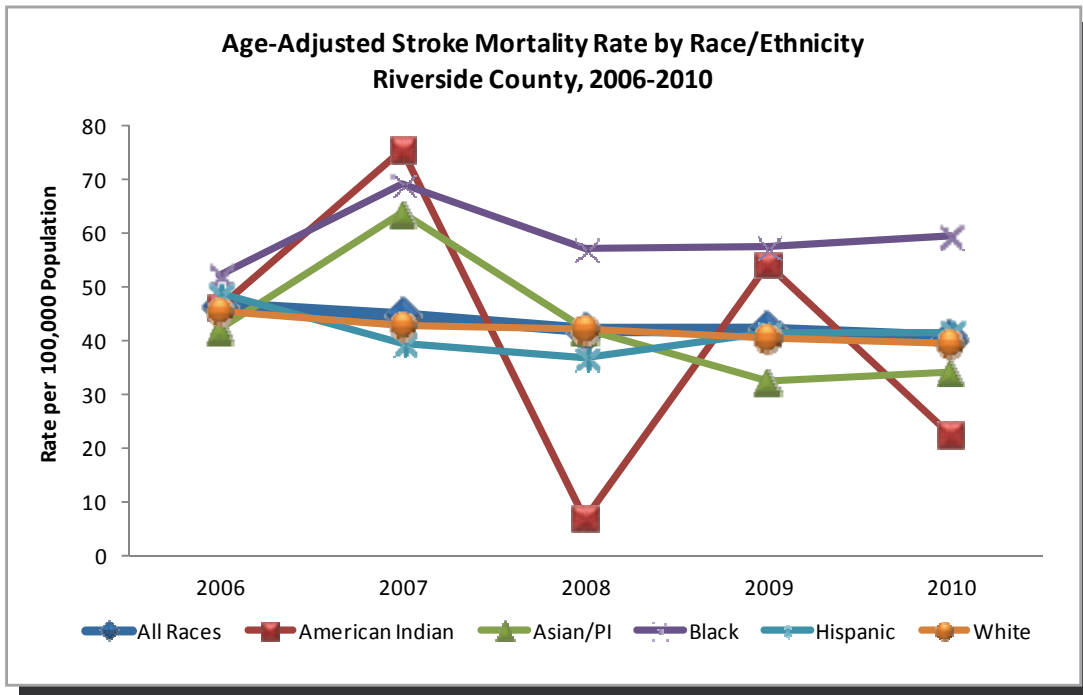
As with overall mortality, CLRD mortality increases sharply with age. The mortality disparity between males and females increases at age 85, with males maintain the highest rate compared to females (1097.4 and 742.6 per 100,000, respectively).

Overview

Stroke is a disease of the blood circulation of the brain which when limited, or interrupted, can interfere with brain functioning.

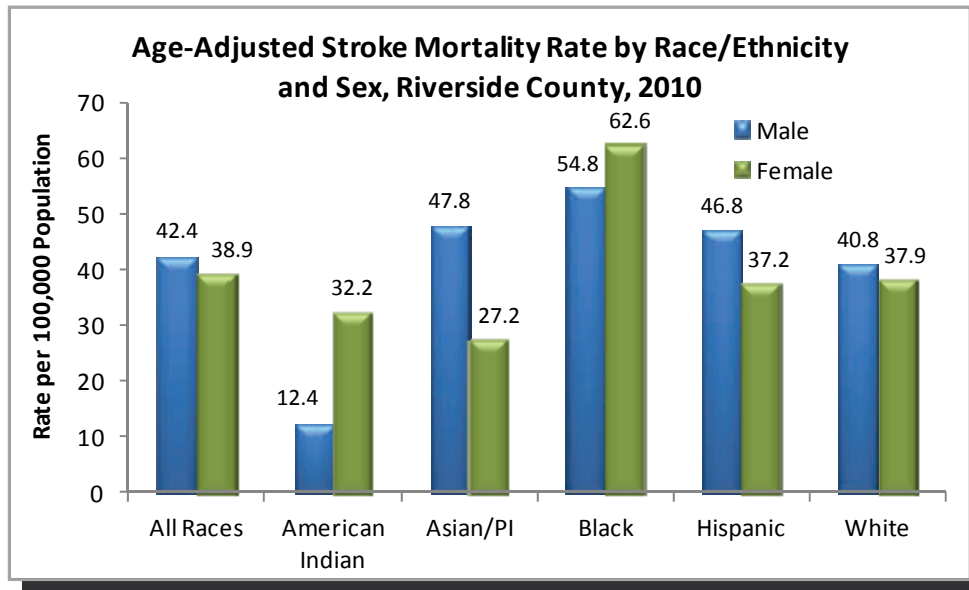
Why does this matter to health?

In 2010, stroke attributed to the death of nearly six percent (n=802) of Riverside County residents. Stroke is the fourth leading cause of death for Riverside County and the third leading cause for California.



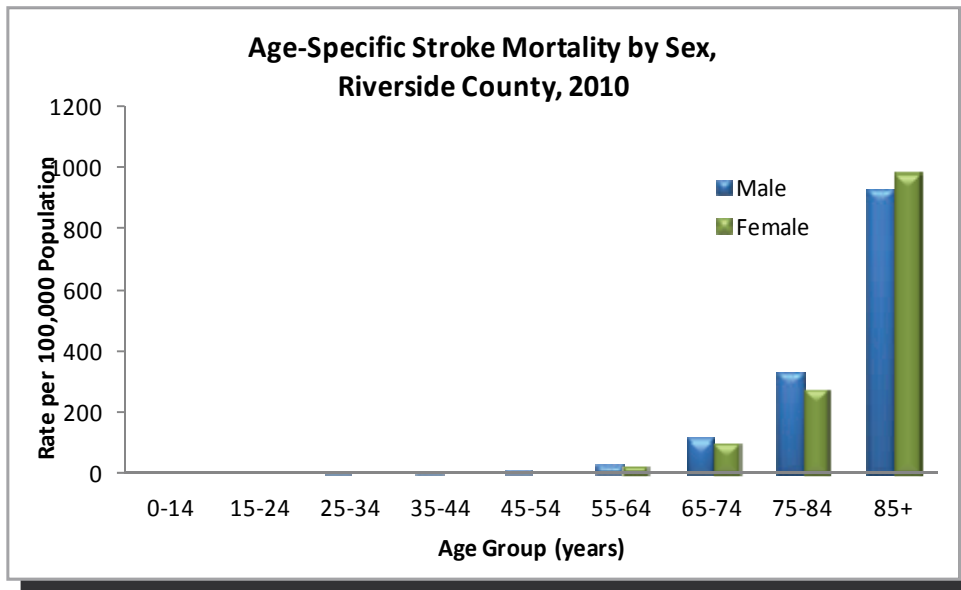
Stroke mortality has remained relatively stable over the past half decade. With the exception of Blacks, most racial and ethnic groups experienced slight declines in stroke mortality. The mortality rate for Blacks rose 14.2% from 52.1 per 100,000 in 2006 to 59.5 per 100,000 in 2010. The rate among Blacks in 2010 was the highest rate of stroke among all subgroups, higher than the County rate of 40.5 per 100,000 population.

From 2006 to 2010, the mortality rate among American Indians was unstable. This may be due to the small population size resulting in spurious data points. In 2010, the mortality rate for this group dropped 50% to a low of 22.6 per 100,000 population.



Stroke mortality differs slightly between males and females, with males maintaining a higher mortality rate in 2010. Conversely, American Indian and Black females have higher stroke mortality rates, compared to their male counterparts. American Indian females have a stroke mortality rate more than double that of American Indian males.

Among males, the highest stroke mortality rate was among Blacks (54.8 per 100,000). Blacks maintain a stroke mortality rate much higher than the overall County rate, while all other groups have rates similar to the Riverside County rate (40.5 per 100,000). The lowest rate was among American Indian males (12.4 per 100,000). Among females, the highest stroke mortality rate was also among Blacks (62.6 per 100,000, respectively). The lowest rate for females was among Asian/Pacific Islanders (27.2 per 100,000).



As with other chronic disease-related mortality, stroke mortality is linked to age. Rates are lowest among those under age 65. Rates are highest among males, until age 85 and older, where rates among females are greater.

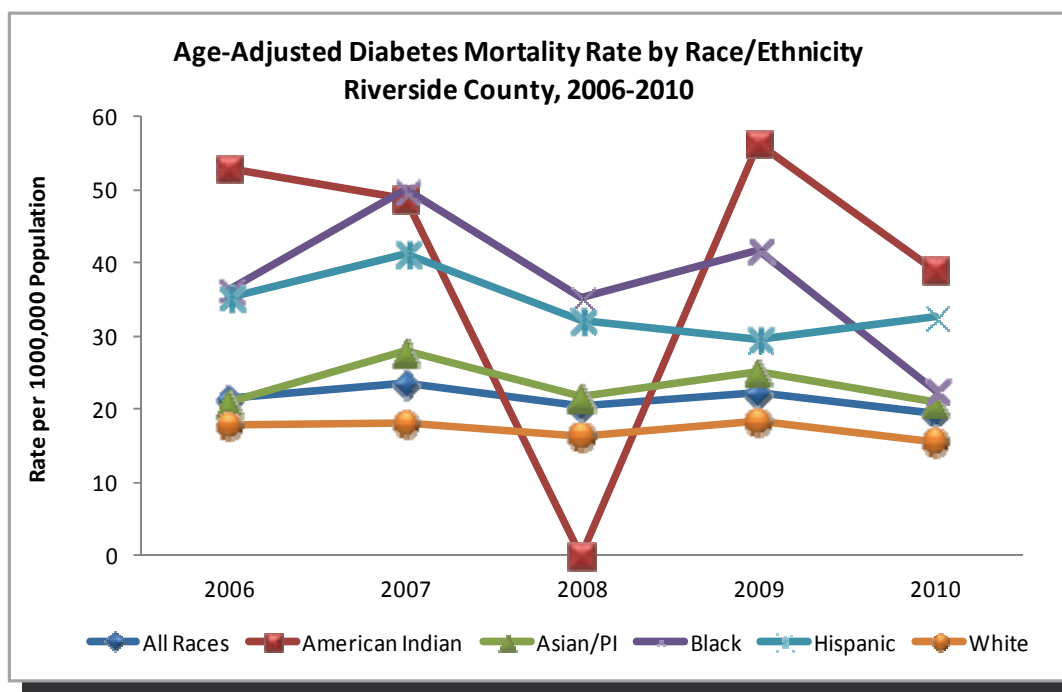
DIABETES

Overview

Diabetes mellitus, often referred to as diabetes, is a group of diseases indicated by high levels of blood sugar. This elevation in blood sugar may result from defects in insulin production, action, or a combination of the two.⁸ The Centers for Disease Control and Prevention estimate that as many as 25.8 million people, or 8.3% of the US population may have diabetes. Of those, as many as 7 million people are undiagnosed.⁸ Diabetes contributes to heart disease, stroke, hypertension, kidney disease, blindness, nervous system disease, amputations, and many other complications.

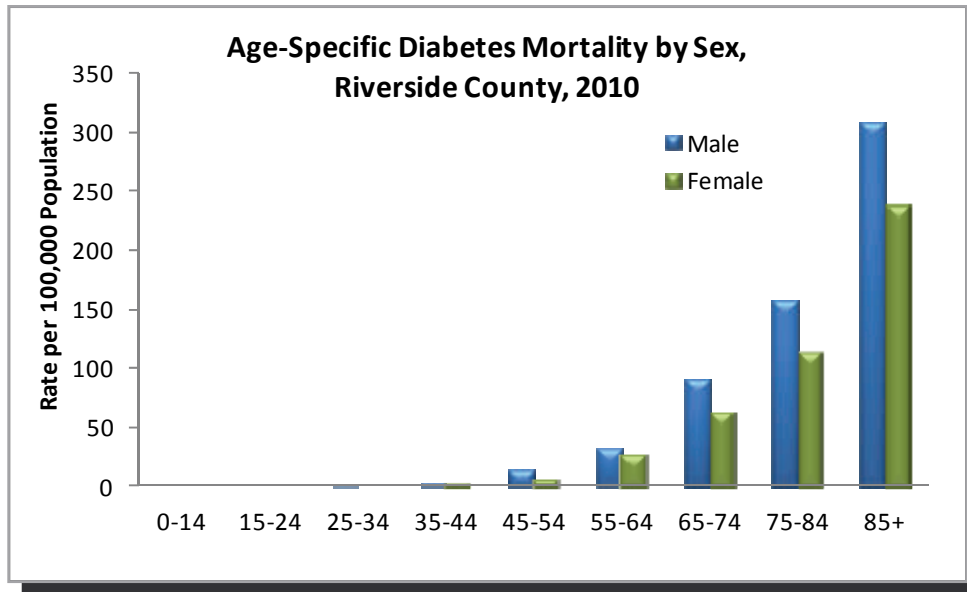
Why does this matter to health?

In 2010, diabetes contributed to the death of nearly three percent (n=380) of Riverside County residents. Diabetes is the seventh leading cause of death for Riverside County. It is thought that diabetes-related deaths are underreported. Some studies have determined that as many as 40% of decedents with diabetes had it listed anywhere on their death certificate, while up to 15% had it listed as an underlying cause of death.¹⁰



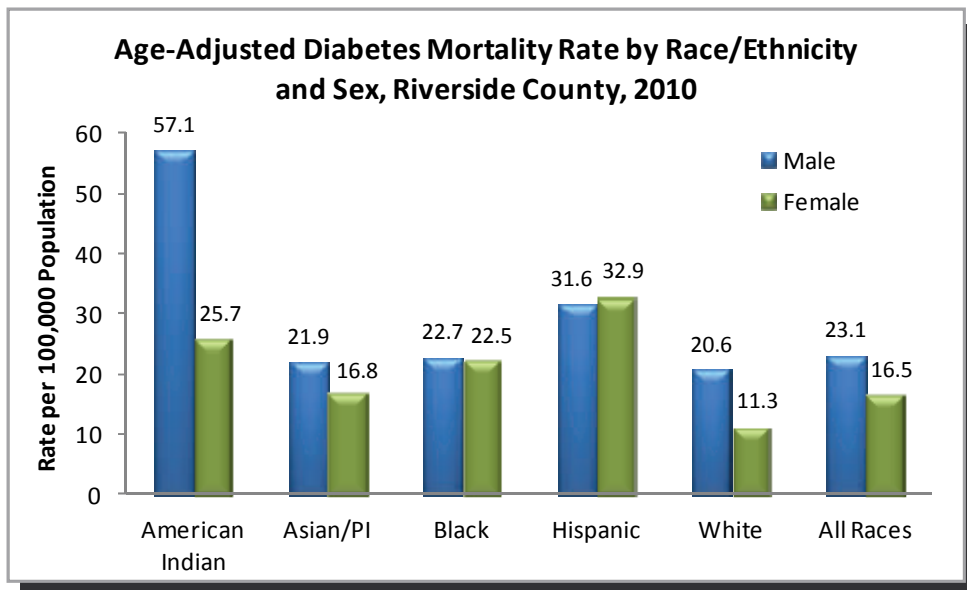
Diabetes mortality has remained relatively stable over the past half decade. In 2010 the diabetes mortality rate was 19.4 per 100,000 population. This is a slight decline from a rate of 21.4 per 100,000 population in 2006.

Diabetes mortality rates have remained higher among American Indians compared to all other racial and ethnic subgroups, except in the year 2008, where no diabetes-related deaths were documented for this group. This data anomaly should be interpreted with caution. From 2006 to 2010, Whites maintained diabetes mortality rates lower than that of all other groups.



In 2010, diabetes mortality was lower among females compared to males (16.5 and 23.1 per 100,000, respectively). A gender disparity in diabetes mortality exists across most racial and ethnic subgroups; however, among Blacks, the male and female mortality rates are the same (22.7 and 22.5 per 100,000, respectively). Moreover, Hispanic females maintain a slightly higher diabetes mortality compared to Hispanic males (32.9 and 31.6 per 100,000, respectively).

Among females, Hispanics had the highest mortality rate (32.9 per 100,000) and Whites had the lowest rate (11.3 per 100,000). Among males, American Indians had the highest rate (57.1 per 100,000) and Whites maintained the lowest rate (20.6 per 100,000).



INTENTIONAL AND UNINTENTIONAL INJURY

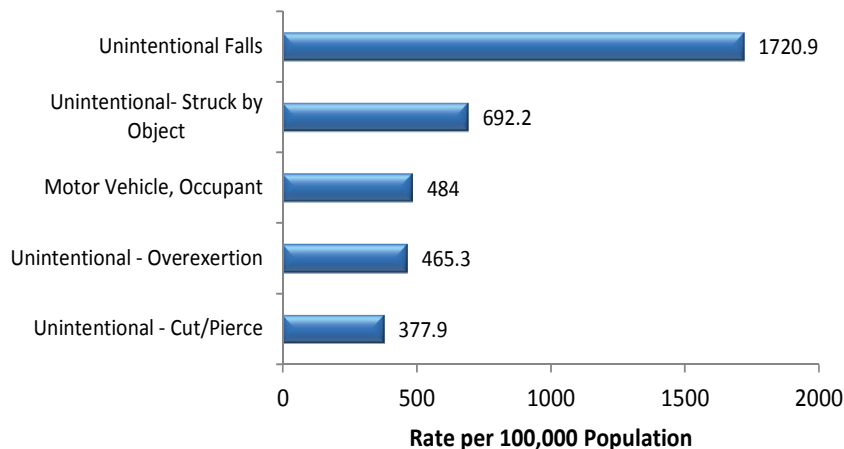
Overview

Injuries are not random. Instead, injuries result from predictable and preventable events and are categorized by intent. Those injuries which are not planned are often referred to as accidental and categorized as unintentional. Those injuries where harm is self-directed or inflicted upon others is categorized as intentional.

Why does this matter to health?

In 2010 injuries attributed to deaths of nearly seven percent (n=929) of Riverside County residents. Two-thirds (n=651) of all injuries were unintentional. Unintentional injuries are the fifth leading cause of death for Riverside County and the sixth leading cause for California. Intentional injuries (inclusive of homicides and suicides) are the eighth leading cause of death for Riverside County and the ninth in California. According to the CDC, injuries are the leading cause of death for those ages 1-44. In the US, one person dies every three minutes from injuries.

Top Five Causes of Non-Fatal Injury, Riverside County, 2010



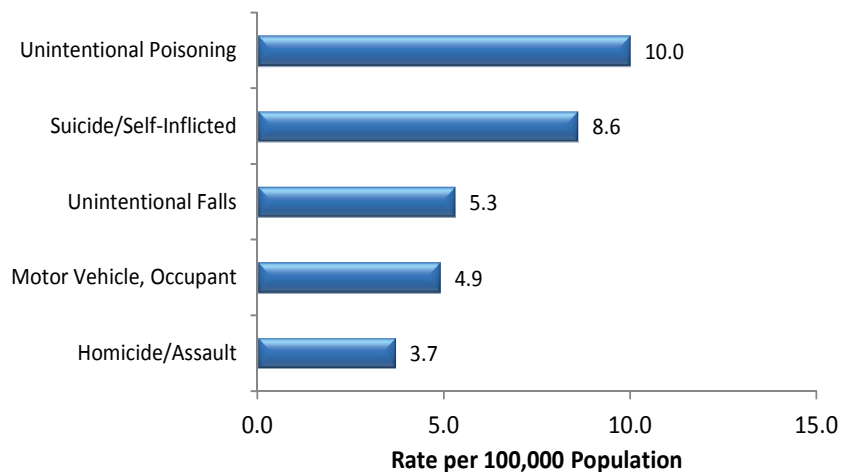
◆ Unintentional falls are the leading cause of injury in Riverside County.

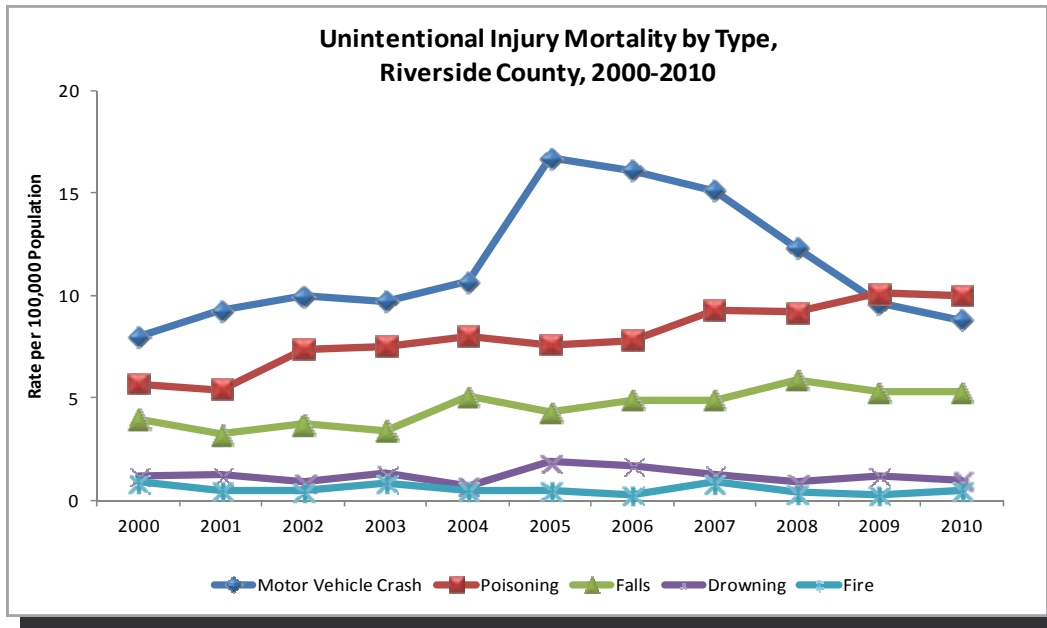
◆ In 2010, 1 out of every 55 Riverside County residents had been injured due to an unintentional fall, totaling 38,531 fall-related injuries.

◆ Unintentional poisonings are the leading cause of injury-related mortality in Riverside County.

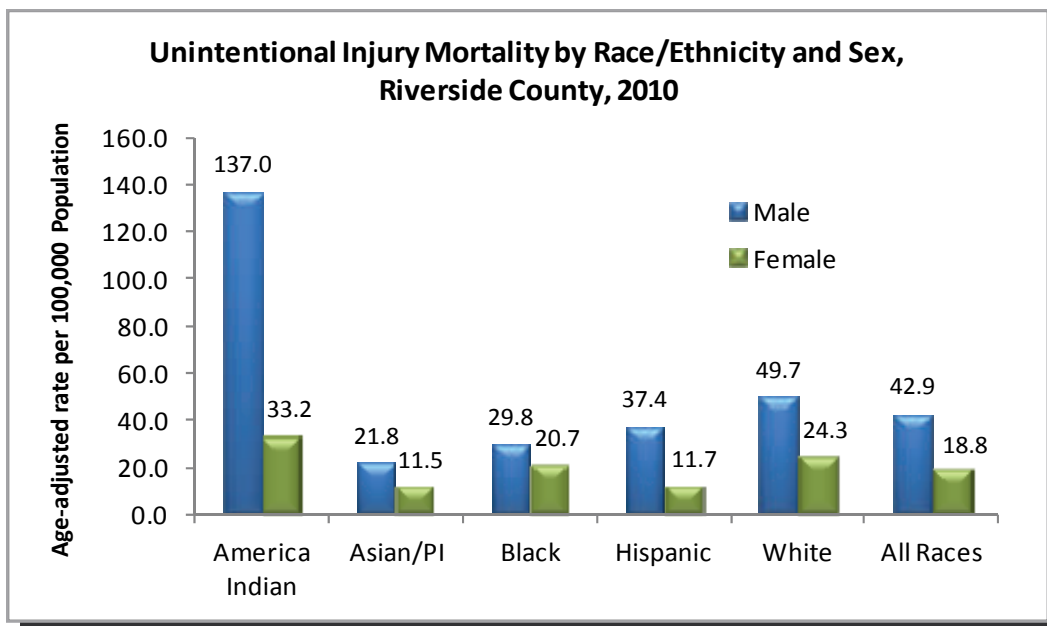
◆ In 2010, 233 Riverside County residents died as a result of accidental poisoning.

Top Five Causes of Injury Mortality, Riverside County, 2010

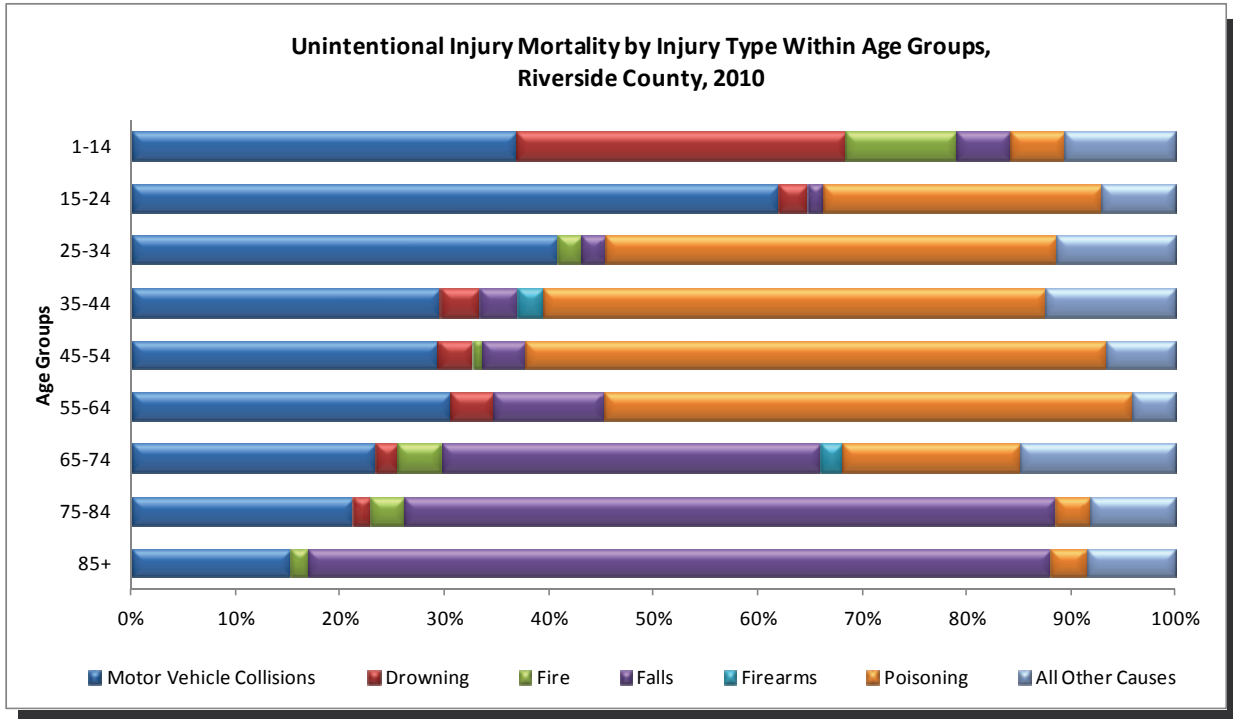




Motor vehicle crashes have consistently been the leading cause of unintentional injury mortality. In 2009, poisoning surpassed motor vehicle crashes as the leading cause of unintentional injury mortality. Since its peak in 2005, motor vehicle crash mortality has dropped 47% to a rate of 8.8 per 100,000, while the rate of poisoning deaths have doubled from a low of 5.4 per 100,000 in 2000 to a rate of 10.0 per 100,000 in 2010.



Most (68%) unintentional injury-related deaths are among males. American Indian males maintain the highest unintentional mortality rate (137 per 100,000), more than 3 times that of the overall mortality rate for all males (42.9 per 100,000).



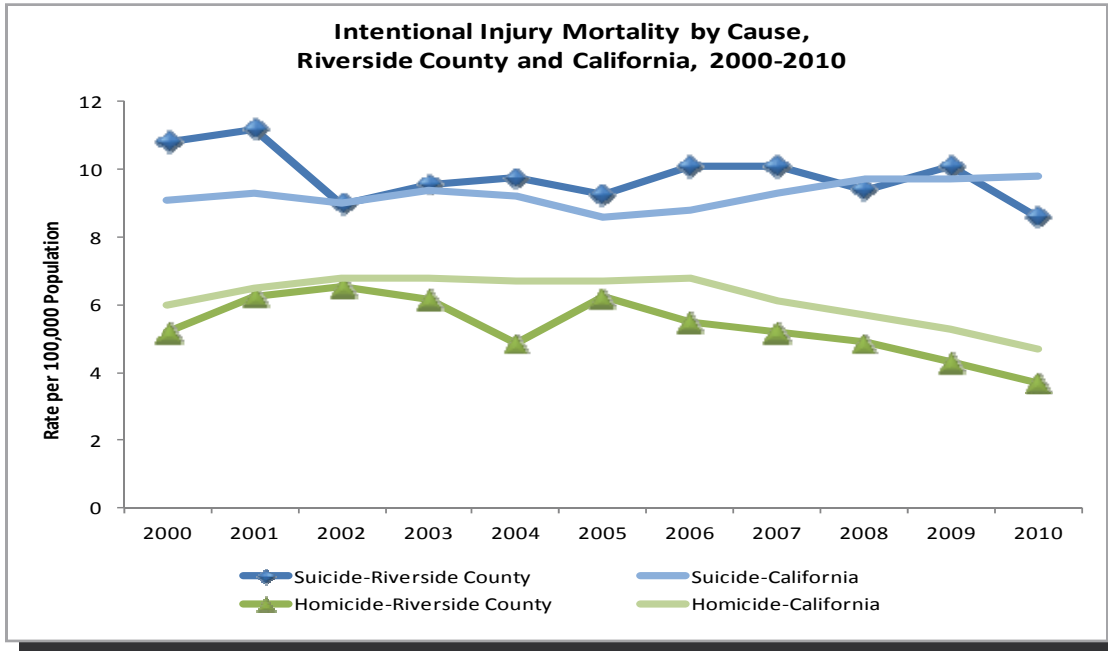
The causes of unintentional injury mortality vary among each age grouping. Motor vehicle crash is the leading cause of mortality among those ages 15-24. Accounting for 62% of all unintentional injury deaths, these crashes disproportionately claim the lives of our youth and young adults.

Drowning also disproportionately takes the lives of young children in Riverside County. All childhood drowning deaths (among those ages 1-14) occurred to children under age 6.

Our aging residents are particularly vulnerable to falls as their flexibility and balance decrease dramatically which increase the risk and severity of a fall. Deaths due to falls increase with age, as conditions such as osteoporosis and poor mobility make falls more severe. Eighty-two percent of fall-related deaths occurred to those ages 65 and older, and 79% occurred to those who identified as White, non-Hispanic.

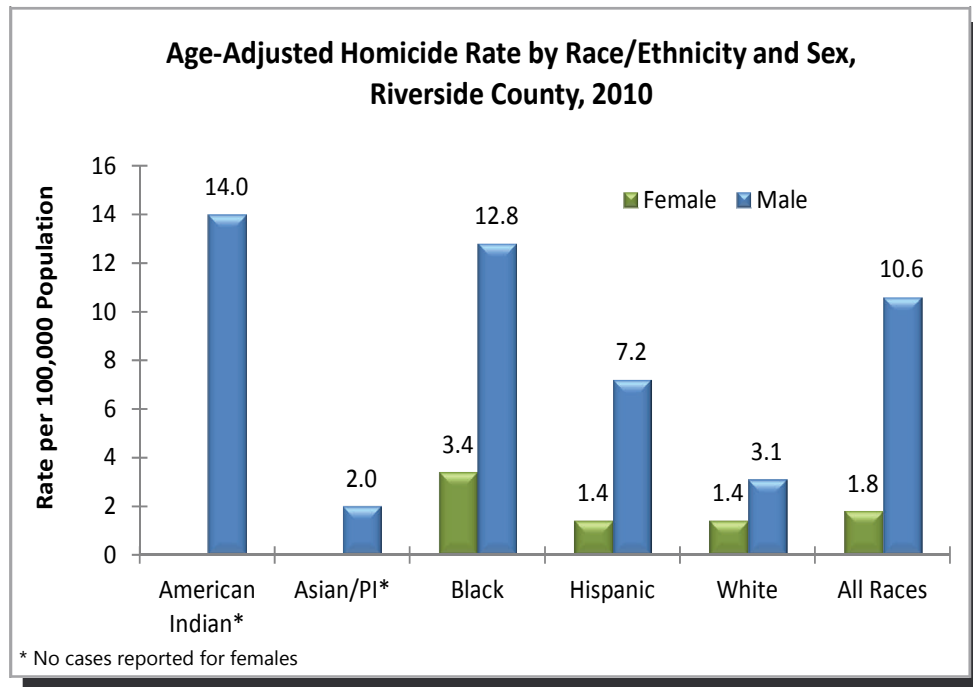
Poisoning is a leading cause of unintentional injury mortality for those ages 25-64, accounting for half (n=191) of all deaths in this age group. In 2009, most (91%) of all unintentional poisoning deaths in the US were caused by prescription painkillers, followed by cocaine and heroin (CDC, 2011). Most (65%) poisoning occurred among males and most (67%) were among those who identified as White, non-Hispanic.

In 2010, unintentional firearm-related deaths were just as likely to occur among those 65-74 years of age as it was to those 35-44 years of age (2.1% and 2.5% of deaths in each respective age group).



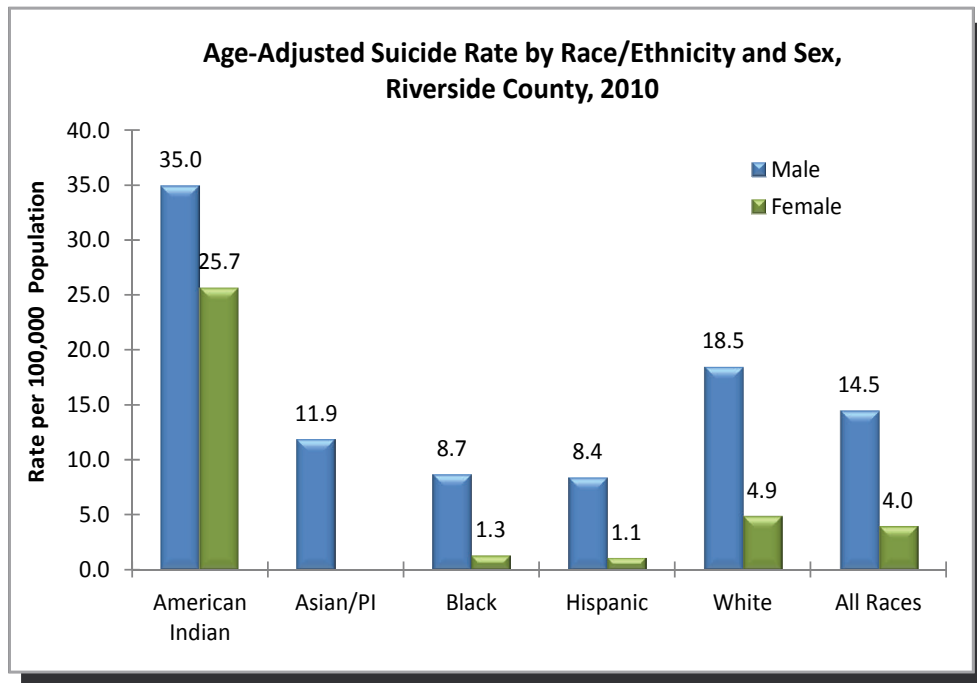
Homicide rates have remained slightly lower in Riverside County compared to rates for California. Over the past decade homicide rates in Riverside County have declined by 20% from a rate of 5.2 per 100,000 in 2000 to a rate of 3.7 per 100,000 in 2010.

Suicide rates in Riverside County have, at times, exceeded rates for California. In 2010, the suicide rate for California was higher than the rate for Riverside County. Suicide rates in Riverside County have dropped 29% from a rate of 10.8 per 100,000 in 2000 to a rate of 8.6 per 100,000 in 2010.



In 2010, the homicide rate among males was nearly 5.8 times higher than that among females. American Indian and Black males had the highest homicide rates (14 and 12.8 per 100,000, respectively). Asian/Pacific Islander males had the lowest homicide rate of 2 per 100,000. Homicide is the third leading cause of death for Black males ages 15-24 in Riverside County, and the second leading cause for Hispanic males in the same age group.

Black females maintain the highest homicide rate (3.4 per 100,000) among all females, about twice that of the overall female rate of 1.8 per 100,000.



In 2010, suicide rate among males was 3.5 times higher than the rate among females. American Indian and White males had the highest suicide rates (35 and 18.5 per 100,000, respectively). Hispanic and Black males had the lowest suicide rates of 8.4 and 8.7 per 100,000, respectively.

American Indian females maintain the highest suicide rate among all females (25.7 per 100,000). The rate among American Indian females is 5 times higher than the rate among White females (4.9 per 100,000), which maintain the second highest suicide rate among all females.

THE CHRONIC DISEASE BURDEN

Overview

Over the past 100 years the burden of disease has shifted from that of infectious diseases to those conditions that are considered chronic. Chronic health conditions significantly impair and limit the quality of life for people and treatment is often costly. The most notable chronic conditions include heart disease, cancer, stroke, and diabetes. These illnesses are the most common, costly, and preventable.

Why does this matter to health?

Seven out of 10 deaths in the US are caused by chronic illnesses. In 2005, it was estimated that 1 out of every 2 adults had at least one chronic disease.¹¹ According to the Oxford Health Alliance, a collaborative aimed at reducing chronic disease, three health behaviors: physical inactivity, poor diet, and tobacco/harmful alcohol use contribute to four chronic diseases: heart disease, diabetes, lung disease, and some cancers, and as a result contribute to more than 50% of preventable deaths around the world.¹² This concept, referred to as 3-four-50, has been used to describe the chronic disease burden across the nation. In Riverside County, the leading four chronic diseases are heart disease, cancer, lung disease, and stroke which accounted for 63% of all deaths in 2010.

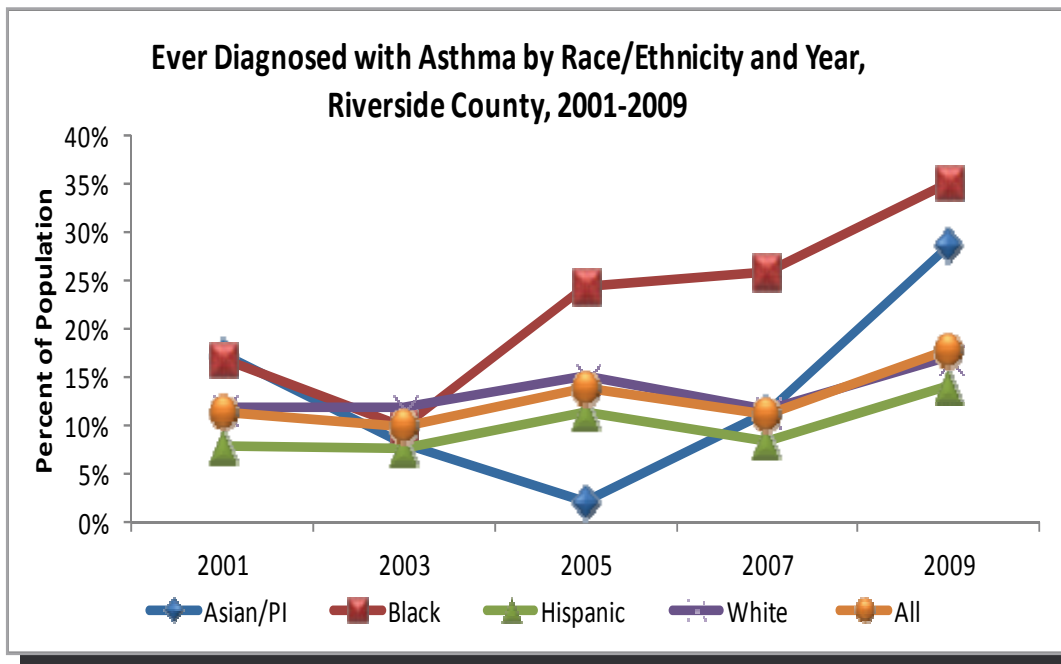


Overview

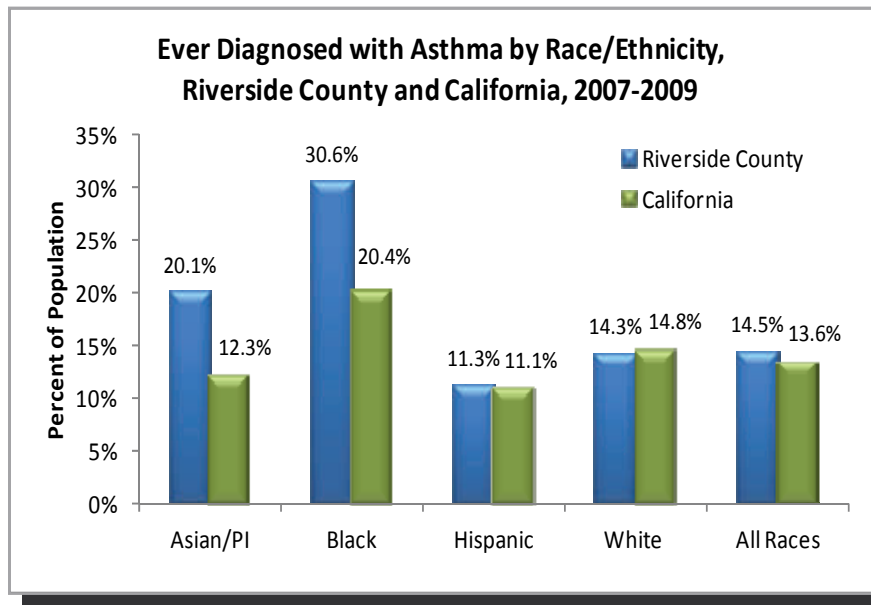
Asthma is a chronic condition that affects the lungs. It is characterized by inflammation and constriction of the airways, causing wheezing, coughing, and chest tightness. Although the cause is unknown, specific exposures such as tobacco smoke, allergens, and respiratory infections can trigger and exacerbate symptoms.

Why does this matter to health?

Asthma contributes to significant illness. Each year more than 500,000 hospitalizations result from asthma illness. The federal Office of Disease Prevention and Health Promotion estimates that annually, asthma is responsible for 4,500 deaths and 134 million days of restricted activity.

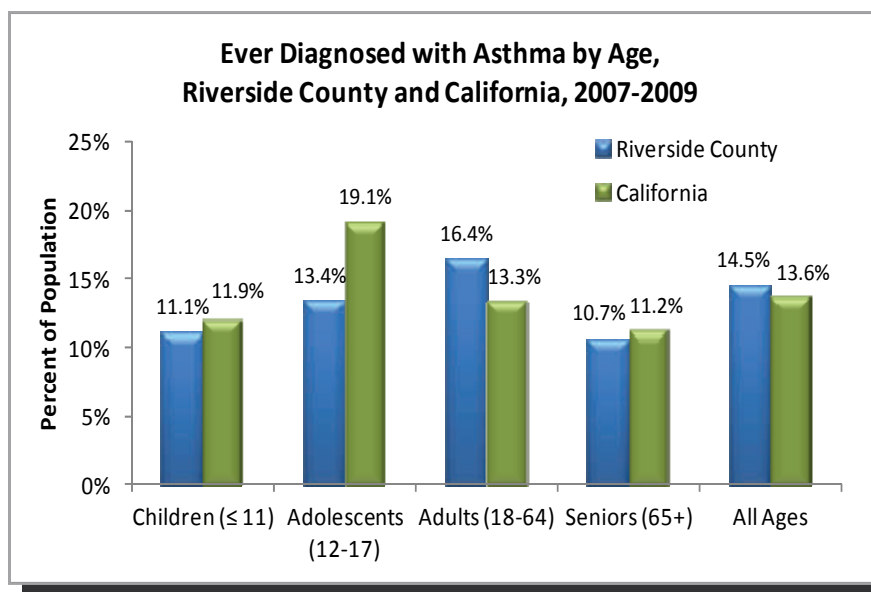


Since 2001, those who reported ever being diagnosed with asthma increased from 11.3% to 17.8%. Asthma diagnoses are not evenly distributed across groups, with evident disparities in Riverside County and across the US. The largest increase in self-reported asthma diagnosis was among Blacks with rates doubling from 16.8% in 2001 to 35.1% in 2009.



Asthma prevalence is higher in Riverside County compared to California (14.5% and 13.6%, respectively). The prevalence of asthma is higher for Blacks than for any other racial and ethnic group in Riverside County and California (30.6% and 20.4%, respectively).

In Riverside County adults are more likely (16.4%) to have received an asthma diagnosis; however, in California adolescents are more likely (19.1%) to have received an asthma diagnosis. Seniors are less likely to have received an asthma diagnosis in both Riverside County and California (10.7% and 11.2%, respectively). According to the California Department of Public Health, about 366,000 Riverside County children under age 17 have been diagnosed with asthma.¹³



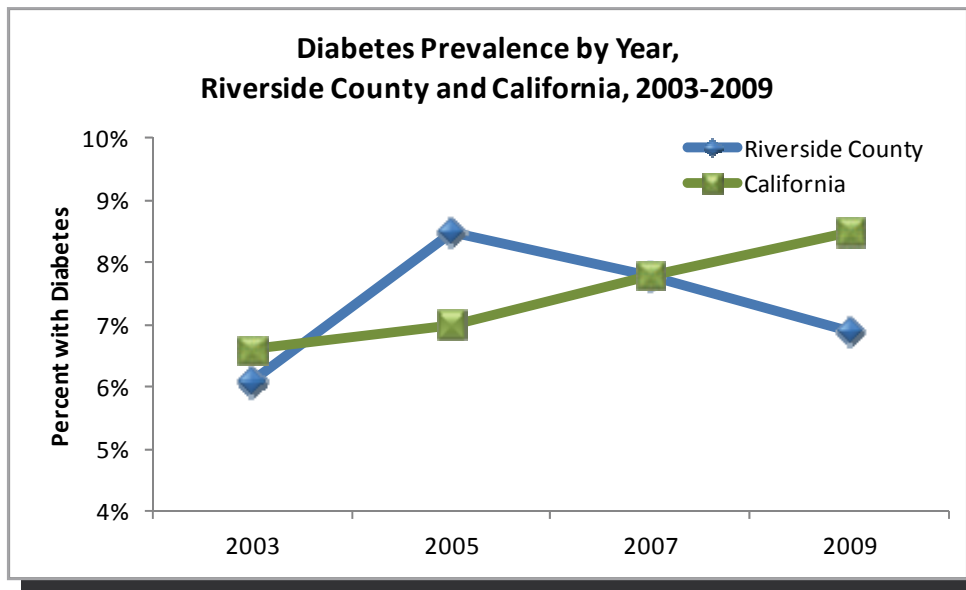
DIABETES PREVALENCE

Overview

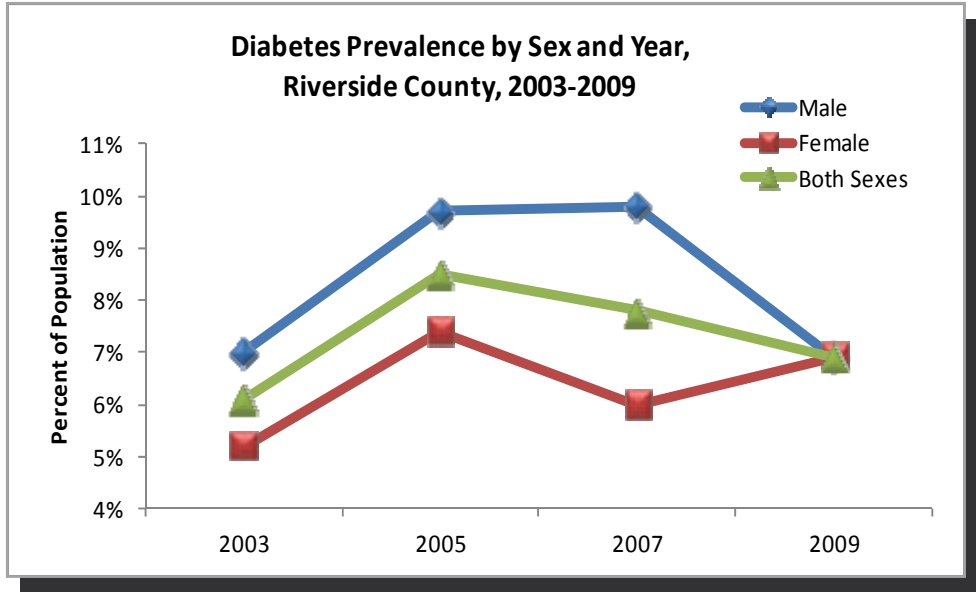
Diabetes is a disease in which high levels of glucose (blood sugar) result from problems with production of or the body's response to insulin. Serious complications including premature death can result from diabetes and there are many risk factors which predispose a person to develop diabetes.

Why does this matter to health?

The economic burden of diabetes in the US is astounding. It has been estimated that costs attributed to diabetes reach near \$174 billion annually. According to the California Health Interview Survey (CHIS), most (95.1%) of those who report having diabetes have type II diabetes, which is linked to obesity. This is concerning as obesity has been continuously linked to many preventable health conditions.

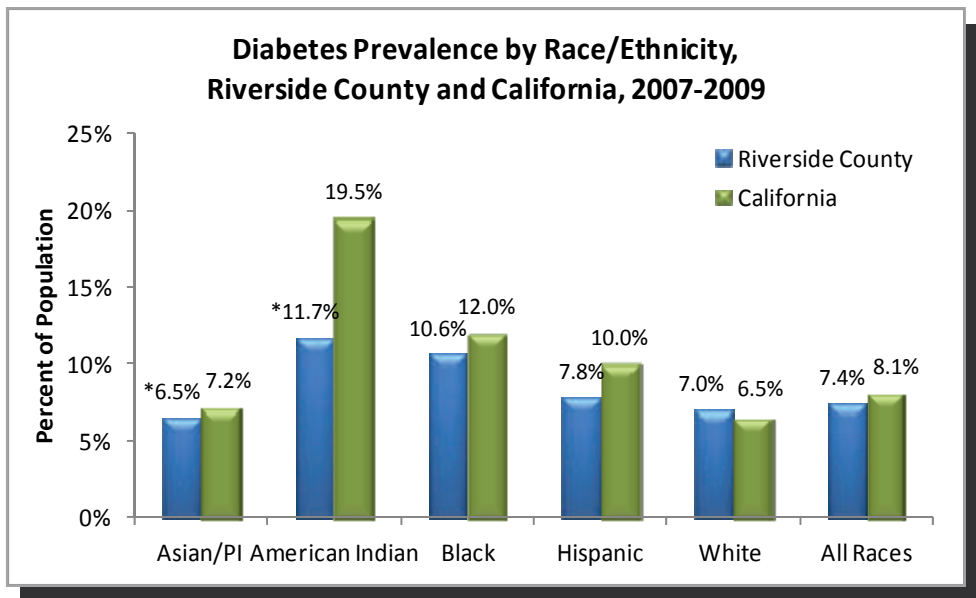


Prevalence estimates are based upon those clinically diagnosed with diabetes, which may underestimate the true burden of disease. Diabetes prevalence in Riverside County has decreased since a high of 8.5% in 2005. In 2009, diabetes prevalence was lower in Riverside County compared to California (6.9% and 8.5%, respectively).



Mirroring the decline in diabetes prevalence in Riverside County was a drop in prevalence among males. Prevalence among females has increased since 2003.

In Riverside County, as well as across California, a higher proportion of American Indians and Blacks report having diabetes; while fewer Whites and Asian/Pacific Islanders report having diabetes. Across most racial and ethnic groups, diabetes prevalence is lower in Riverside County compared to California. Whites in Riverside County, however, maintain slighter higher diabetes prevalence rates than the average rates for Whites in California (7.0% and 6.5%, respectively).



* Rates are unstable, refer to technical notes section for details

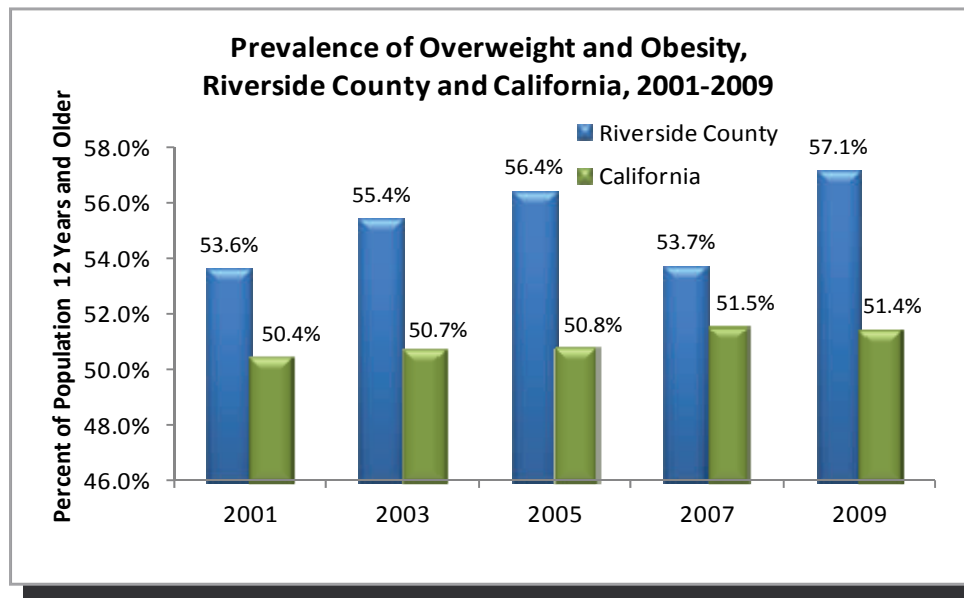
OVERWEIGHT AND OBESITY PREVALENCE

Overview

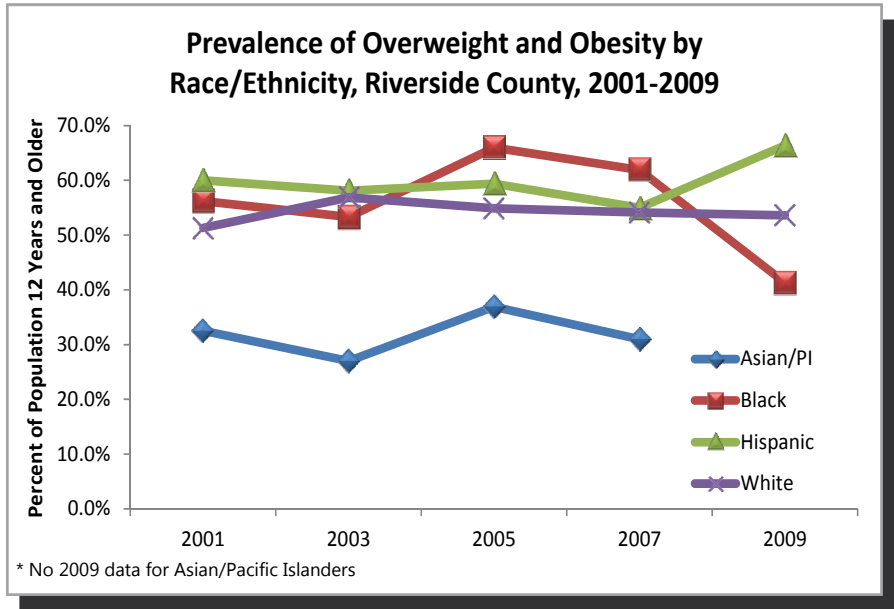
Clinically the terms “overweight” and “obese” refer to body weight greater than what would be considered healthy for a specific height. The increased prevalence of overweight and obesity is staggering, with millions of Americans identified as having increased body weights. Obesity prevalence among children and teens have almost tripled since 1980. It has been recognized that the ways in which our communities are designed have an effect on our health and may promote unhealthy behaviors that in turn lead to overweight and obesity.

Why does this matter to health?

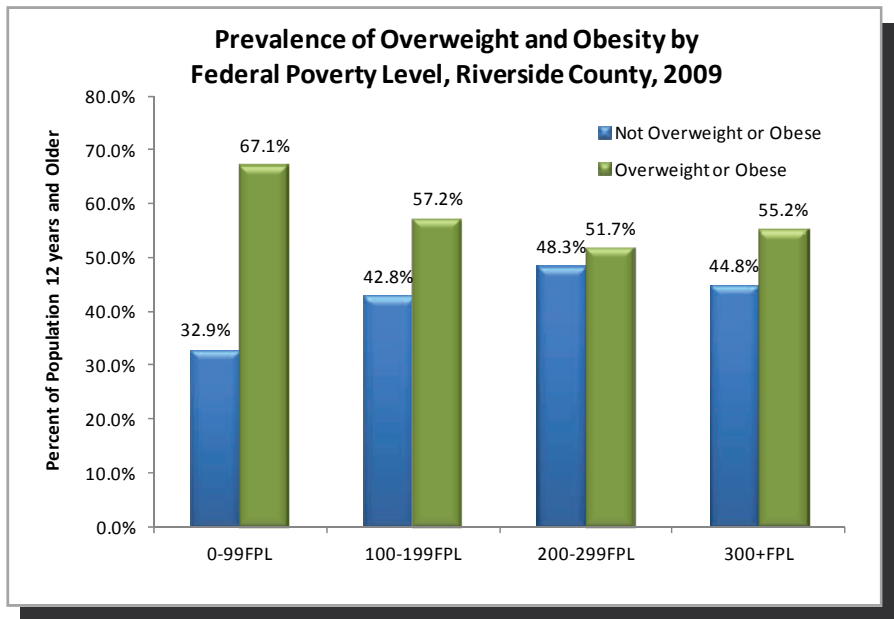
The health implications of overweight and obesity include heart disease, high blood pressure, diabetes, depression, and certain cancers. These obesity-related conditions are also the leading causes of preventable death. In 2008, medical costs associated with obesity were estimated to be \$147 billion.¹⁴



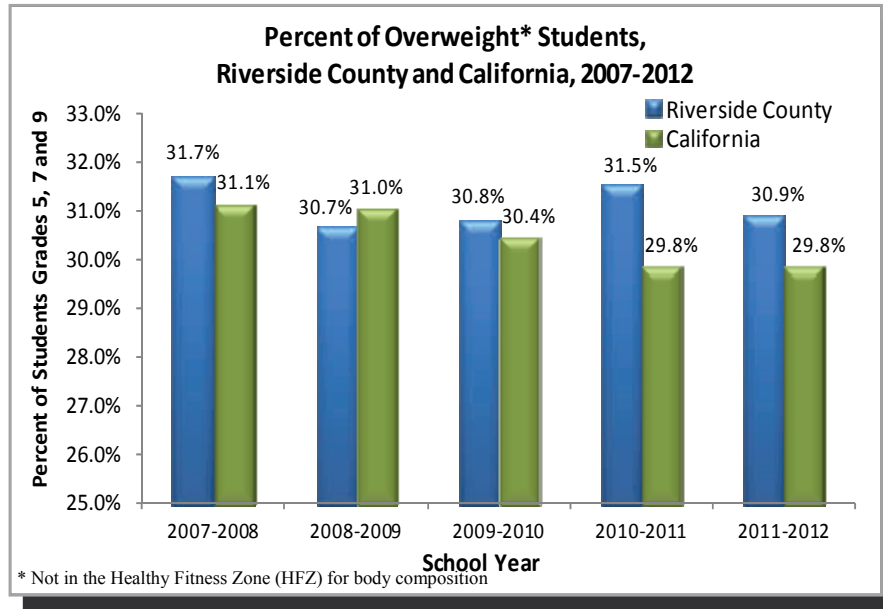
Overweight and obesity prevalence for teens and adults in California have remained stable since 2001. Obesity rates for teens and adults in Riverside County are higher than rates for California. In 2009, the overweight and obesity prevalence for Riverside County and California were at their highest (57.1% and 51.4%, respectively).



Since 2001, overweight and obesity rates among most racial and ethnic groups in Riverside County have remained stable. Asian/Pacific Islanders have maintained the lowest overweight and obesity prevalence. In 2009, the highest rate of overweight and obesity was among Hispanics (66.4%). Blacks had the largest change, with a drop in prevalence from a high of 66.0% in 2005 to a low of 41.3% in 2009.



There are evident disparities in overweight and obesity prevalence. Those at or below 100% of the federal poverty level (FPL) are more likely to be overweight or obese. In 2009, 67.1% of those at the FPL were overweight or obese. As income levels rise, the prevalence of overweight and obesity decrease.



Students in public schools across California participate in physical fitness tests to evaluate performance according to established benchmarks. Students are placed into categories based upon how they compare to other students of similar age and sex. Students that do not meet the standard are said to fall outside of the Healthy Fitness Zone (HFZ). Body composition results are used as a proxy for overweight status of students.

Across all school years (2007-2012), students in Riverside County and California maintain similar overweight prevalence. The prevalence of overweight students in Riverside County and California has remained stable at 30%.

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III. HEALTH BEHAVIORS



Health behaviors are those actions used to ensure good health and prevent illness.¹ There are daily behaviors and actions that we engage in that can be protective or harmful to our health and well being. These factors, often referred to as **lifestyle factors**, increase or decrease our chance of illness.

Certain behaviors have been found to increase risk factors contributing to chronic disease as well as excess and premature death. These behaviors, referred to as **risk factors**, include excessive alcohol consumption, use of tobacco, poor dietary practices, and physical inactivity.² People who engage in healthier practices such as not using tobacco, eating healthy, getting regular exercise, and limiting alcohol consumption will live longer.

This section will examine the incidence of risk and protective factors as well as potential disparities across subgroups including age, sex, and racial and ethnicity. More specifically, discussion of nutritional and dietary practices, physical activity, alcohol and tobacco use, children’s leisure time, and the prevention and early detection of disease will take place in this section of the report. Data from the California Health Interview Survey (CHIS) is used to describe the health behaviors of Riverside County residents. Throughout the section, when possible and appropriate, the CHIS survey questions are stated. An asterisk (*) will be used to denote rates that are considered statistically unstable. For further details on rate instability, please refer to the technical notes section in the appendices.

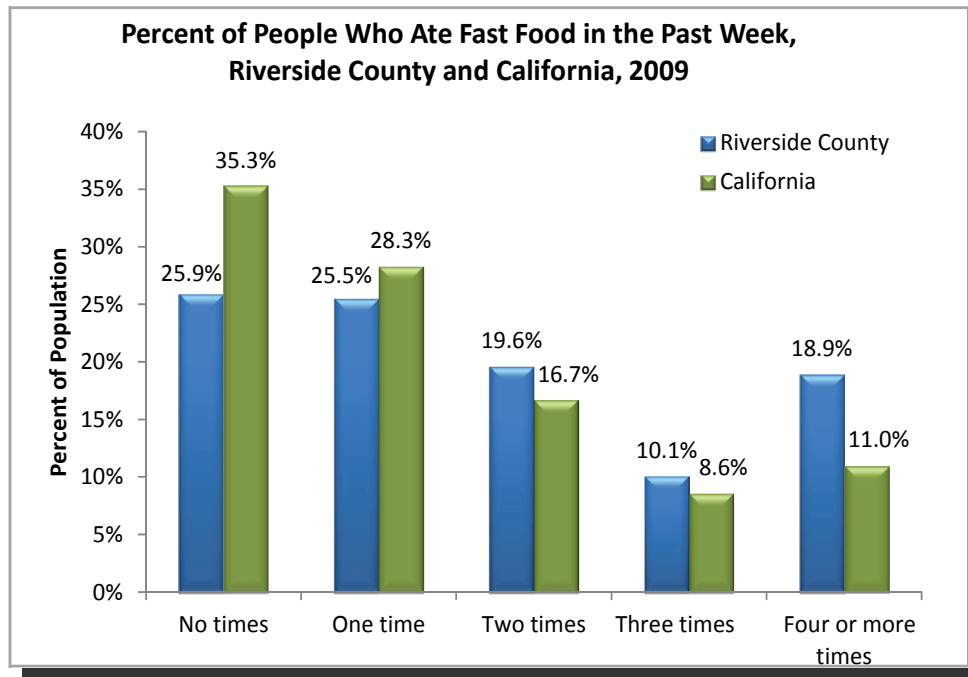
NUTRITION AND DIETARY PRACTICES

Overview

Nutrition and dietary practices are those that include what we eat, how much, and how often. Where and in what situation we eat can also affect our food choices and dietary habits. Dietary practices may vary depending on factors such as one's personal beliefs, life experience, and emotions.

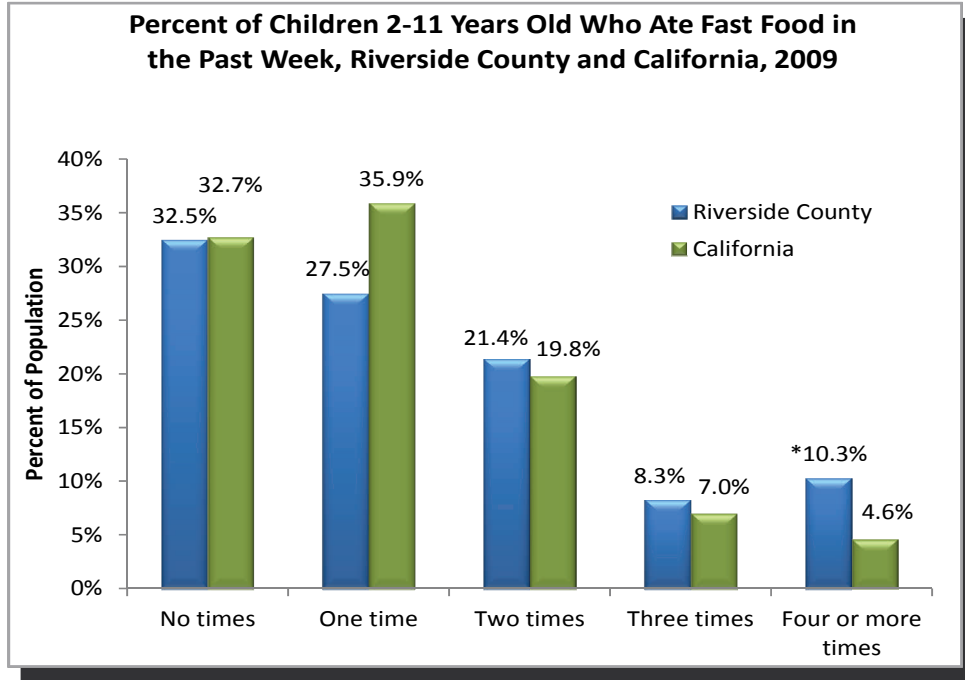
Why does this matter to health?

The consumption of fast and convenient foods as well as sugary beverages has steadily increased. It is well established these behaviors are associated with obesity and other health problems.³ Further, diets that include fruits and vegetables are important for the prevention of chronic illness, weight management, and child growth.⁴

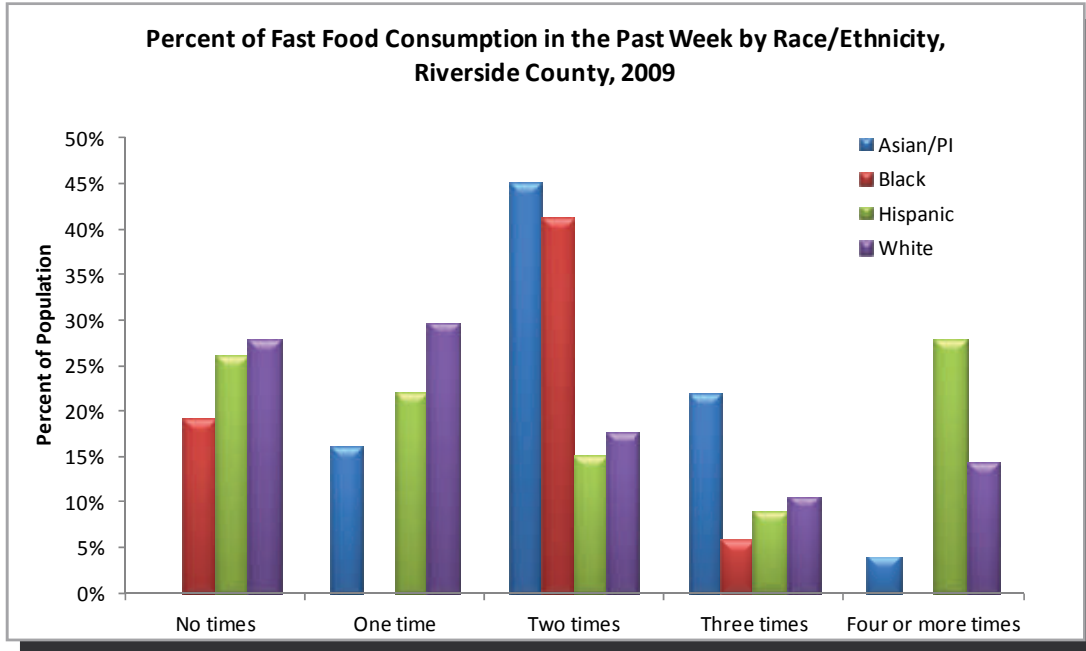


Many Americans spend a significant amount of their day at work, school, or commuting. This reduces the amount of time available to prepare meals. Increased consumption of fast foods has been linked to increased body weight. Riverside County residents are more likely to eat fast food compared to California residents as a whole. Nearly 20% of Riverside County residents reported eating fast food four or more times in the past week. Since 2007, the proportion of those who report eating fast food in the past week has risen from 13.1%, to 18.9% in 2009.

CHIS Survey Question: "In the past 7 days, how many times did you eat fast food? Include fast food meals eaten at work, school, home, or at fast food restaurants, carryout or drive through."



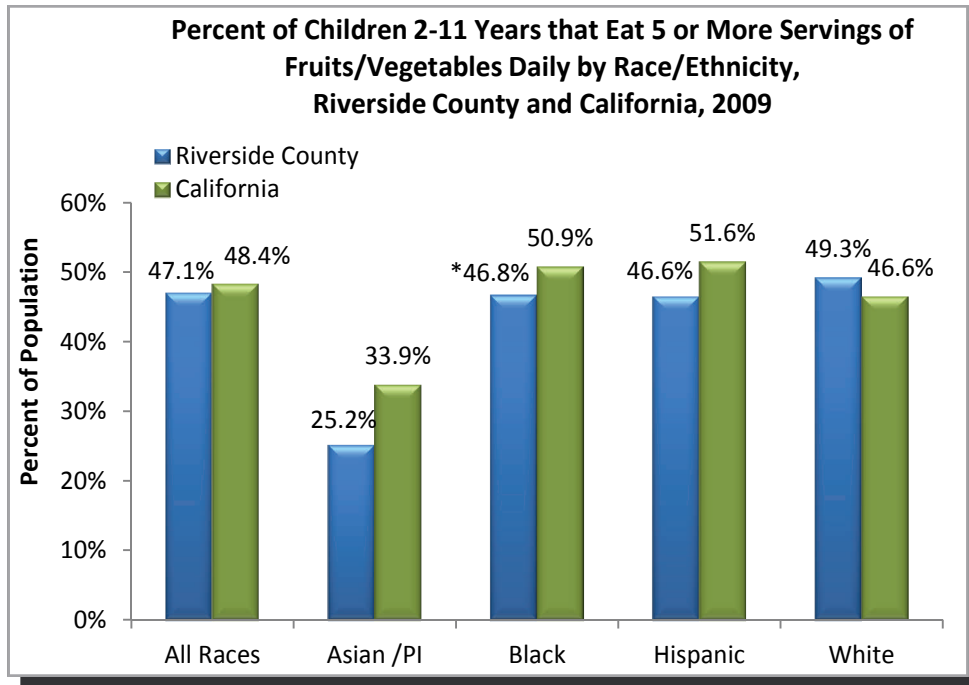
Compared to adults, children consumed less fast food during the past week. One third of children in Riverside County and California did not eat fast food during the past week, but compared to children in California, children in Riverside County were twice as likely to eat fast food four times in the past week.



In 2009, more Whites reported not consuming fast food at all (27.8%), while more Hispanics reported consuming fast food four or more times during the past week (27.8%). Asian/Pacific Islanders were more likely to report consuming fast food two or three times in the past week (66.9%).

From 2007 to 2009, there was a slight decrease in the percent of residents who reported no consumption of fast food in the past week (from 27.4% to 25.9%). During the same timeframe, the amount that reported eating fast food four or more times increased from 13.1% to 18.9%.

Among adult women who reported participating in the County's Women, Infants and Children's (WIC) nutrition program, their consumption of fast food in the past week was lower (41.0%) than that of those not enrolled in the WIC program (87.6%).



Increased consumption of fruits and vegetables coupled with the reduction of fast food consumption are healthier eating practices. The amount of fruits and vegetables needed by the body depends on age, sex, and physical activity level. Five servings is a good marker for daily intake. A single serving is, in many cases, a half cup.

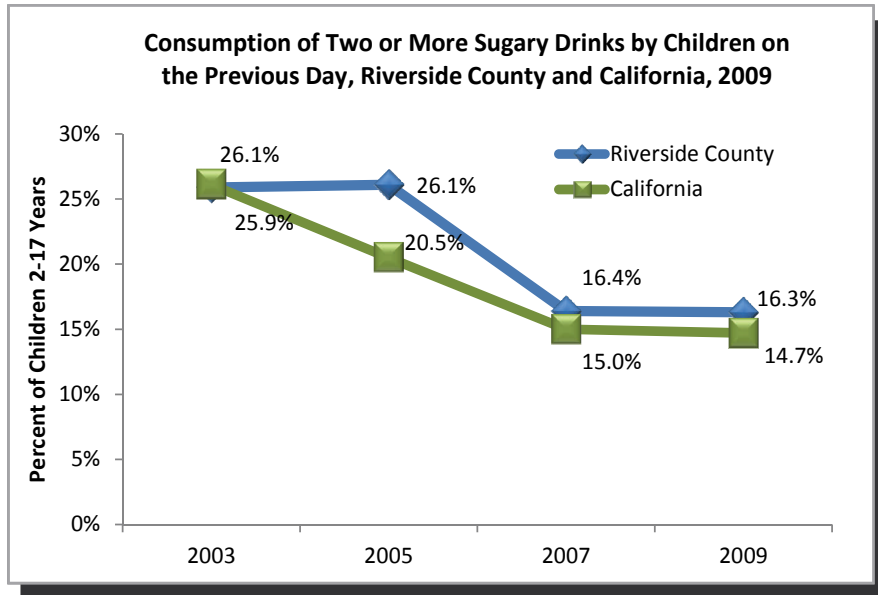
In Riverside County, a greater percentage of Whites ate five or more servings of fruits and vegetables compared to the statewide average. Whites, Blacks, and Hispanics maintained similar rates of fruit and vegetable consumption (49.3%, 46.8%, and 46.6%, respectively). Asians were less likely to report eating five or more servings of fruits and vegetables when compared to all other groups in Riverside County and Asians in California overall.

- ◆ Riverside County residents at or below 99 percent of the federal poverty level were more likely (67.7%) to consume five or more servings of fruits and vegetables when compared to the overall rate of consumption among all County residents (48.3%).

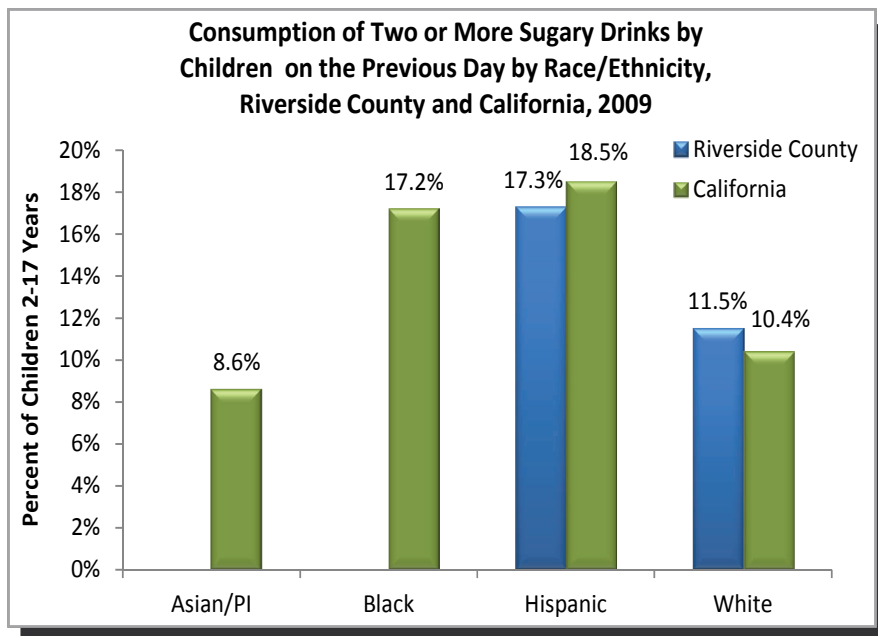


CHIS Survey Question: Respondents were asked multiple diet questions that inquired about previous 24 hour eating habits among children 2 and older.

Consumption of sugary beverages is of concern as this often times replaces the consumption of water. Since 2003, there has been a decrease in the consumption of two or more glasses of sugary drinks among children 2-17 years.



In 2009, on average, Riverside County children were more likely to consume two or more glasses of sugary drinks, compared to the state. Whites in Riverside County consume soda and other sugary beverages at a rate lower than all other ethnic groups.



CHIS Survey Question: "Yesterday, how many glasses or cans of soda, such as Coke, or other sweetened drinks, such as fruit punch or sport drinks did {you/he/she} drink? Do not count diet drinks."

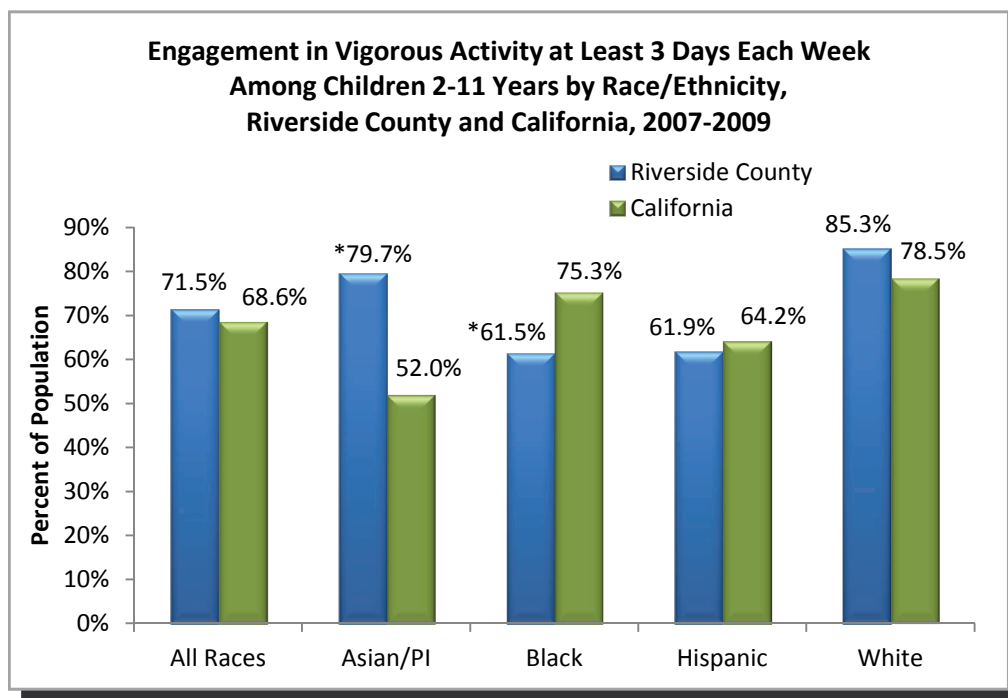
PHYSICAL ACTIVITY

Overview

The benefits of regular physical activity have been well documented. Exercise of at least 30 minutes each day has been found to reduce the risk of heart disease, cancer, diabetes, obesity, and premature death. Some studies have shown that for every hour of walking, life expectancy may be increased by two years.

Why does this matter to health?

From weight control to building muscle and strength and living longer, physical activity, according to the Centers for Disease Control and Prevention (CDC), is one of the most important activities to promote health.⁵ Regular physical activity can improve health and wellbeing and reduce the risk of chronic illness for all ages. The cost of physical inactivity is high. An increasing number of Americans are overweight which costs the US billions in health care.



In 2009, the rate of vigorous physical activity in children was slightly higher in Riverside County compared to that of California. In Riverside County, Blacks and Hispanics were less likely to engage in vigorous physical activity when compared to all other groups. Whites in Riverside County and California overall are more likely to engage in vigorous physical activity.

In 2009, only 23.8% of children were physically active for at least one hour daily. Fewer teens (16.5%), ages 12-17, reported being physically active for at least one hour daily.

CHIS Survey Question: "During a typical week, how many days are you physically active for at least 60 minutes total per day? Do not include PE"

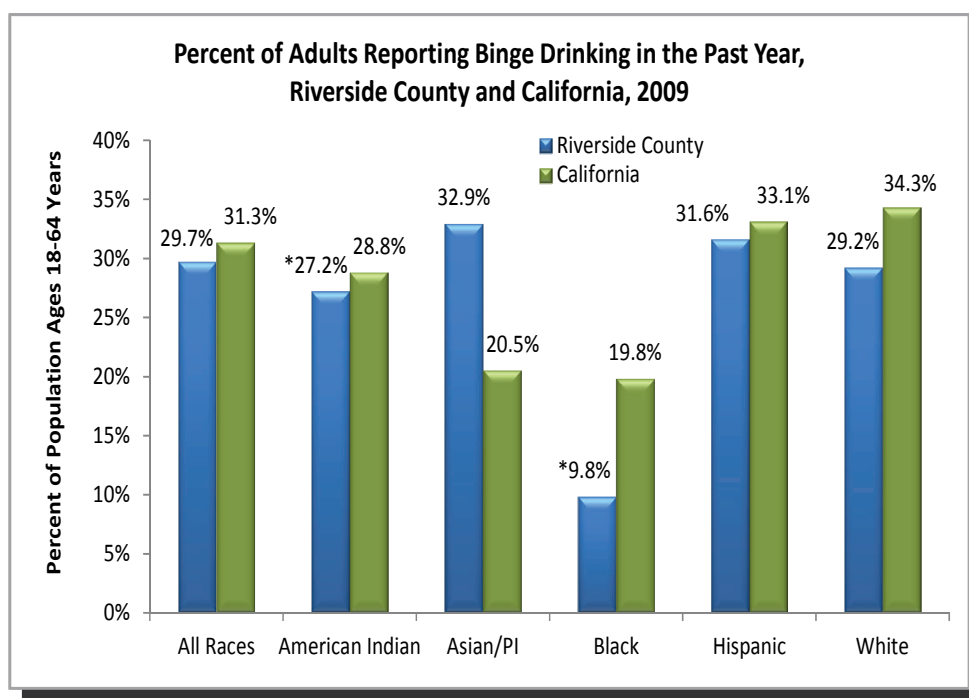
ALCOHOL AND TOBACCO USE

Overview

Excessive alcohol consumption or “heavy drinking”, and tobacco use are behaviors that have been linked to negative health effects. Binge drinking is the most common form of excessive alcohol use in the US, while cigarette smoking is the most common form of tobacco use.

Why does this matter to health?

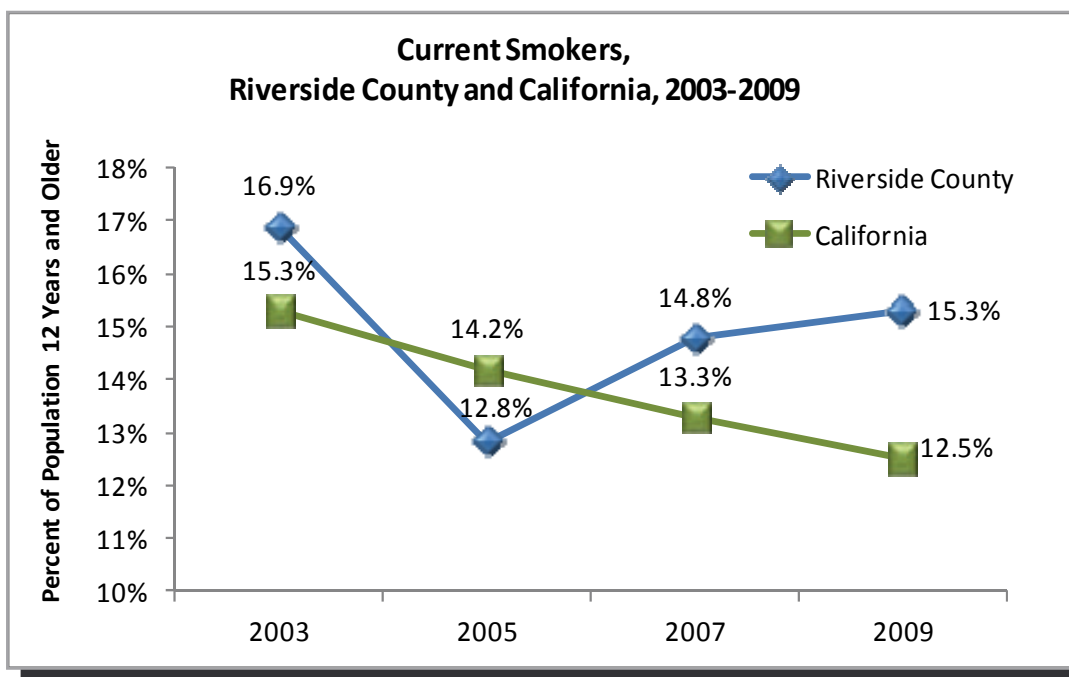
The excessive consumption of alcohol and the use of tobacco greatly increase the risk of morbidity and mortality from cancer and cardiovascular disease. Excessive alcohol use is the third leading lifestyle-related cause of death for the nation and tobacco use is the leading preventable cause of death in the US.^{6,7} The reduction of alcohol use and abstinence from tobacco have been found to produce long term health benefits.



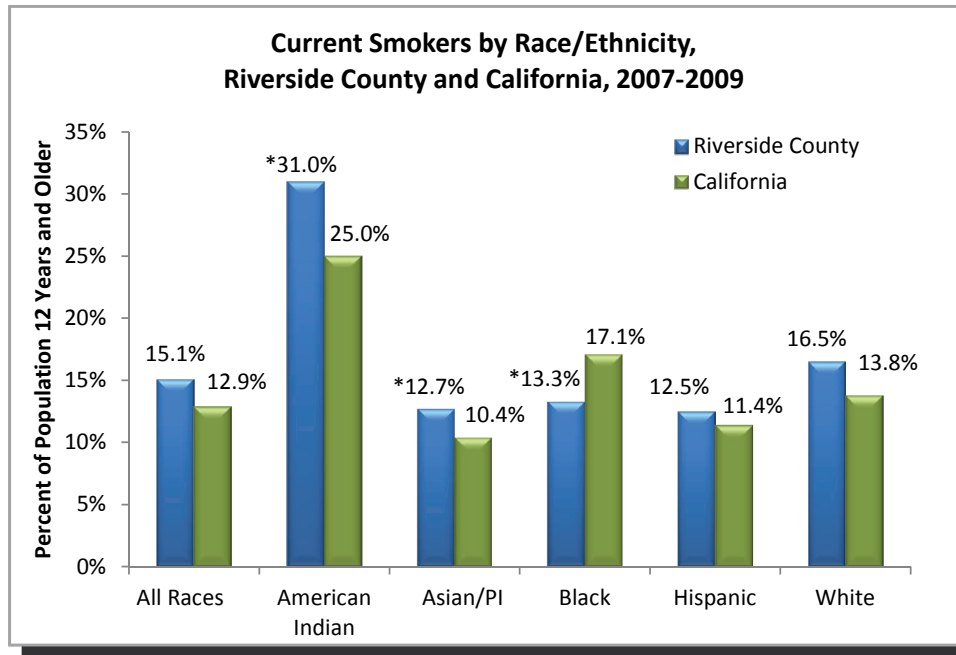
Binge drinking has been associated with many health problems, such as intentional and unintentional injuries. In 2009, about 30% of residents in Riverside County and California reported binge drinking in the past year. In Riverside County there were no notable differences in binge drinking behaviors by subgroup, with the exception of fewer Black residents who reported binge drinking in the past year. However, the rate is considered statistically unstable due to the small sample size and should be interpreted with caution.

CHIS Survey Question: Respondents were asked a series of questions concerning their alcohol consumption. Males were considered binge drinkers if they drank 5 or more alcoholic drinks and females were considered binge drinkers if they drank 4 or more drinks on at least one occasion in the past year.

It is well documented that tobacco use is harmful to the body. Smoking cessation has immediate health benefits. Since 2003, the rate of smoking for people 12 years and older has decreased in California. The inverse has been experienced in Riverside County, with increases beginning in 2005. In 2009, the rate of smoking was higher in Riverside County (15.3%) compared to California (12.5%) overall. This increase is of concern, given the health consequences that accompany smoking behaviors.



According to the California Tobacco Survey, the rate of smoking among youth (those under 18 years) in Riverside County increased slightly from 13.7% in 2002 to 14.1% in 2010 (not illustrated). Rates of smoking among adults in Riverside County dropped drastically from 20.3% in 2002 to 14.6% in 2008. Smoking initiation among youth remains a significant public health concern. The younger a person is when they begin smoking the more packs-a-day they smoke and the longer they smoke in their lifetime, increasing the risk for smoking related morbidity and mortality.



Across most racial and ethnic subgroups, Riverside County residents were more likely to be current smokers when compared to their California peers. Blacks in Riverside County were less likely to be current smokers compared to the statewide smoking average for Blacks. Of significant challenge for Riverside County is obtaining an accurate picture of smoking prevalence. Due to the small sizes of subgroups such as American Indian, Asian/Pacific Islanders, and Blacks, rates are often unreliable limiting analysis and interpretation.

CHIS Survey Question: Respondents were asked a series of smoking-related questions.

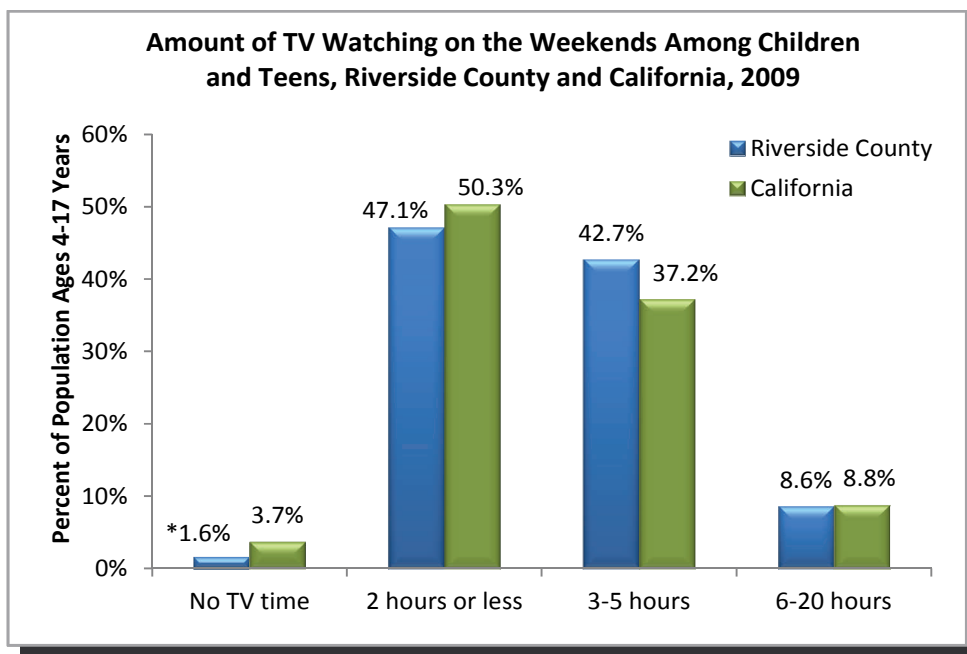
CHILDREN'S LEISURE TIME

Overview

Recent research has found that the amount of free time we have has increased and most of this leisure time is spent watching television.⁸ Screen time, which includes the use of the television, DVDs, computers, video games, and handheld devices should be used in moderation and is not recommended for children under 2 years of age.

Why does this matter to health?

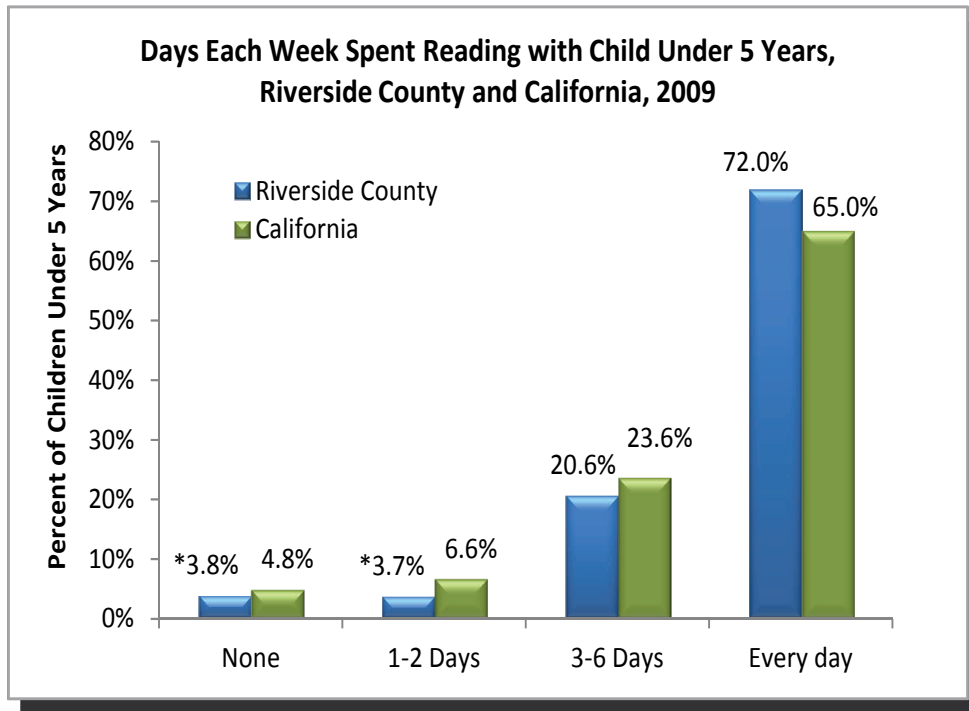
Too much screen time has been found to interfere with healthy physical and social development in children. Children who watch TV for more than four hours a day are more likely to be overweight.⁹ Healthful development for children includes a diverse array of activities including outdoor play and reading books.



In 2009, children and teens in Riverside County were less likely to watch TV for two hours or less compared to the average for California.

Inversely, children and teens in Riverside County were more likely to spend three to five hours in front of the screen, compared to the average viewing time for California (51.3% and 46.0%, respectively).

CHIS Survey Question: "Now, thinking about a typical SATURDAY AND SUNDAY, about how many hours per day do {you/CHILD} usually watch TV or play video games?"



Reading to children has been found to provide benefits in language development and scholastic achievement.¹⁰ Children in Riverside County were more likely to be read to every day, when compared to the average rate for children in California (72% and 65%, respectively).

In Riverside County, when poverty rates are examined, children at or below 99% of the federal poverty level were less likely (47.3%) to be read to every day, compared to the county average of 72%.

CHIS Survey Question: "In a usual week, about how many days do you or any other family members read stories or look at picture books with (CHILD)?"

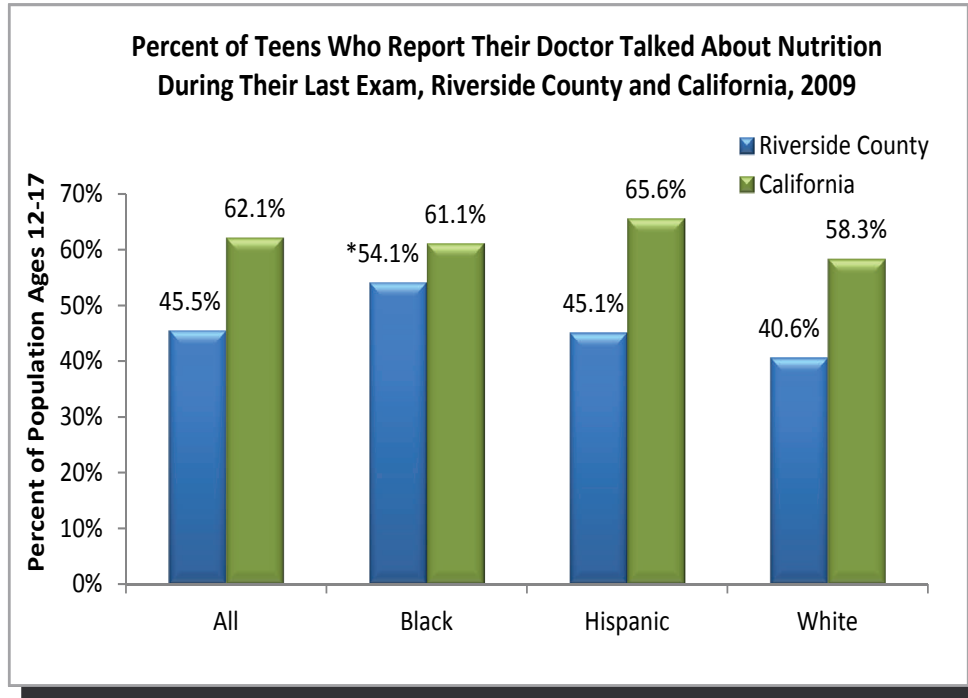
PREVENTION AND EARLY DETECTION

Overview

Medical providers talking to their patients about nutrition and physical activity is key to raise awareness of risk and protective factors for health. Additionally, flu vaccination and screening practices are important in the prevention of disease and or decreasing its severity.

Why does this matter to health?

The prevention and early detection of illness is important to length and quality of life. Open communication may facilitate prevention and early detection as well as ensure that patients and medical providers work in partnership to improve health.

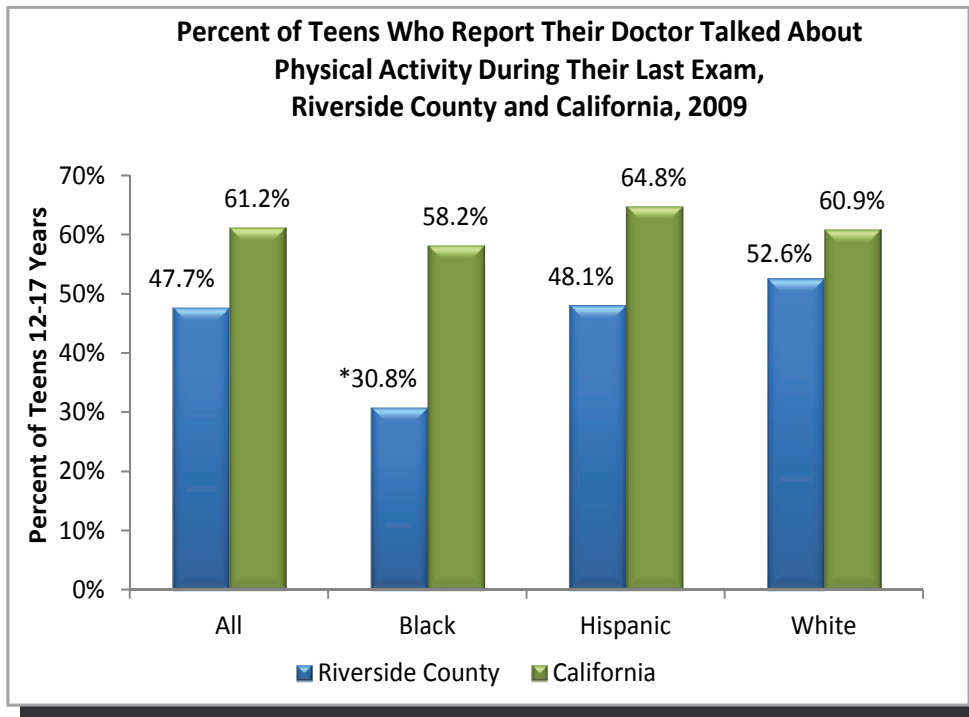


In 2009, teens in Riverside County were less likely to report that their doctor spoke with them about nutrition during their last exam, when compared to the average for California (45.5% and 62.1%, respectively).

Whites were less likely (40.6%) to report that their doctor spoke with them about nutrition when compared to their counterparts. Blacks were more likely (54.1%) to report that their doctor spoke with them about nutrition during their last exam when compared to all other groups.

Since 2007, there has been a slight increase in the percentage of Riverside County teens who report their doctor talked to them about nutrition, from 41.4% to 45.5%.

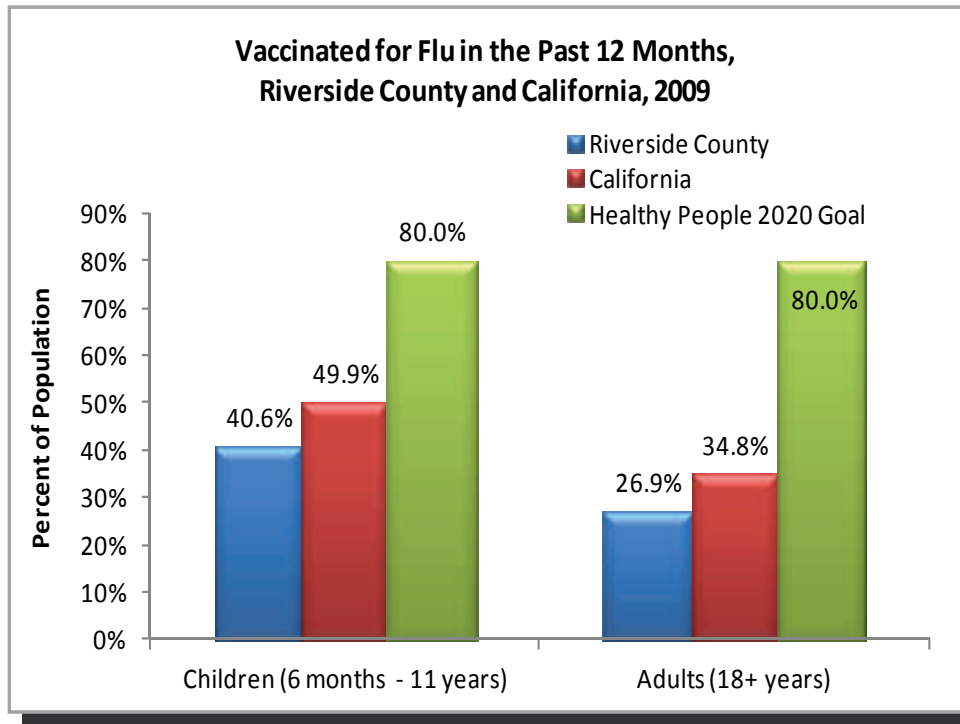
CHIS Survey Question: "When you had your last routine physical exam, did you and a doctor talk about nutrition or healthy eating?" ... "talk about exercise or physical activity?"



In 2009, teens in Riverside County were less likely to report that their doctor spoke with them about physical activity during their last exam, when compared to the average for California (47.7% and 61.2%, respectively).

In the same year, Blacks in Riverside County were less likely (30.8%) to report that their doctor spoke with them about physical activity, compared to all other groups. Whites in Riverside County were more likely (52.6%) to report that their doctor spoke with them about physical activity, compared to all other groups.

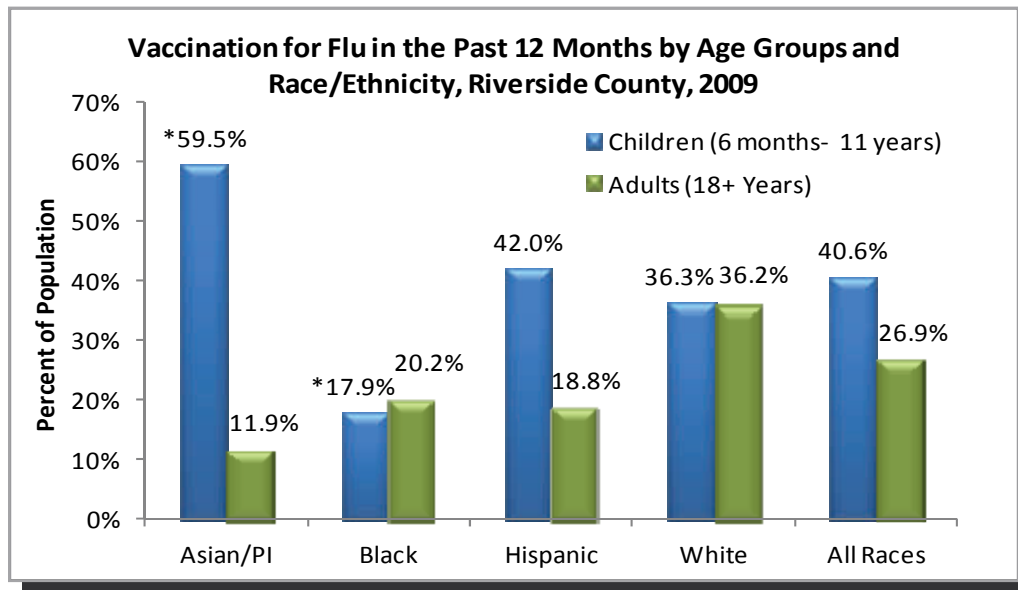
Since 2007, there has been a slight increase in the percentage of teens who have reported their doctor talked to them about physical, from 41.4% to 47.7%.



In 2009, children in Riverside County were more likely to have been vaccinated for the flu, compared to adults (40.6% and 26.9%, respectively). Vaccination rates in Riverside County remain lower than the average rates for California. Rates among children and adults in Riverside County are substantially lower than the national goal of 80%.

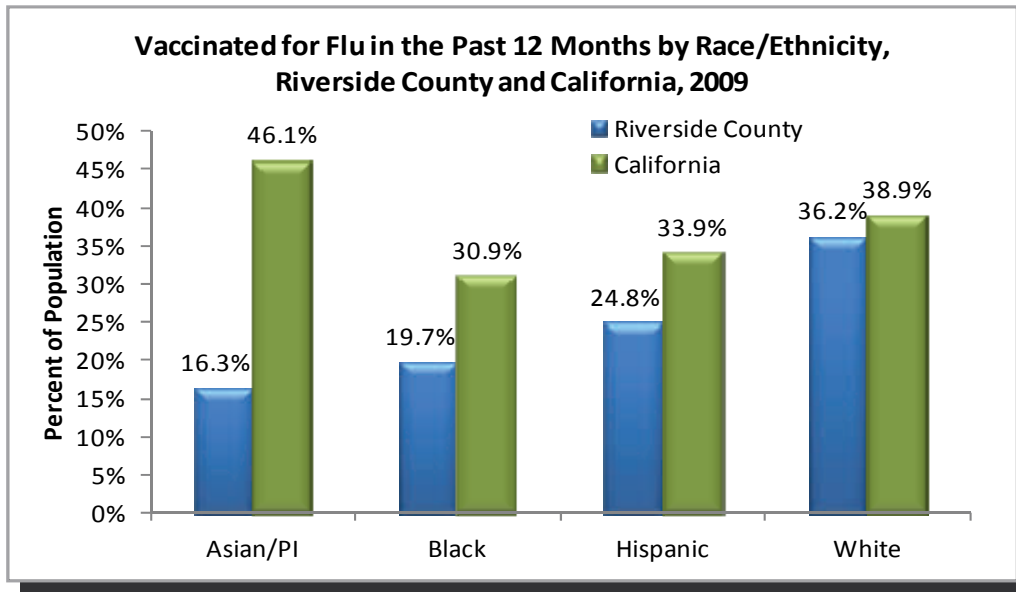
In 2009, those at or below the federal poverty level were less likely to have been vaccinated for the flu in the past year (24.5%). Of all children vaccinated for the flu, most (77.4%) were above the federal poverty level.

CHIS Survey Question: "During the past 12 months, have you (child) had a flu shot?"
This questions was asked of all adults and children ages 6 months to 11 years.



The overall vaccination rate for influenza in Riverside County is lower than the rate for California (29.7% and 37.5%, respectively). Children (6 months to 11 years) are more likely to be vaccinated compared to adults (18 years and older).

When comparing adult and children vaccination rates across racial and ethnic groups, Black children were less likely than their adult counterparts to be vaccinated (17.9% and 20.2%, respectively). Whites maintained equal vaccination rates across age groups. Sixty percent of Asian children were vaccinated for flu, the largest vaccination rate across all age and racial and ethnic groups. Although the rate is statistically unstable, it is similar to the rate among Asians in California, where 63.4% of Asian children were vaccinated for flu.



Vaccination rate differences between Riverside County and California continue to be evident across all ethnic groups. The average vaccination rate for California, as well as rates for all racial and ethnic subgroups, is higher compared to rates for Riverside County. The greatest disparity between Riverside County and California vaccination rates exists among Asian/Pacific Islanders, where the difference is three fold. In Riverside County Asians maintain the lowest vaccination rate (16.3%), whereas in California they maintain the highest vaccination rate (46.1%).

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IV. APPENDIX

DATA TABLES

Birth Rates by Year (per 100,000 population), Riverside County 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
16.0	15.7	15.9	15.9	15.9	16.3	16.4	16.8	16.8	15.5	14.5	13.7

Teen Birth Rates (per 1,000 population) by Year and Age Group, Riverside County, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Under 15 Years	0.6	0.6	0.4	0.6	0.6	0.4	0.6	0.5	0.4	0.3	0.3
15 to 17 Years	30.1	26.7	24.1	23.1	22.3	22.4	22.0	22.2	20.7	18.1	15.4
18 to 19 Years	94.1	90.7	83.6	76.2	74.5	72.1	72.2	76.4	66.3	58.9	50.6

Teen Birth Rates (per 1,000 population) by Year and Race/Ethnicity, Riverside County, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
All Teens	54.6	51.1	46.8	43.5	42.5	41.6	41.4	43.4	38.9	34.8	29.9
Black	54.3	45.1	37.9	30.7	25.4	30.4	35.3	33.5	34.8	26.9	25.2
Hispanic	81.3	76.0	69.3	62.9	62.7	70.1	68.5	70.1	61.7	55.6	47.3
White	32.0	28.6	25.8	25.6	23.8	16.8	16.1	16.5	15.0	13.0	11.4

Infant Mortality Rates (per 1,000 live births) by Year and Race/Ethnicity, Riverside County, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
All Races	6.7	4.5	6.4	6.5	5.4	6.1	5.0	5.4	5.7	5.3	5.1
Black	11.4	9.5	8.9	10.7	7.4	14.6	6.2	10.8	14.7	11.2	9.5
Hispanic	6.8	4.0	5.8	6.8	5.6	6.2	65.2	5.5	5.8	4.6	4.3
White	5.9	4.7	6.4	5.4	5.4	5.0	4.2	4.0	3.5	5.8	5.7

Age-Adjusted Mortality Rate by Year, Riverside County, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Rate	810.0	810.0	770.0	770.0	750.0	790.0	772.8	749.5	737.5	705.3	699.4

Crude Mortality Rate by Cause and Year, Riverside County, 2001-2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Cancer	179.4	176.4	167.9	169.9	181	174.5	170.8	179.1	172.8	171.2
Diabetes	19.3	16.5	14.8	17.5	23.1	21.4	23.6	20.4	22.2	19.4
Heart Disease	261.3	248.8	240.7	222.8	230	229.8	213.7	205.5	191.9	188.2
Stroke	63.4	54.9	58	53.3	52.8	46.6	44.7	41.9	42	40.5

Cancer Mortality Rates (per 100,000 population) by Year and Race/Ethnicity, Riverside County, 2006-2010

	2006	2007	2008	2009	2010
All Races	174.5	170.8	179.7	172.8	171.2
American Indian	79.7	158.3	115.8	105.6	163.9
Asian/PI	128.6	128.7	134.8	128.9	159.7
Black	200.4	194	200.5	184.9	191.1
Hispanic	137.8	122.9	137.9	132	131.4
White	186.4	186.6	195.5	189.4	185.1

Heart Disease Mortality Rates (per 100,000 population) by Year and Race/Ethnicity, 2006-2010

	2006	2007	2008	2009	2010
All Races	229.8	213.7	205.5	191.9	188.2
American Indian	351.7	265.7	238.3	193.9	289.6
Asian/PI	114.1	135.6	157.5	139.3	172.8
Black	317.4	258.9	293.7	252.2	269.3
Hispanic	194.5	173.6	158.1	151.2	154.3
White	263.5	252.6	238.2	223.9	216.9

**Diabetes Mortality Rates (per 100,000 population) by Year and Race/Ethnicity,
Riverside County, 2006-2010**

	2006	2007	2008	2009	2010
All Races	21.4	23.6	20.4	22.2	19.4
American Indian	52.8	48.8	0.0	56.3	38.9
Asian/PI	21.1	27.9	21.8	25.2	21.0
Black	36.2	50.1	35.3	41.7	22.5
Hispanic	35.2	41.3	32.2	29.5	32.6
White	17.8	18.1	16.4	18.5	15.4

TECHNICAL NOTES

Racial/Ethnic Category Labels

Please note that the following racial/ethnic categories were used to compile the data:

- American Indian/Alaska Native
- Asian/Pacific Islander
- Black, not Hispanic
- Hispanic
- White, not Hispanic

In an effort to condense data displayed, the following labels were used:

- American Indian
- Asian
- Black
- Hispanic
- White

Definitions and Rate Calculations

Place of Residence: The place where a person lives or maintains legal residency. For purposes of this report, all totals used are based on "Residence" in the County of Riverside.

Birth rate is the number of births during a stated period of time, usually one year.

$$\text{Birth Rate} = \frac{\text{number of births in specified time period}}{\text{Estimated total population}} \times 1,000$$

Death Rate is the number of deaths during a stated period of time, usually one year.

$$\text{Death Rate} = \frac{\text{number of deaths in specified time period}}{\text{Estimated total population}} \times 100,000$$

Fertility Rate is the number of births to women of child bearing age (15-44 years) during a stated period of time, usually one year.

$$\text{Fertility Rate} = \frac{\text{number of live births during time period}}{\text{Estimated population of females ages 15-44}} \times 1,000$$

Incidence is the number of new cases of a specific illness diagnosed or reported during a stated period of time, usually one year.

$$\text{Incidence Rate} = \frac{\text{number of observed cases reported in specified time period}}{\text{Estimated total population}} \times 100,000$$

Prevalence is the number of current cases of a condition or illness at one time, no matter when it started. Usually used to describe conditions that last a long time, or are chronic.

$$\text{Prevalence Rate} = \frac{\text{number of cases living with disease at specified time period}}{\text{Estimated total population}} \times 100,000$$

Age-Adjusted Rates

Rates calculated as the total number of events divided by the total population are called crude rates. Most health outcomes vary with age, therefore in order to compare populations with differing age distributions statistical adjustments must be made. Age-adjustment allow one to "adjust for" differences in both the size and age distribution of populations. The age-adjusted rates are used to compare mortality or morbidity across populations with different age distributions and sizes. Age-adjusted rates can only be compared if they are adjusted to the same population standard. The current standard used is the US 2000 standard million population (Anderson, 1998).

Data Limitations and Rate Instability

Rate instability refers to the increased relative standard error rate resulting from the small number of cases measured. In this instance, the calculated rate is considered unreliable and should be interpreted with caution. When sample sizes are insufficient, there is no way to distinguish random fluctuations in data from true changes. When possible, the pooling of multiple years data may be done to reduce instability and increase reliability. There may be exclusion of some groups when data is not available or when rates remain unstable even after pooling multiple years. Throughout the publication the asterisk symbol (*) may also be used to denote rates that are unstable.

Readers of this publication should observe caution when interpreting rates based on few events and/or small populations (ex: American Indians comprise 0.5 percent of the total population of the County of Riverside) For more information, please refer to *Guidelines for Statistical Analysis of Public Health Data with Attention to Small Numbers, Revised, July 2003*.

This publication may be found at:

http://familymedicine.medschool.ucsf.edu/fhop/_docs/pdf/prods/smallnumbers2003.pdf

Such factors may prevent or make it difficult to interpret a measure for a population that is small in size. Another limitation is that such a measure may inadvertently disclose confidential information about an individual in a community. In data tables, this publication employs masking ("*"symbol) for totals less than five, in efforts to protect identity of reported individuals from possible disclosure.

Changes in COPD definition

Chronic lower respiratory disease (CLRD) is inclusive of chronic obstructive pulmonary disease (COPD), asthma, chronic bronchitis, emphysema, and other lower respiratory illnesses. Prior to 1999, CLRD was called COPD and in 2008 a revision to CLRD coding and classification was made. This change may effect reported mortality, however there is uncertainty as to how it may affect rates.

Data Sources and Additional References

To complete the Community Health Profile data was gathered from the birth and death statistical masterfiles, the Cancer Registry for the California Department of Public Health, EPiCenter: California Injury Data Online, Healthy People 2020 National Objectives, the US Census Bureau, California Department of Finance, California Department of Education, and others. Additionally, data was gathered and analyzed from the California Health Interview Survey (CHIS), the largest state health survey in the US, with more than 50,000 Californians surveyed biennially.

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