Monterey County 2013 Community Health Assessment

Prepared by

Monterey County Health Department

Acknowledgements

Thank you to all Monterey County residents, community partners, and Health Department employees who provided valuable time and input in identifying our community's health strengths and needs, and for sharing experiences and recommendations with the Monterey County Community Health Assessment leadership team. The expertise and leadership of the following people and agencies make this Monterey County Community Health Assessment a collaborative, engaging, and substantive plan that will further guide our community in developing a comprehensive Community Health Improvement Plan.

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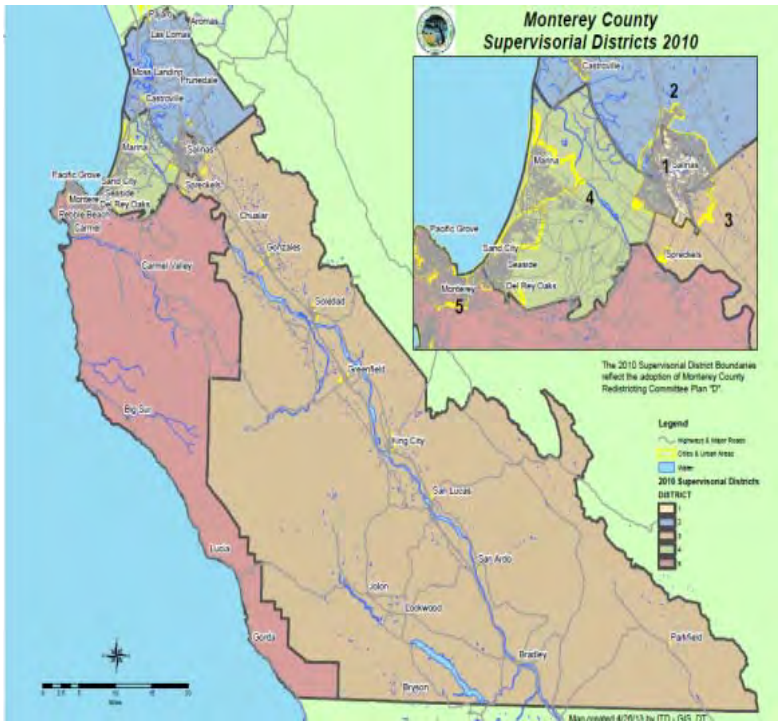

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This report may be downloaded from http://www.mtyhd.org/data

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American Cancer Society
California State Senator Bill Monning
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California State University, Monterey Bay – Nursing Program
Cancer Patients Alliance
Center for Community Advocacy
Central California Alliance for Health
Central Coast Center for Independent Living
Central Coast Visiting Nurses Association
City of Gonzales, Emergency Medical Services
City of King
City of Monterey - Fire Department
City of Salinas - Fire Department
City of Salinas - Public Works
Clinica de Salud del Valle de Salinas
Community Foundation for Monterey County
Community Hospital of the Monterey Peninsula
Community Human Services
Community Partnership for Youth
Dorothy's Place
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Monterey County Free Libraries
Monterey County Office of Education - Head Start
Monterey County Office of Education - Health & Prevention Programs
Monterey County Regional Fire District
Monterey Peninsula College
Monterey Peninsula Unified School District
Monterey-Salinas Transit District
Natividad Medical Foundation
Nonprofit Alliance of Monterey County
North Monterey County Unified School District/Castro Plaza Family Resource Center
Noyes Research and Consulting
Pacific Grove Police Department
Peacock Acres, Inc.
Planned Parenthood Mar Monte
Public Health Accreditation Board
Salinas Valley Memorial Healthcare System
Salud Para La Gente
Seaside Police Department
Service Employees International Union Local 521
Sulsona Consulting
Sun Street Centers
The Village Project

Fort Ord Environmental Justice Network
George L. Mee Memorial Hospital
Grants by Design
Services – Child Support Services
Townsend and Associates
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This report was assembled and formatted by:

harder+company community research

Table of Contents

Executive Summary

Data is the foundation of sound policy development, and with reliable data, communities can develop policies leading to healthy outcomes and equal access to social, educational, economic, and health opportunities.

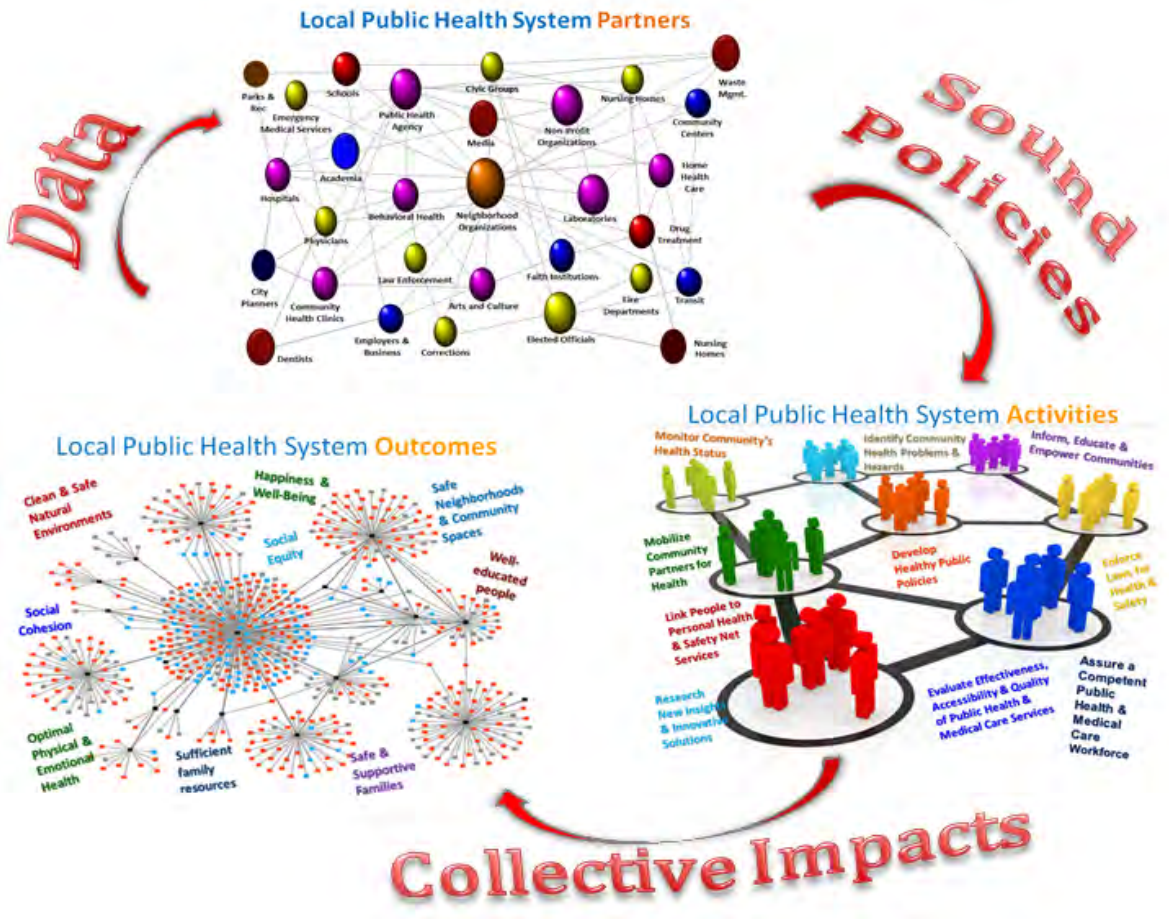
Sharing information through this 2013 Monterey County Community Health Assessment can act as a catalyst to strengthen and enhance our local health care system, and doing so provide a number of opportunities that align with Monterey County Health Department's strategic initiatives:

- **Empower the community** to improve health through programs, policies and activities
- **Enhance community health and safety** by emphasizing prevention
- **Ensure access** to culturally and linguistically appropriate, customer-centered quality services.

"Whether through democracy, strong public education, quality health care, or broad economic opportunity – reducing inequity is the highest human achievement."

Bill Gates

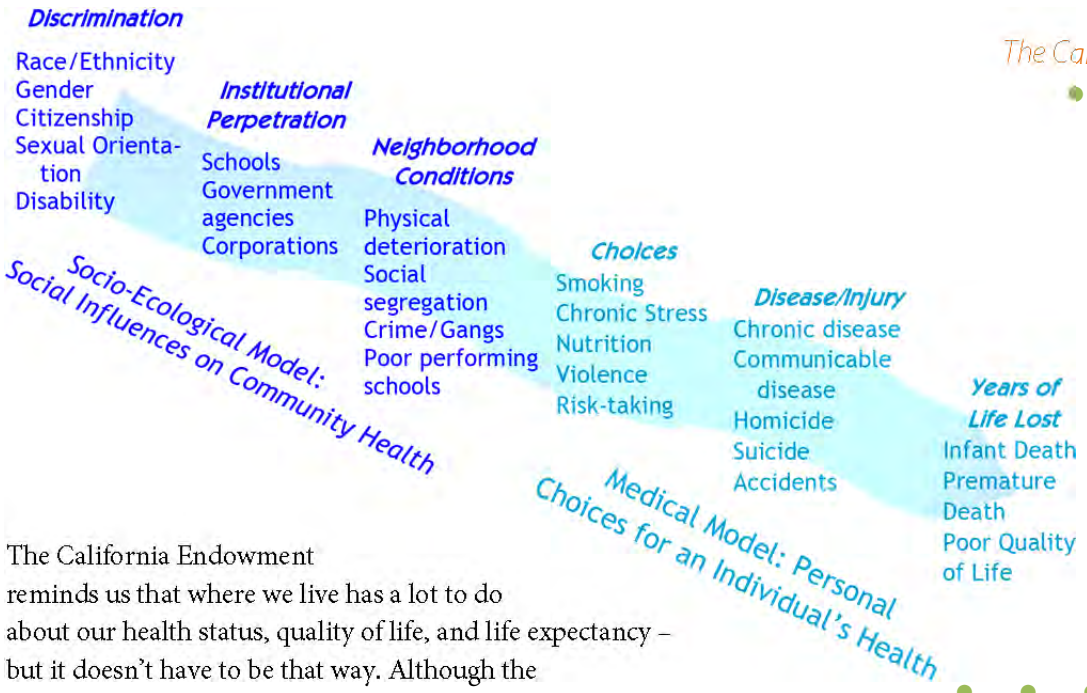
As a community public health system, our **collective impact** is possible through collaborations among numerous partnering agencies that traditionally are not health-related, including schools and universities, faith institutions, service organization, youth development nonprofits, public safety agencies, recreation programs, arts and cultural communities , economic development and philanthropic organizations, and environmental agencies, among others.[1]



Getting a handle on improving health outcomes requires a new, "upstream" way of thinking about health equity that focuses on the **root causes** of poor health, such as poverty, limited education, disenfranchisement, and institutional perpetuation of social inequities. This "upstream" approach is called *the Socio-Ecological Model* of community health, because it recognizes contributions of social influences on health.

"Every additional $12,500 in a San Francisco Bay area household income buys one additional year of life expectancy."

Tony Iton, MD
The California Endowment



The California Endowment reminds us that where we live has a lot to do about our health status, quality of life, and life expectancy – but it doesn't have to be that way. Although the "upstream," Socio-Ecological approach is new, **we are already seeing how policies are improving health outcomes in Monterey County**. For example:

"90% of all adult smokers begin while in their teens or earlier… the TRL will result in reduced initial use of tobacco."

Dale Hilliard, Chair
Coalition for a Tobacco-Free Monterey County

"As a result of the TRL, 9 retailers have stopped selling tobacco products, reducing you access to tobacco and unnecessary exposure to tobacco marketing."

Gonzalo Coronado
Tobacco Control Program Coordinator

- The Tobacco Retail Licensing (TRL) Program that was adopted into County code in May 2012 requires all tobacco retailers in the unincorporated areas of Monterey County to obtain a Tobacco Retail License from the Health Department. The ordinance affects the marketing and sales of tobacco including promotional signage and sales of tobacco paraphernalia (cigarette papers, pipes, etc.), in hope that none of Monterey County's 127,000 children and teens grow up to become tobacco consumers. For more information see http://www.mtyhd.org/index.php/departments-all/item/tobacco-control-program

- Safe Routes to School is program that is increasing driver and community awareness about traffic safety for *2,590 students in five Seaside elementary schools*. The program educates students on pedestrian safety and encourages parents and families to walk to school.

- County safety-net clinics are closely monitoring patients with high blood pressure, high blood sugar, and overweight/obese conditions, and are referring patients to behavioral change classes to help control these silent killers. More than *15,000 of these clinic visits* occurred in the last fiscal year alone.

- The Nutrition and Fitness Collaborative of the Central Coast (over 50 agencies working together for collective impact) conducted a tri-county survey of sugar sweetened beverage consumption by children, teens and adults. The survey found that *youth age 11 to 17 drank 4.5 times as many sugary drinks as water*. Survey findings are being used to encourage the adoption of healthy beverage policies. For more information see http://www.mtyhd.org/index.php/service-catalog/hd-phb-svcs/nutrition-services/item/nutrition-network-services

"Local sugary beverage consumption data is essential to defining the problem of obesity in our three counties."
Edward Moreno, MD
Monterey County Health Officer

- The Early Childhood Development Initiative (ECDI) was launched in 2012 as a collaborative catalyst to ensure that young children from the prenatal stage through age 5 have what they need to succeed in school and life. Recognizing the importance of this work, the Monterey County Board of Supervisors committed funding and resources to the initiative that has the *potential to reach 40,000 Monterey County children*. When young children grow up in an environment of positive early experiences - physically, socially, intellectually, and emotionally – they have a greater chance to succeed at kindergarten and grow up to be successful adults. For more information see http://first5monterey.org/ECDI.html

- Agencies across the county are learning about Health in All Policies, an approach that recognizes the links between housing, transportation, economic development, urban planning and other issues for achieving healthier, more equitable communities. Thus far, *more than 500 Monterey County community leaders* are involved in Health in All Policies activities. For more information see http://www.mtyhd.org/index.php/hd-news-and-events/hd-pep-news/item/what-is-health-in-all-policies

We know that health is much more than the absence of disease… ***Health is a true state of well-being that incorporates physical, mental, spiritual, social, economic, and community wellness and opportunity.*** As a networked system of health, we partners must effectively collaborate in our efforts and resources. The data held in this 2013 Community Health Assessment should be widely discussed, prioritized, and collectively applied to encourage safer and healthier homes, neighborhoods, and communities.

Report Background

With a Board of Supervisors' resolution, Monterey County embarked in 2011 on pursuing national health department accreditation. This Community Health Assessment (CHA) is one of four accreditation pre-requisite documents that will be used to portray and help standardize health department practices to achieve the Department's strategic goals and initiatives. The Monterey County 2013 CHA will further assist health and social services providers, elected officials, and community members in monitoring health trends and disparities, determining priorities among numerous health issues, prioritizing resources, and taking actions to provide health equity in Monterey County. Other objectives of sharing these data include enabling community empowerment and action, eradicating the adverse social determinants of health, and fulfilling a prerequisite to national health department accreditation.

The CHA presents data for several hundred indicators over ten broad categories. Monterey County Health Department and community partners conducted a comprehensive review and analysis of secondary quantitative data from local, state, and national agencies and surveillance systems. The most current, standardized and reliable data were used. The following are key findings from the 2013 CHA.

Key Highlights from the 2013 Monterey County Community Health Assessment

The growing population of Monterey County is as diverse as its geography, and data show the existence of social and economic disparities:

- The Hispanic/Latino population grew from 47% of Monterey County's population in 2000 to 56% in 2012.
- Thirty percent (30%) of Monterey County's residents had less than a 12th grade education in 2012.
- Nearly 40% of Monterey County residents lived at or below 200% of the Federal Poverty level in 2012.
- Nearly 25% of the Hispanic/Latino population lived under the federal poverty level in 2010, indicating a disparity when compared to 8% of the White, non-Hispanic population.

Social and economic disparities also reflect health disparities that exist in Monterey County:

- Hispanic/Latino teens age 15 to 19 in 2008-2010 consistently had higher birth rates than all other race/ethnic groups, with 66 births per 1,000 population. Black teens had the next highest rate at 39 births per 1,000 population. This compared unfavorably to 18 births per 1000 White, non-Hispanic population.
- Age-adjusted diabetes mortality rates significantly decreased from 1999 to 2010 for Black and Hispanic/Latino residents. Despite this, in 2008-2010, rates among Hispanic/Latino residents were significantly higher compared to White, non-Hispanic residents.
- In 2009, 45% of Hispanic/Latina women reported never having had a mammogram for breast cancer screening; the White, non-Hispanic percentage was 17%.
- In 2009, 45% of Hispanic adults reported never having had a sigmoidoscopy for colorectal cancer screening; the White, non-Hispanic percentage was 19%.
- Age-adjusted prostate cancer incidence rates significantly increased among Hispanic residents from 2001 to 2010, while rates decreased for Asian/Pacific Islander residents.
- Homicide rates significantly increased for Asian/Pacific Islander and Black residents from 1999 to 2010, and were significantly higher for these groups compared to White, non-Hispanic residents.

The leading cause of death in Monterey County is heart disease, followed by cancer.

- Heart disease was the leading cause in 25% of all Monterey County mortalities in 2010.
- Disparities in the leading causes of death and the years of potential life lost prior to age 75 are apparent by geographical regions within the county.
- Over the last decade, age-adjusted heart disease mortality rates significantly decreased for all race/ethnic groups and genders.
- Mortality rates were consistently lower for White, non-Hispanic residents compared to Black and Hispanic residents, although not statistically significant.
- Age-adjusted cancer (all types), lung, breast, and colorectal cancer incidence and mortality rates significantly decreased in Monterey County from 2001 to 2010, although there were disparities between some age and race/ethnic groups.
- Unintentional mortality rates significantly decreased for Hispanic residents from 1999 to 2010, while rates significantly increased for Multiple/Other race residents.
- Unintentional injuries were the leading cause of premature death in the county's north, central, and south regions.
- The 2010 percentage of north county deaths due to unintentional injury was more than double the countywide percentage.

Rates have increased for some communicable diseases, mirroring similar increases across the state.

- Newly diagnosed cases of chronic hepatitis C infection significantly increased from 1999 to 2010 for residents ages 15 years and older.
- Chlamydia infection rates significantly increased from 1999 to 2010 for residents ages 15 to 44 years, and for all females.
- Pertussis (whooping cough) infection rates significantly increased in Monterey County from 1999 to 2010, although there were disparities between some age groups.

Monterey County residents experienced significant improvements in health status over the last decade.

- There was a dramatic decrease (from 17% to 11% in the percentage of adults who reported themselves as a current smoker from 2003 to 2012. In 2012, however, there were three times as many male smokers compared to female smokers.
- Age-adjusted stroke mortality rates significantly decreased in Monterey County from 1999 to 2010.
- Age-adjusted heart disease mortality rates significantly decreased in Monterey County from 1999 to 2010.
- Rates of substantiated child maltreatment decreased by half from 2007 to 2001; rates for 16 to 17 year olds decreased by more than half.

Equitable access to health care and resources will be important to tackle moving forward.

- All of Monterey County is designated as a primary care shortage area by the federal Health Resources and Services Administration. Most of the county is medically underserved, which includes dental and mental health services.
- Over one-quarter (29%) of adults ages 18 to 64 years were uninsured in 2011-2012.
- Nearly one quarter (23%) of Monterey County residents received Medi-Cal health care benefits in 2011-2012.
- One-quarter (25%) of Hispanic residents were not insured in 2011-2012 compared to eight percent of White, non-Hispanic residents.

The growing population of Monterey County is as diverse as its geography, and data show the existence of social and economic disparities.

From its renowned Monterey Peninsula tourist destination to the agriculturally rich Salinas Valley, Monterey County has bountiful resources to offer its residents and visitors. This geographic diversity is mirrored by a growing population where the majority is ethnically Hispanic and multiple languages are spoken fluently. Although the county is rich in resources, data show the existence of social, economic and health disparities related to income, race/ethnic groups, education and access to quality-of life opportunities. These are critical characteristics to consider when making key decisions on how to improve the health of Monterey County residents. The following are notable demographic and socioeconomic characteristic findings:

- **The Hispanic/Latino population grew from 47% of Monterey County's population in 2000 to 56% in 2012 (Exhibit A).**

Exhibit A. Population by race/ethnicity

	Number				Percent			
	2000	2005	2010	2012	2000	2005	2010	2012
Asian/Pacific Islander (nH)	24,245	26,852	27,329	29,674	6	7	7	7
Black (nH)	15,050	9,691	12,785	12,120	4	2	3	3
Hispanic/Latino, any race	187,969	201,127	230,003	240,870	47	52	55	56
Multi-Race/Other	8,251	6,669	3,041	5,578	2	2	1	1
Native American/ Native Alaskan (nH)	4,202	1,801	5,464	2,304	1	<1	1	1
White (nH)	162,045	142,864	136,435	136,216	40	37	33	32
TOTAL	**401,762**	**389,004**	**415,057**	**426,762**	**100**	**100**	**100**	**100**

(nH) = non-Hispanic

Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

- **Thirty percent (30%) of Monterey County's residents had less than a high school education in 2012 (Exhibit B).**

Exhibit B. Educational attainment for population age 25 and older

Less than 12th Grade	77,061	67,517	73,832		32	29	29	30
High School	45,354	48,728	54,211	50,742	19	21	21	19
Some College/Associate	66,774	61,467	71,802	71,071	27	26	28	27
Graduate Degree	21,298	22,275	23,047		9	10	9	9
							101	**100**

*Columns do not total 100% due to rounding

Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

- **Nearly 40% of Monterey County residents live at or below 200% of the Federal Poverty level (Exhibit C).**

Exhibit C. Residents living at up to 200% of the federal poverty level

				2012				
Below 50%	21,152	23,459	25,798		15	17	16	12
126%-150%	21,739	20,611	23,409		16	15	14	15
151%-185%	29,077	31,894	37,349	35,452	21	23	23	21
186%-200%	12,910	12,516	14,721	13,086	9	9	9	8
						100	**101**	**101**

*Some columns may not total 100% due to rounding
Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

- **Nearly 25% of Hispanic/Latino and 22% of Black residents lived under the poverty level in 2010, indicating a disparity when compared to just 8% of the White, Non-Hispanic population.**

The social and economic disparities illustrated above are also reflective of the health disparities that exist in Monterey County.

Social and economic disparities are often a reliable indicator of health disparities, also known as social determinants of health. Social determinants of health are the social, economic, and physical conditions in which people are born, live, learn, work, play, and age that affect a wide range of health, functioning, and quality-of-life outcomes. Having good data and a deep understanding of these factors may have positive implications on developing and implementing sound and sustainable policies. The following are key findings:

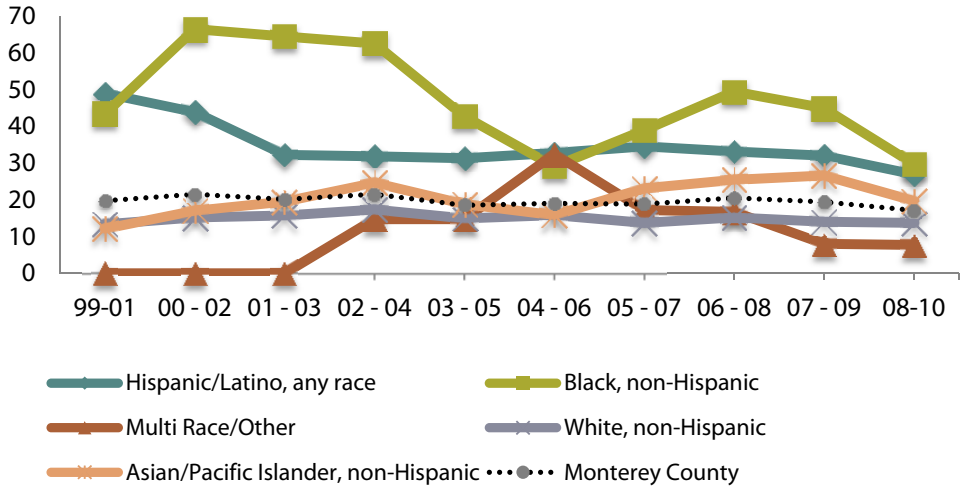
Birth Outcomes

- **In 2008-2010, Hispanic/Latino teens age 15 to 19 consistently had higher birth rates than all other race/ethnic groups, with 66 births per 1,000 population. Black teens age 15 to 19 had the next highest rate at 39 births per 100,000.**

Chronic Disease

- **Age-adjusted diabetes mortality rates decreased significantly from 1999 to 2010 for Black and Hispanic/Latino residents. Rates among Hispanic/Latino and Black residents, however, were significantly higher compared to White, non-Hispanic residents.**

Exhibit D. Age-adjusted diabetes mortality rates per 100,000 by race/ethnicity



Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

- **Age-adjusted prostate cancer incidence rates increased significantly among Hispanic residents from 2001 to 2010, while rates decreased for Asian/Pacific Islander residents.**

Health Behaviors

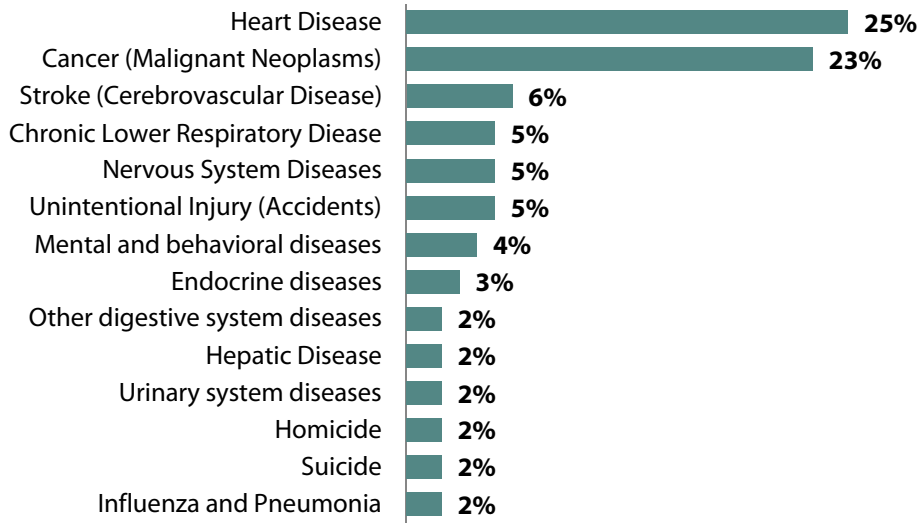
- **In 2009, 45% of Hispanic women reported never having had a mammogram for breast cancer screening, comparing unfavorably to 17% of White, non-Hispanic women.**
- **In 2009, 45% of Hispanic adults reported never having had a sigmoidoscopy for colorectal cancer screening, comparing unfavorably to 19% of White, non-Hispanic women.**
-

Mortality

- **Mortality rates were consistently lower for White, non-Hispanic residents compared to Black and Hispanic residents, although not statistically significant.**
- **Homicide rates significantly increased for Asian/Pacific Islander and Black residents from 1999 to 2010, and were significantly higher for these groups compared to White, non-Hispanic residents.**

The leading cause of mortality in Monterey County is heart disease, followed by cancer.

Exhibit E. Leading Causes of Mortality, 2010



Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010, Statistical analysis performed by Monterey County Health Department Surveillance and Epidemiology Unit.

Much of the recent improvement in death rates and life expectancy for all population groups may be attributed to continuing reductions in mortality rates from major causes of death, such as heart disease, cancer, stroke, and chronic lower respiratory diseases, as well as reductions in risk behaviors such as smoking. Disparities continue to persist in Monterey County geographic regions, and within race/ethnic groups. Here are some key findings related to mortality for Monterey County.

- **Mortality rates for the county overall, decreased, although not significantly, over the last decade for all age groups except for 15 to 24 year old residents.**
- **Age-adjusted cancer (all types), lung, breast, and colorectal incidence and mortality rates actually decreased significantly in Monterey County from 2001 to 2010, although there were disparities between some age and race/ethnic groups.**
- **For the county overall, age-adjusted prostate cancer mortality rates increased significantly from 2001 to 2010.**
- **Unintentional mortality rates significantly decreased for Hispanic residents from 1999 to 2010, while rates significantly increased for Multiple/Other race residents.**
- **Unintentional injuries were the leading cause of premature death in the county's north, central, and south regions.**
- **The 2010 percentage of north county deaths due to unintentional injury were more than double the countywide percentage.**

Rates have increased for some communicable diseases mirroring similar increases across the state.

Many communicable diseases have been eradicated (such as polio and smallpox) or greatly diminished in the United States, disparities are still apparent in the more prevalent infectious diseases such as sexually transmitted diseases, whooping cough, and tuberculosis. Here are key communicable disease disparity findings for Monterey County:

- **Newly diagnosed cases of chronic hepatitis C infection increased significantly from 1999 to 2010 for residents ages 15 years and older.**
- **Chlamydia infection rates increased significantly from 1999 to 2010 for residents ages 15 to 44 years, and for all females.**
- **Pertussis (whooping cough) infection rates increased significantly in Monterey County from 1999 to 2010, although there were disparities between some age groups.**

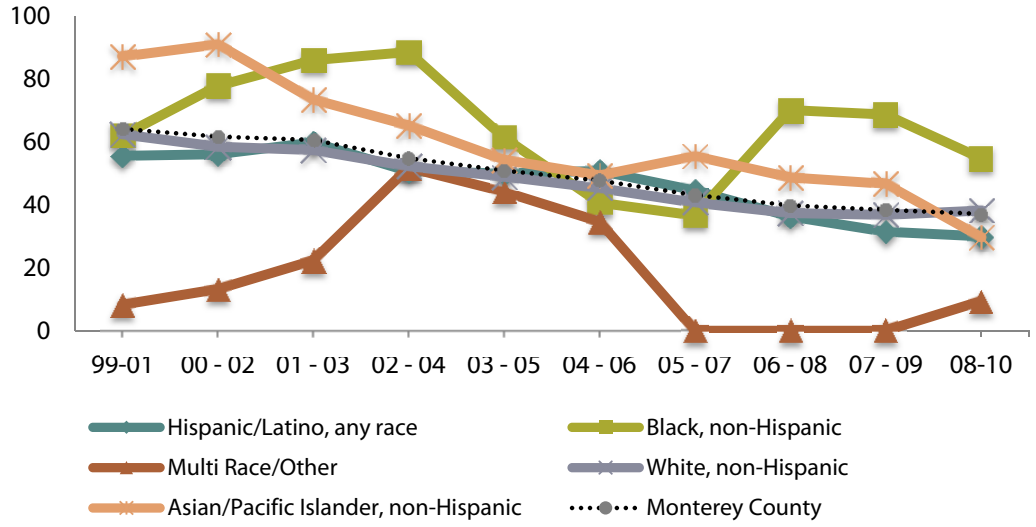
Monterey County experienced significant improvements in its health status over the last decade.

Data have shown significant improvements in the health status of Monterey County residents, particularly in the area of chronic disease.

- **There was a dramatic decrease (from 17% to 11%) in the percentage of adults who reported themselves as a current smoker from 2003 to 2012. In 2012, however, there were three times as many male smokers compared to female smokers.**

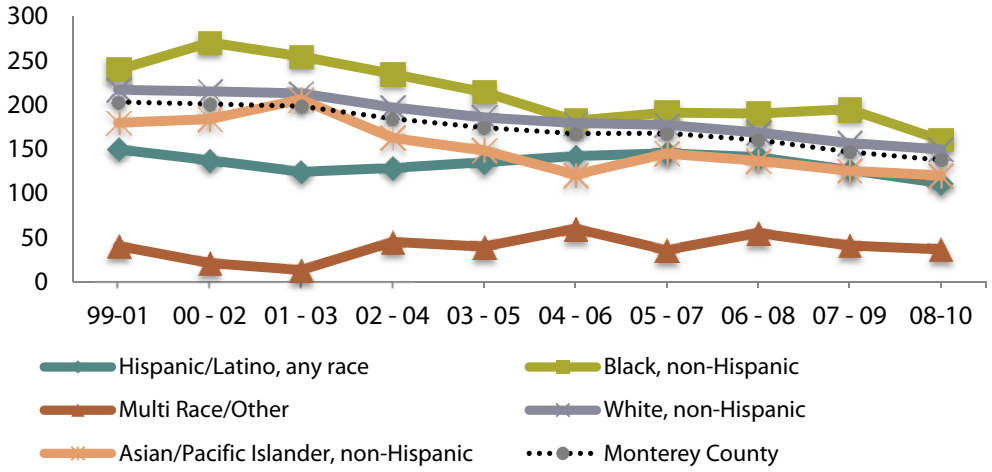
- **Overall, dramatic declines were seen from 1999-2001 to 2008-2010 in the stroke mortality rate countywide and across all race/ethnic groups. Age-adjusted stroke mortality rates decreased significantly in Monterey County from 1999 to 2010 (Exhibits F and G).**

Exhibit F. Age-adjusted stroke mortality rates per 100,000 by race/ethnicity



Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Exhibit G. Age-adjusted heart disease mortality rates per 100,000 by race/ethnicity



Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- **Age-adjusted heart disease rates decreased significantly in Monterey County from 1999 to 2010.**

Equitable access to health care and health resources will be important to tackle moving forward.

The social determinants of health described above also have key implications on the ability of Monterey County residents to access health care and related resources. It is also difficult to tease out whether poor health outcomes are a result of barriers to accessing basic yet important health resources, or whether poor health conditions make it more difficult for people to access appropriate and affordable care. Nevertheless these are indicators that are tied directly to Monterey County's strategic initiatives to pursue the following:

- Empower the community to improve health through programs, policies and activities
- Enhance community health and safety by emphasizing prevention
- Ensure access to culturally and linguistically appropriate, customer-centered quality services.

It is also important to note that during the process of developing the CHA we found gaps in the availability of reliable data for key indicators such as gang-related violence and some health behaviors. Further, the implementation of the Affordable Care Act will change much of our current health insurance coverage data. Here are notable findings in the area of access to health care and health resources:

- **All of Monterey County is currently designated as a primary care shortage area by the federal Health Resources and Services Administration. Most of the county is medically underserved, which includes dental and mental health services.**
- **Over one-quarter (29%) of adults in Monterey County were uninsured in _ in 2011-2012.**
- **One-quarter (25%) of Hispanic residents are not insured compared to eight percent of White, non-Hispanic residents in in 2011-2012.**
- **Nearly one quarter (23%) of Monterey County residents received Medi-Cal health care benefits in 2011-2012.**

There are significant and unprecedented health systems changes underway with the advent of the Affordable Care Act, greater focus on preventive care and responsible health behaviors, the development and acceptance of electronic health records and other technologies, and medical advancements through genomic research. The CHA can be used as a vital tool to ensure that these systemic changes are implemented, smoothly, effectively, and that they work for the unique characteristics of the residents of Monterey County. The data is presented such that health status data can be viewed and considered alongside descriptive demographic, socioeconomic, quality of life and health access and resource data. These changes challenge us more than ever to develop a shared vision for healthy communities in Monterey County.

Monterey County 2013 Community Health Assessment

Purpose

This 2013 Community Health Assessment (CHA) is intended to assist health and social services providers, elected officials, and community members in monitoring health trends and disparities, determining priorities among numerous health issues, prioritizing resources, and taking actions to provide health equity in Monterey County. Other objectives of sharing these data include enabling community empowerment and action, eradicating the adverse social determinants of health, and fulfilling a prerequisite to national health department accreditation.

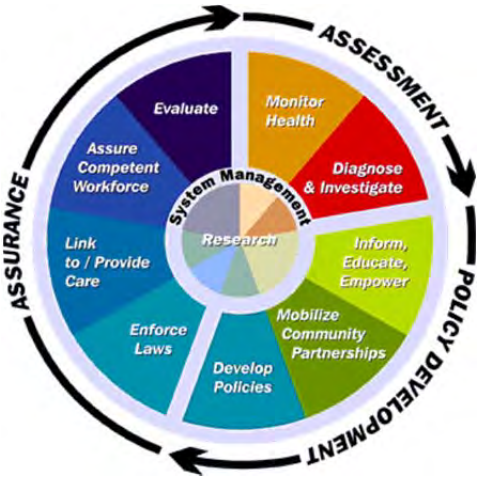
In 1998, the Institutes of Medicine defined public health as "what we, as a society, do collectively to assure the conditions in which people can be healthy." Sharing information through this CHA can act as a catalyst to strengthen and enhance our local health care system, and doing so provides a number of opportunities:

- identifying strengths for expansion opportunities
- identifying system challenges for improvements
- building capacity for new programs and services
- developing opportunities for increased resources
- creating a process for long-term system planning.

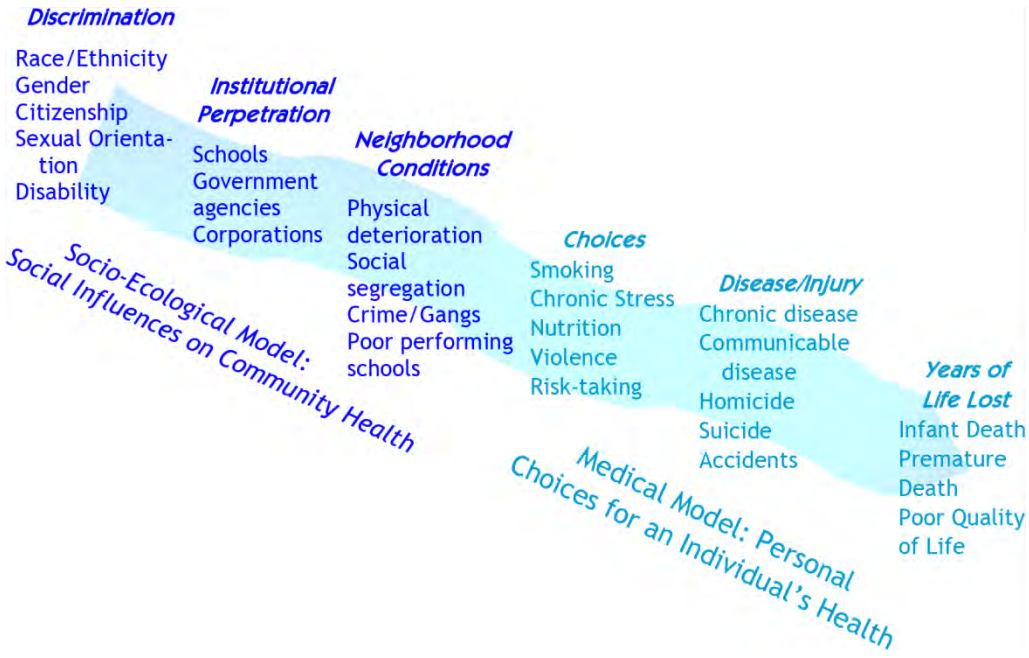
Significant health systems changes are underway with the advent of the Affordable Care Act, greater focus on preventive care and responsible health behaviors, electronic health record and other technologies, and medical advancements through genomic research. These changes challenge us more than ever to develop a shared vision for healthy communities in Monterey County.

Background

In 2011 with a Board of Supervisors' resolution, Monterey County embarked on pursuing national accreditation for its Health Department. This new initiative was established by the Centers for Disease Control and Prevention and developed by the Robert Woods Johnson Foundation to measure health department performance against recognized standards, with the objective of advancing continuous quality improvement. The performance standards are founded in the *10 Essential Public Health Services* that was developed in 1994 through a committee of US Public Health Service agencies and other major public health organizations.



A second foundation for change in traditional public health practice is recognition of the Health Equity Framework that seeks to prevent serious health conditions and reduce health disparities by breaking down discrimination, institutional perpetuation, and social inequities. The traditional or "downstream" medical model of public health focused on individual people to fix their immediate health problems. Shifting some resources to an "upstream" socio-ecological model provides focus on unequal causes for poor community health in a preventive fashion.



Methodology

This CHA was developed as a part of the National Association of County and City Health Officials' Mobilizing for Action through Planning and Partnerships (MAPP) framework. MAPP is a tool that helps communities improve health and quality of life through community-wide and community-driven strategic planning. By participating in the MAPP process, community residents can develop a sense of ownership over strategies, resulting in more innovative, effective, and sustainable solutions to complex health problems. The MAPP process involves completion of four assessments that when assembled together, are key to improving community health:

The ***Forces of Change Assessment*** identifies current external factors (such as economic, political, social, environmental, etc.) that influence a community's health and quality of life. Monterey County's *Forces of Change Assessment* can be viewed and downloaded at http://www.mtyhd.org/PEP.

The ***Community Themes and Strengths Assessment*** is a deep understanding of the issues that are important to county residents. Monterey County's *Community Themes and Strengths Assessment* are included in the Strategic Plan, which can be viewed and downloaded at http://www. mtyhd.org/PEP.

The ***Local Public Health System Assessment*** identifies strengths and areas of needed improvement in the public health system based on the 10 Essential Services of Public Health framework. Monterey County's *Local Public Health System Assessment* can be viewed and downloaded at http://www.mtyhd.org/PEP.

This ***Community Health Assessment*** comprises a core list of reliable and recognized indicators of public health that are analyzed over time and stratified by race/ethnicity, age group, and gender to identify priority health issues for community action. Monterey County's *Community Health Assessment* can be viewed and downloaded at http://www.mtyhd.org/PEP.

The CHA was created using both primary and secondary data sources. Primary data consist of qualitative input directly obtained from more than 500 residents in 21 meetings held county-wide over a six-month period from November 2010 to April 2011. Additional input was obtained from 97 community partners during the day-long Local Public Health System Assessment, and from 22 health and social service organization participants as part of the Forces of Change Assessment.

Secondary quantitative data for this report were collected from local, state, and national agencies and surveillance systems. Major data sources include the California Department of Education, California Department of Justice, California Department of Public Health, California Office of Statewide Health Planning and Development, Monterey County Health Department Environmental Health Bureau, Monterey County Health Department Communicable Disease Unit, United States Census Bureau, United States Department of Health and Human Services, and University of California Berkley Child Welfare Dynamic Reporting System.

Publications used as secondary data sources included the 2011 Monterey County Homeless Census and the 2012 Monterey County Kindergarten Readiness Assessment.

Two surveys were used extensively for local self-reported health conditions and behaviors: the California Health Interview Survey conducted by University of California Los Angeles, and the California Healthy Kids Survey conducted by WestEd.

Monterey County Today

Monterey County, located on California's central coast, is geographically and socially diverse. From its renowned Monterey Peninsula tourist destination and the unmatched marine biodiversity of the coastline, to the agriculturally rich Salinas Valley – also known as the "salad bowl" of the nation – Monterey County has bountiful resources to offer its residents and visitors. This geographic diversity is mirrored by a growing population where the majority is ethnically Hispanic and multiple languages are spoken fluently.

The county has 12 incorporated cities located within its 3,322 square miles. The rest of the unincorporated County includes communities that range from a small cluster of homes to small towns.

Exhibit 1. Selected Monterey County Assets, 2013

	Asset Levels
Square miles	3,322
Coastline miles	90
Acres of state parks	16,000
Acres of county parks	12,500
Acres of agricultural/grazing land	1.3 million
Number of cities	12
Number of adults (≥ Age 18)	304,044
Number of children and youth (≤ Age 17)	111,013
Number of K-12 school districts	24
Number of adult schools	7
Number of higher education and research institutions	18
Number of county library branches	17
Number of hospitals	4
Number of health clinics accepting Medi-Cal	14

Sources: Monterey County Convention and Visitors Bureau, Visitor Information, http://montereyinfo.org/page/544/. U.S. Census Bureau, http://factfinder.census.gov/home/saff/main.html?_lang=en. Office of Statewide Health Planning and Development, http://www.oshpd.cahwnet.gov/oshpdKEY/Facilities.htm Monterey County Office of Education, http://www.montereycoe.org/home/districts-and-schools/links Monterey County Economic Development Department, http://www.co.monterey.ca.us/EconomicDevelopment/

Two of Monterey County's most distinct characteristics, the fertile Salinas Valley and dramatic Monterey Bay coastline, help to define daily life and standards of living. The county is a world leader in agricultural exports, shipping more than 740 million pounds of produce to 27 major trading partners worldwide in 2012. The $4.14 billion, year-round agricultural business is achieved through a diversity of crops including strawberries, salad products, spinach, broccoli, wine grapes, cut flowers and nursery products, and beef cattle. Monterey Bay area's commercial fishing industry produced nearly 60 million pounds of fish and crustaceans valued at more than $9 million in 2004. In 2011, tourist destinations located primarily along the Monterey Bay and Big Sur coast created more than $2.1 billion in county revenue, and generated approximately 21,450 full-time jobs. County revenues from these activities contribute to public funding for an array of community services, including the public health services that are described in this report.

Although Monterey County is rich in resources, data show the existence of social, economic, and health disparities related to income, race/ethnic groups, education, linguistic isolation, and access to quality-of-life opportunities. These and other social determinants to health are examined in this report, which is a critical element in the County's overall plan to improve the health and wellbeing of its residents.

Monterey County Population

Population growth in Monterey County is generally driven by natural increase. The estimated percent change in total population from January 1, 2012 to January 1, 2013, was .5% (419,586 to 421,494) which is consistent with Monterey County's population growth trends. Although the population base declined in the early 2000s, population growth has remained positive and consistent since 2006.

Exhibit 2. Monterey County population growth

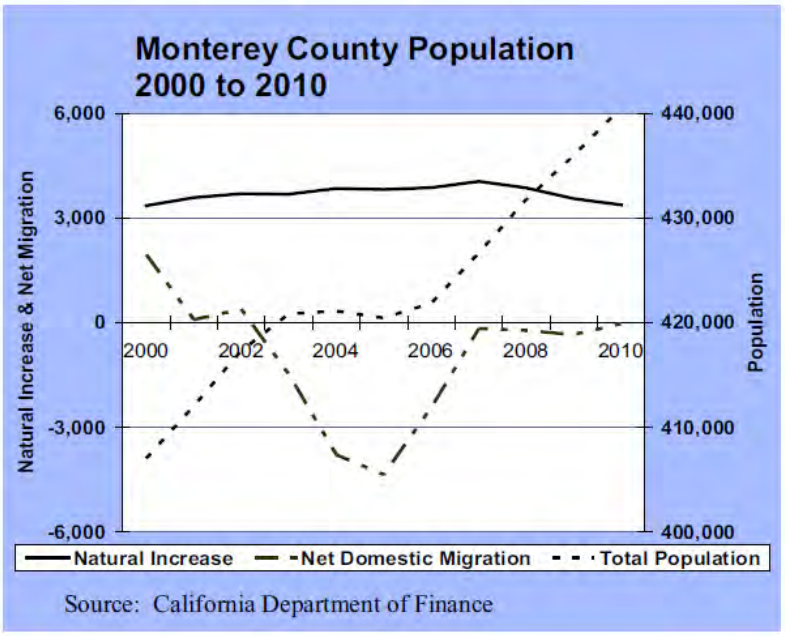


Exhibit 3. Population by age groups

	Number				Percent			
	2000	2005	2010	2012	2000	2005	2010	2012
0-19 years	126,789	127,440	124,785	127,903	32	33	30	30
35-44 years	61,978	53,654	54,820	54,964	15	14	13	13
45-64 years	77,691	85,411	96,472	98,701	19	22	23	23
65+ years	40,299	39,419	44,422	47,693	10	10	11	11

Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

- Children ages 0-19 were the largest proportion of the county in 2000 to 2012 (30 to 33% of the total population), followed by young adults ages 20-34 (21 to 24%), and adults ages 45-64 (19 to 23%).
- The population of older adults ages 45 to 65+, however, increased while the population of children ages 0-19 and adults ages 35-44 has decreased.

Exhibit 4. Population by race/ethnicity

	2000	2005	2010	2012	2000	2005	2010	2012
Asian/Pacific Islander (nH)	24,245	26,852	27,329	29,674	6	7	7	7
Black (nH)	15,050	9,691	12,785	12,120	4	2	3	3
Hispanic/Latino, any race	187,969	201,127	230,003	240,870	47	52	55	56
Multi-Race/Other	8,251	6,669	3,041	5,578	2	2	1	1
Native American/ Native Alaskan (nH)	4,202	1,801	5,464	2,304	1	0	1	1
TOTAL	**401,762**	**389,004**	**415,057**	**426,762**	**100**	**100**	**100**	**100**

(nH) = non-Hispanic

Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

- The largest race/ethnic group in the county from 2000 to 2012 was Hispanic (increasing from 47 to 57%), followed by White non-Hispanic (decreasing from 40% to 32%).
- The Hispanic population increased (from 47% to 55 % of the total population), while the White non-Hispanic population decreased (from 40% to 33%). The population of Asian/PI, Black, Native American/Alaskan, and multi-ethnic groups fluctuated by a few percentage points over the last 12 years.

Exhibit 5. Population by gender

	Number				Percent			
Male	207,941	196,238	213,431	219,690	52	50	51	51
Female	193,821	192,766	201,626	207,072	48	50	49	49
TOTAL	**401,762**	**389,004**	**415,057**	**426,762**	**100**	**100**	**100**	**100**

Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

Languages

A variety of languages brings cultural richness to communities, and can also create linguistic difficulties and barriers for non-English speaking residents. These barriers are indicated by households that are in "linguistic isolation," which the US Census Bureau identifies as a household in which no member 14 years old and over (1) speaks only English or (2) speaks a non-English language and speaks English less than "very well."

It is important for local public health systems to recognize and accommodate non-English speaking residents as they may require an additional level of outreach, health education, and service delivery from health providers.

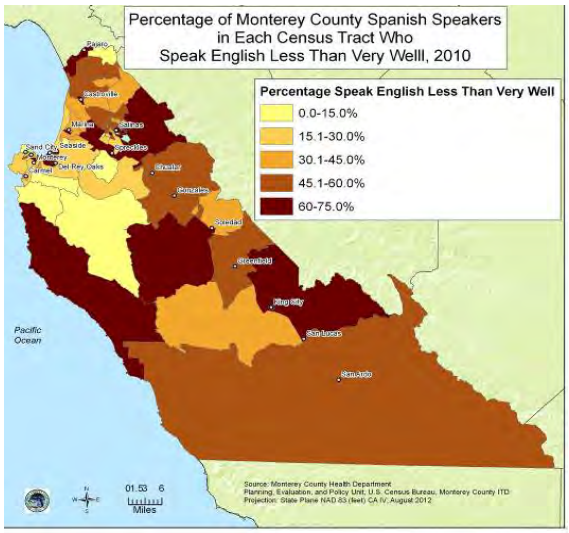


Exhibit 6. Languages spoken at home for population over 5 years of age, 2012

	Number	Percent
Spanish	186,114	47.4
English	179,865	45.8
Asian and Pacific Islander languages	14,963	3.8
Other Indo-European languages	9,049	2.3
Other languages	2,924	0.7
TOTAL	**392,915**	**100.0**

Source: US Census Bureau, American Community Survey, 2012

- Spanish is the language most commonly spoken at home (47%), followed by English (46%).

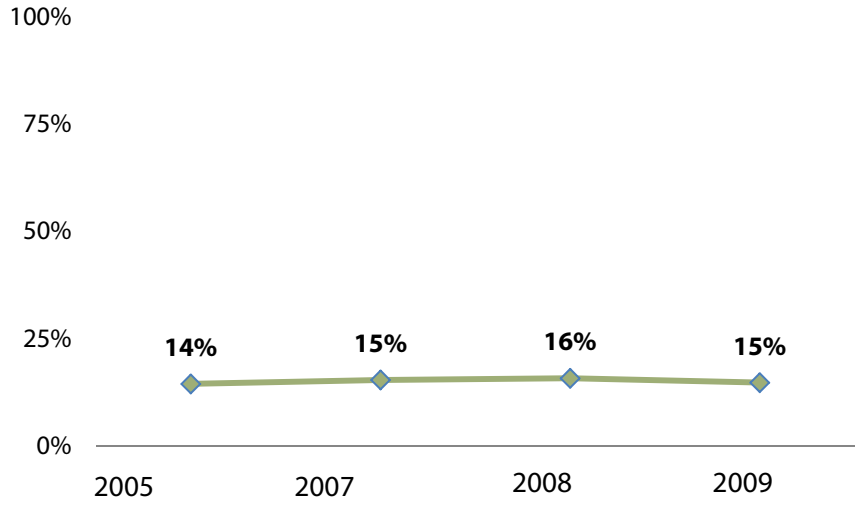
Exhibit 7. English language proficiency among English as a Second Language speakers

	Number				Percent			
Speaks English very well	271,695	253,127	277,302	273,984	73	72	72	70
Speaks English less than very well	99,255	100,294	106,845	118,931	27	28	28	30
TOTAL	**370,950**	**353,421**	**384,147**	**392,915**	**100**	**100**	**100**	**100**

Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

- The majority of the population (72%) spoke English very well in 2012. Just under one-third (30%) spoke English less than very well.
- English language proficiency changed very little from 2000 to 2012.

Exhibit 8. Linguistically isolated households



Source: US Census Bureau, American Community Survey, 2005, 2007, 2008, 2009

- The number of linguistically isolated households (those in which no member of the household over age 14 speaks English "very well") remained fairly steady from 2005 to 2009.

Exhibit 9. Percent of linguistically isolated households by language

	Percent			
	2005	**2007**	**2008**	**2009**
Spanish	36	38	38	34
Asian and Pacific Islander languages	20	24	25	25
Other languages	17	8	15	18
Other Indo-European languages	12	12	21	8

Source: US Census Bureau, American Community Survey, 2005, 2007, 2008, 2009

- Of linguistically isolated households, over one third were Spanish-speaking households, and about one quarter spoke an Asian or Pacific Islander language.
- The number of linguistically isolated households that spoke Asian or Pacific Islander languages became more common from 2005 to 2009, increasing their share of the population by five percent.

Education

Historically, educational attainment in Monterey County, along with other measures of educational performance, has lagged behind California and other Central Coast counties.

After experiencing continuous declines in enrollment growth from 2003-2004 to 2007-2008, Monterey County's K-12 enrollment grew steadily. In 2012-13, K-12 enrollment was 73,460, representing roughly 17% of the total county population.

Cohort graduation rates are considered a critical indicator of a community's educational attainment. In 2011-12, Monterey County's average high school SAT scores in critical reading, math, and writing lagged behind the statewide average. However, Monterey County's high school cohort graduation rate increased from 71.2 graduates per 100 in 2009-10 to 79 graduates per 100 in 2011-12.

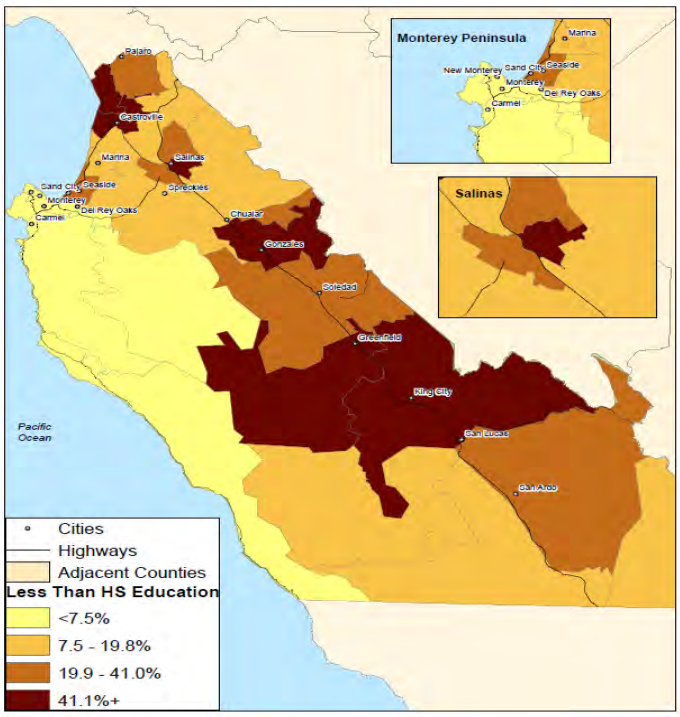


Exhibit 10. Cohort high school graduation rates by race/ethnicity

	Percent		
	2009-10	2010-11	2011-12
Asian (nH)	89.9	85.6	87.4
Filipino (nH)	76.2	85.6	96.0
Hispanic /Latino, Any Race	67.2	71.3	75.8
Native American or Native Alaskan (nH)	64.3	83.3	68.8
Pacific Islander (nH)	63.9	88.9	87.0
Two or More Races (nH)	71.9	88.5	82.2
Race/ethnicity not reported	50.0	33.3	62.5

	2009-10	2010-11	2011-12

(nH) = non-Hispanic Source: California Department of Education

- In the 2011-12 cohort, Hispanic, Black, and Native American cohorts generally had the lowest percentages of high school students graduating.

Exhibit 11. Cohort high school drop-out students by race/ethnicity

						18
Filipino (nH)	4	5	11	13	6	2
Hispanic/Latino, Any Race	13	8	18	19	15	14
Multi-race or Not Reported	13	6	5	38	50	41
Native American or Native Alaskan (nH)	8	10	21	14	13	25
Pacific Islander (nH)	12	2	8	25	3	9
White (nH)	8	6	10	11	8	9
Monterey County	**10**	**7**	**16**	**17**	**13**	**12**

(nH) = non-Hispanic
Source: California Department of Education

- In the 2011-12 graduating cohort, just over 40% of students who self-identified as multi-race or did not declare a race/ethnicity dropped out of high school before obtaining their degree.

The improvement in English language and math proficiency scores in Monterey County is important for the county as it rebounds from the ill effects of the recession. Improved test scores will boost college attendance and give Monterey County a more educated workforce, which should help entice companies to invest in Monterey and help create more high-paying jobs in the local economy. The following table (Exhibit 12) provides a sampling of the graduation rates of some of Monterey County's high school districts and the associated English and math proficiency rates for those districts.

Exhibit 12. Monterey County high school district graduation and proficiency rates, 2012

District	% Graduation	% English Proficiency	% Math Proficiency
Carmel Unified	97	83	74
North Monterey County	89	38	34

Soledad Union High	89	43	44
Salinas Union High	86	42	23
Monterey Peninsula Unified	83	52	42
Gonzales Unified	82	36	30
King City Joint Union High	78	46	51
Monterey County	79	46	42

Source: California Department of Education

- The highest graduation, English proficiency, and math proficiency rates in 2012 were seen at Carmel Unified School District; the lowest graduation rate was seen at King City Joint Union High School District; lowest English proficiency rate was seen at Gonzales Unified School District; and lowest math proficiency rate was seen at Salinas Union High School District.

Exhibit 13. Residents with a bachelor's degree or higher

District				

Source: US Census Bureau, American Community Survey, 2009, 2010, 2011, 2012

- Monterey County, from 2009 to 2012, consistently had lower percentage of residents with a bachelor's or higher degree, compared to California.

Exhibit 14. Educational attainment for population age 25 and older

Less than 12th Grade	77,061	67,517	73,832		32	29	29	30
High School	45,354	48,728	54,211	50,742	19	21	21	19
Some College/Associate	66,774	61,467	71,802	71,071	27	26	28	27
Bachelor Degree	33,641	34,278	35,897	40,545	14	15	14	15
Graduate Degree	21,298	22,275	23,047	26,066	9	10	9	9

Columns may not total 100% due to rounding
Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

- Thirty percent of Monterey County's residents had less than a 12th grade education in 2012.

Social Determinants of Health

Social determinants of health are the social, economic, and physical conditions in which people are born, live, learn, work, play, and age that affect a wide range of health, functioning, and quality-of-life outcomes.

These conditions are both the material attributes of the surrounding environment and also the patterns of social engagement and sense of security and well-being that exist where people live. Understanding the relationship between how population groups experience their environment and its impact on health is fundamental to the social determinants of health—including both social and physical determinants.[2]

Examples of social determinants include income levels, job training and employment, housing availability and affordability, periodic and generational poverty, homelessness, quality education and childcare, public safety and crime, and a community's level of social and cultural engagement. Contributors to these conditions include but are not limited to:

- Racism and prejudices
- Segregated neighborhoods
- Limited transportation options
- Lack of recreational parks and open spaces
- Limited formal education
- Stigma
- Lack of literacy
- Physical hazards and use of toxic substances
- Poor or little access to affordable, healthy foods
- Lack of quality afterschool programs

By working to establish policies that positively influence social and economic conditions and those that support changes in individual behavior, we can improve health for large numbers of people in ways that can be sustained over time. Improving the conditions in which we live, learn, work, and play and the quality of our relationships will create a healthier population, society, and workforce.[3]

Income, Employment, and Poverty

Two large, national studies (the Community Tracking Study and the General Social Survey) indicate that low income, when coupled with a low level of education, is positively related to poor health outcomes. Some of the health risk factors related to low income include the ability to participate in the health care system, employment options, educational attainment and the ability to understand and make use of health information, also known as health literacy.

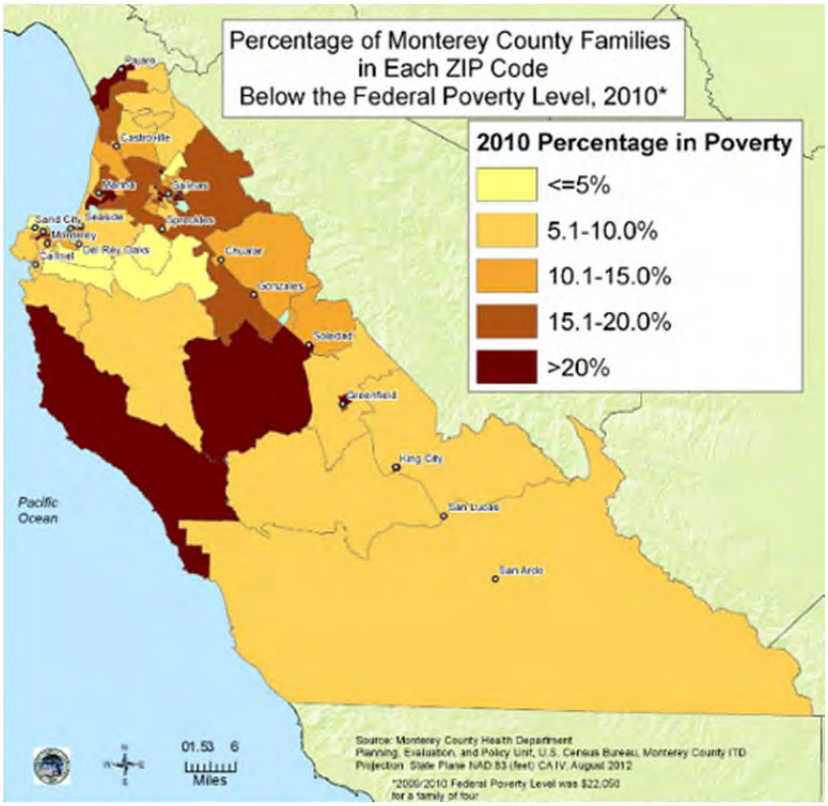


Exhibit 15. Household income

	Number				Percent			
Less than $24,999	27,292	26,887	25,622	24,122	23	22	20	19
$25,000-34,999	14,599	12,830	12,294	12,119	12	10	10	10
$35,000-49,999	20,973	14,342	19,245	16,985	17	12	15	14
$50,000-74,999	25,391	25,518	24,322	25,061	21	21	19	20
$75,000-99,999	14,469	17,297	14,969	15,346	12	14	12	12
$100,000-149,999	11,872	17,458	16,887	17,142	10	14	13	14
$150,000 or more	6,603	9,298	12,107	13,396	5	8	10	11

Columns may not total 100% due to rounding
Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

- In 2012, nearly 1 in 5 (19%) Monterey County households had incomes of less than $25,000 a year.
- The percentage of households making $150,000 or more doubled over the last decade, a rate of growth that was faster than any other income group.
- The percentage of households making $100,000 to $149,999 annually also increased in the last decade.

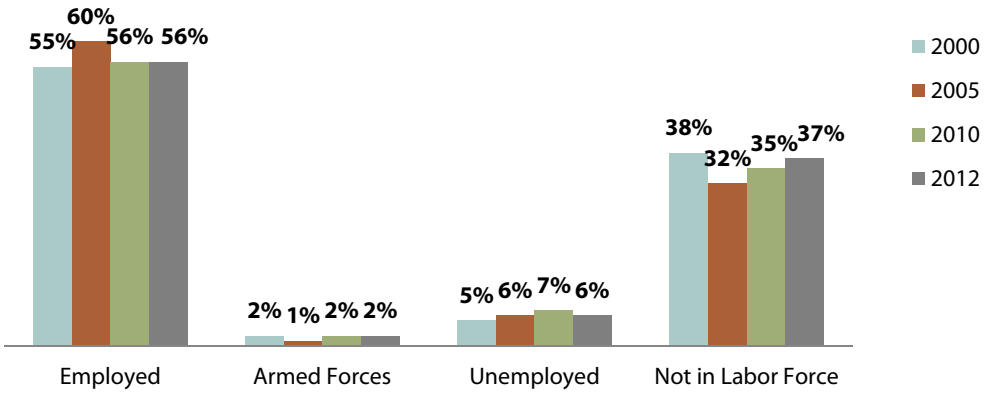
Exhibit 16. Median earnings for full-time year-round workers by gender, in dollars

	Dollars			
	2000	2005	2010	2012
Male	$38,444	$39,123	$41,185	$41,638
Female	$30,036	$31,473	$33,836	$35,017

Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

- The annual median earnings for men from 2000 to 2012 averaged $7,500 higher compared to that of women.
- From 2000 to 2012, median earnings rose by about $3,200 for men and about $5,000 for women.

Exhibit 17. Non-seasonal employment status (full or part time)

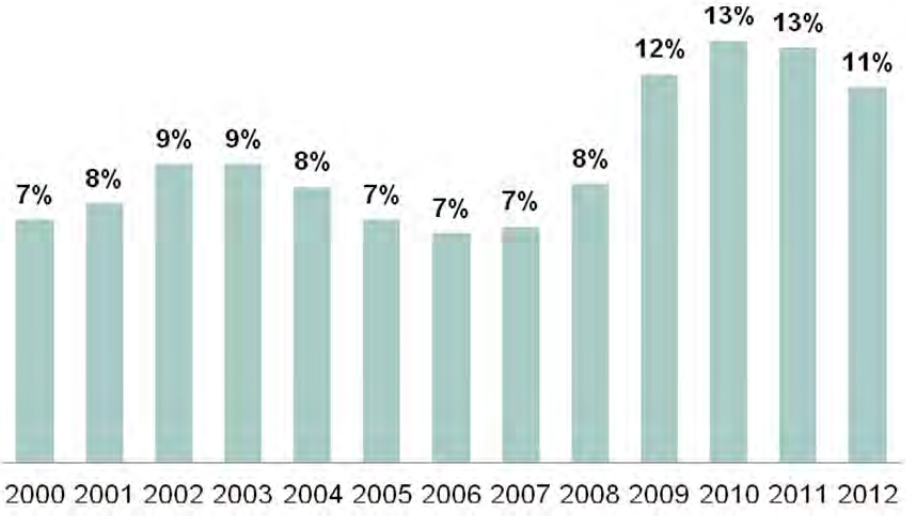


Note: Data not seasonally adjusted
Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

- The majority of residents (ranging from 55% to 60% in the prior decade) were employed full or part time.
- The percentage of non-seasonal unemployed residents rose by one percent from 2000 to 2012.

At its peak in November 2010, unemployment in Monterey County hit nearly 14 percent on a seasonally adjusted basis (not shown).[4] Since then, the unemployment rate has been falling fairly consistently, with a small exception during the first quarter of 2011. The County's unemployment rate averaged eleven percent in 2012, declining one percent below the 2011 average.

Exhibit 18. Monterey County average annual non-seasonal unemployment rates



Note: Data not seasonally adjusted
Source: Monterey County Employment Development Department

The Gini Index measures the degree of inequality in the distribution of family income, from the poorest to the richest, within a population.[5] A score of 0 reflects perfect equality, where all families would have equal income. A Gini score of 1 reflects maximum inequality, where for example, only one person has all the income.

Exhibit 19. Gini Index for Monterey County, California, and United States, 2009-2011

	Monterey County	California	United States
Index	0.4529	0.471	0.469

Source: U.S. Census Bureau, 2009-2011 American Community Survey

- The Gini index for Monterey County indicates incomes were slightly more equitable in Monterey County than they were in the United States and California overall.

Exhibit 20. Residents living at up to 200% of the federal poverty level

	2000	2005	2010	2012	2000	2005	2010	2012
Below 50%	21,152	23,459	25,798		15	17	16	12
50%-125%	52,575	49,378	63,702	78,390	38	36	39	45
126%-150%	21,739	20,611	23,409	25,615	16	15	14	15
151%-185%	29,077	31,894	37,349	35,452	21	23	23	21
186%-200%	12,910	12,516	14,721	13,086	9	9	9	8

*Some columns may not total 100% due to rounding
Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

- Nearly 40 percent of Monterey County residents (172,568 out of 426,762 in 2012) lived at or below 200% of the Federal Poverty level.
- In 2012, 200% of the federal poverty level equated to an annual household income of $46,100 for a family of four people.

Exhibit 21. Individuals living below poverty by race/ethnicity*

Asian (nH)				
Hispanic/Latino, any race	20	22	24	25
Multi-Race	14	11	9	12
Native American or Native Alaskan (nH)	22	-	61	-
Some Other Race (nH)	21	22	17	21
White alone (nH)	6	4	8	8

(nH) = non-Hispanic
*Percentages do not add up to 100% because the 2010 US Census allowed people to self- identify in more than one race/ethnic category.
Source: US Census Bureau, American Community Survey, 2000, 2015, 2010, 2012

- One quarter of the Hispanic/Latino population lived under the federal poverty level in 2012, indicating a disparity when compared to 8% of the White, non-Hispanic population.

Exhibit 22. Families living below poverty in the last 12 months by family structure

	Percent			
	2000	2005	2010	2012
Married-Couple Family	55	42	44	43
Male Householder, no Wife Present	10	11	17	12
Female Householder, no Husband Present	35	47	39	45
TOTAL	**100**	**100**	**100**	**100**

Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

- Of families living below the poverty level, the largest proportion (43%) were married couple families.
- The percentage of families living in poverty that were headed by married couples decreased from 2000 to 2012, while the percentages for single parent households increased.
- There were nearly four times as many single female householders living in poverty compared to single male householders in 2012.

The United States Food and Drug Administration (USDA) food affordability measure is the ratio of dollars to purchase the annual market basket of foods in USDA's low-cost plan for meals eaten at home, for a female-headed household with children under 18 years of age, relative to her annual inflation-adjusted income. In this 1-to-10 ranking, a score of "1" indicates the least ability to afford a market basket of nutritious food items relative to income; a score of "10" indicates the most ability to afford a market basket of nutritious food items relative to income.

Exhibit 23. Food affordability for female-headed households, 2006-2010

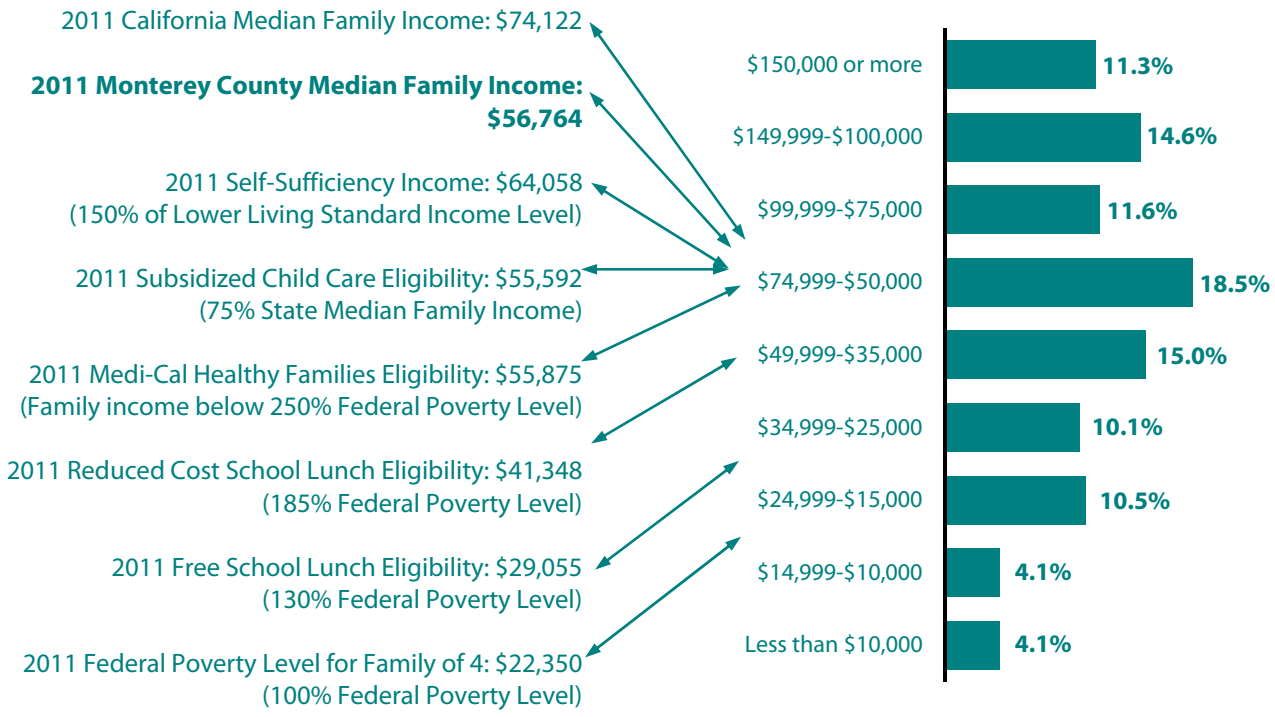
City/place	Average family size	Median income	Affordability Measure
Pajaro	4.5	$9,259	1
Las Lomas	3.9	$9,348	1
Chualar	5.3	$20,114	2
Soledad	3.7	$20,579	3
San Ardo	3.7	$22,750	3
Salinas	3.8	$22,784	3
Castroville	4.4	$22,885	3
Prunedale	3.0	$19,315	4
Gonzales	4.2	$28,355	4
King City	4.4	$31,743	4
Monterey	2.6	$23,468	5
Marina	3.4	$25,352	5

City/place	Average family size	Median income	Affordability Measure
Elkhorn	3.4	$26,719	5
Greenfield	4.4	$38,287	5
Seaside	3.3	$34,216	6
Pacific Grove	2.6	$36,908	8
Carmel Valley Village	2.6	$41,530	8
Carmel-by-the-Sea	2.3	$53,068	10
Del Rey Oaks	3.6	$97,813	10

Note: no data were available for Sand City.
Source: California Department of Public health, Healthy Communities Data and Indicators Project, January 2013.

- Single female householders with children under age 18 living in Pajaro or Los Lomas were least likely to afford the USDA's annual market basket of foods in USDA's low-cost plan for meals eaten at home.

Exhibit 24. Economic Benchmarks Compared to Family Income Distribution, 2011



Sources: U.S. Dept of Health & Human Services 2011 Poverty Guidelines. US Dept of Agriculture Child Nutrition Programs-Income Eligibility Guidelines, 2011. California Dept of Health Services Medi-Cal/Healthy Families Income Levels, 2011. California Dept of Education, Child Development Division, Eligibility for Subsidized Child Care, 2011. Monterey County Workforce Investment Board Lower Living Standard Income Level, 2011. California Department of Commerce. U.S. Census Bureau Median Income for 4-Person Families by State and County, 2011. Insight Center for Community Economic Development, Monterey County Self-Sufficiency Standard for 4-Person Families, 2011.

- Twenty-six percent of Monterey County families had incomes of $100,000 or more in 2011.
- Twenty-nine percent of Monterey County families had incomes of less than $34,999 in 2011.

Housing and Homelessness

Affordable housing is a challenge in Monterey County that contributes substantially to the high cost of living. High housing prices and limited vacancies are two forces that contribute to a lack of affordable housing. The federal government defines affordable housing as that which does not cost more than one-third of a family's income. Families will often share housing space to cope with the high cost of housing. Household crowding can become a health concern when conditions cause emotional stress and/or facilitate the spread of infectious disease.

Exhibit 25. Housing occupancy

	Number				Percent			
	2000	2005	2010	2012	2000	2005	2010	2012
Occupied Housing Units	121,236	123,630	125,446	124,171	92	90	90	89
Vacant Housing Units	10,472	13,903	13,588	14,700	8	10	10	11
TOTAL	**131,708**	**137,533**	**139,034**	**138,871**	**100**	**100**	**100**	**100**

Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

- Housing vacancies increased slightly from 8% in 2000 to 11% in 2012.

Exhibit 26. Housing prices

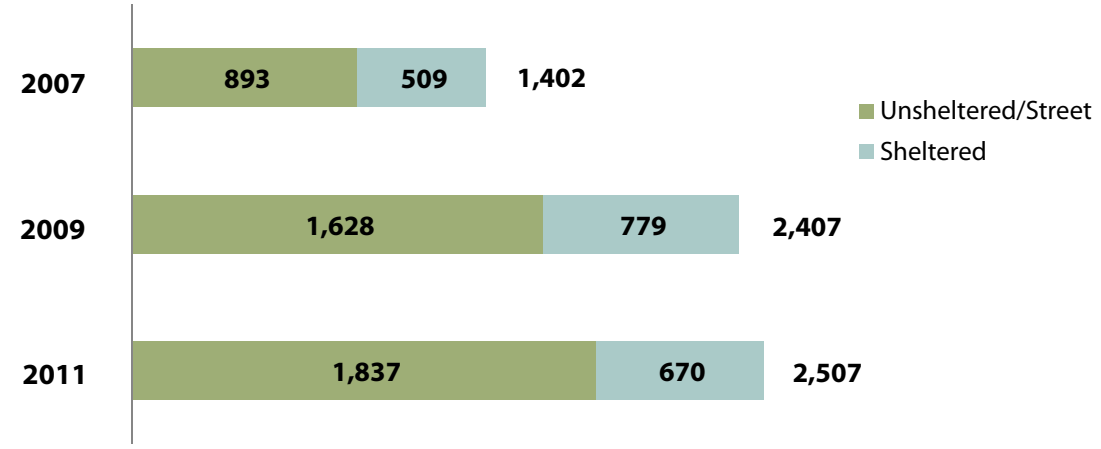
	Number							
	2000	2005	2010	2012	2000	2005	2010	2012
$0-199,999	19,011	4,468	12,299	15,318	33	7	19	25
$200,000-500,000	28,244	15,222	27,776	29,114	49	22	43	48
$500,000 or more	9,818	48,974	23,819	16,152	17	71	37	27
TOTAL	**57,073**	**68,664**	**63,894**	**60,584**	**100**	**100**	**100**	**100**

Source: US Census Bureau, American Community Survey, 2000, 2005, 2010, 2012

- Nearly half (48%) of all houses cost between $200,000 and $500,000 in 2012.
- The percentage of homes costing $500,000 or more increased from 17% of all homes in 2000 to 27% of all homes in 2012.

A point-in-time census of Monterey County children, youth, and adults who are homeless is conducted every other year. For planning services, it is useful to estimate the number of people who experience homelessness over the course of an entire year. This "annual estimation" is calculated according to a formula developed by the Corporation for Supportive Housing.

Exhibit 27. Total number of homeless individuals



Source: 2011 Monterey County Homeless Census, United Way Monterey County, Applied Survey Research

- The estimated number of homeless individuals grew from 1,402 in 2007 to 2,507 four years later, in 2011.
- The percent of homeless individuals who were unsheltered or living on the street more than doubled from 893 in 2007 to 1,837 in 2011.

Crime

Risk factors for crime and violence include high unemployment, poverty and drug trafficking in the community. The perpetuation of crime is associated with low social capital, which is often measured as limited connection and trust to others in the community, and/or limited civic involvement.

Exhibit 28. Crime rates

	Rate per 100,000				
Type of Crime	**2005**	**2006**	**2007**	**2008**	**2009**
Violent Crimes	437.1	475.6	515.0	459.8	488.1
Homicide	3.3	3.5	6.8	8.4	11.8
Forcible Rape	27.8	27.4	28.9	23.1	28.8
Robbery	133.9	141.4	150.0	136.8	151.4
Aggravated Assault	272.2	303.2	329.3	291.5	296.2
Property Crimes	1,815.1	1,721.1	2,100	1,632.7	1,586.8
Burglary	660.8	640.4	709.9	712.2	726.2
Motor Vehicle Theft	545.5	520.0	790.8	441.4	416.7
Theft Over $400	608.8	560.8	599.4	479.1	443.9
Theft $400 and Under	1,623.6	1,376.4	1,291.3	1,045.2	995.4
Total Theft	2,232.4	1,937.2	1,890.7	1,524.4	1,439.9
Arson	21.4	19.1	18.6	18.2	20.7

Source: California Department of Justice, Office of the Attourney General, retrieved in 2013

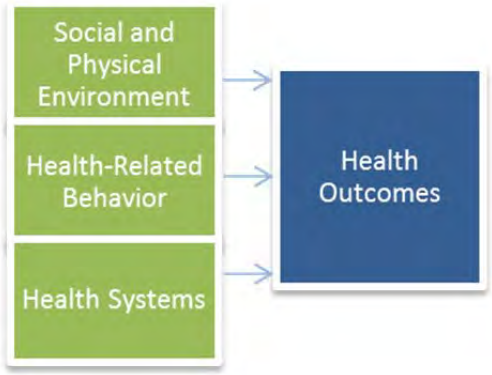
- Property crimes (theft) remained the most common type of crime between 2005 and 2009.
- All types of violent crimes (homicide, forcible rape, robbery, aggravated assault) increased from 2005 to 2009. With the exception of burglary, property crimes decreased from 2005 to 2009.

Quality of Life

Quality of life indicators measure the influences that social and environmental resources and conditions can have on population health outcomes. Examples of these include safe and affordable housing; access to quality education; stigma-free access to social, emotional, and economic supports; safe neighborhoods; available and accessible healthy foods; adequate local emergency/health services; and environments free of life-threatening toxins.

In 2008, the Institutes of Medicine recommended that 20 indicators be used to track population health in the U.S. The indicators in the health domain fell into two categories:

1. **Health outcomes related to social and physical environments**, which include life expectancy, self-reported health status, and chronic disease prevalence.
2. **Factors that influence health outcomes**, which include:
   - Health-related behaviors such as smoking, alcohol consumption, nutrition, and weight, and
   - Health Systems performance such as insurance, unmet medical needs, preventive services, and preventive hospitalizations.



Clinically, quality of life indicators are seen in individual health characteristics such as blood pressure, physical strength and endurance, oral health, and mental health. Other individual-level determinants include genes and personality, age and gender, and relationships.[6]

Focusing on quality of life indicators can help bridge the boundaries between social, mental, and medical health outcomes and the services that support them by determining disparate burdens of preventable injuries, disabilities, disease, and life expectancies related to geographic regions, race/ethnicity, and socio-economic levels.[7]

Civic Engagement

Exhibit 29. Teens who did volunteer work

Male			44.9*
	66.1*	74.6*	76.5*
Race/Ethnicity			
	56.8*	93.2*	93.2*
Black (nH)	–	–	–
	49.2	59.8	59.2
Multi-Race (nH)	100.0*	–	100.0*
	–	–	–
White (nH)	68.7*	80.6*	49.3*

*Statistically unstable, interpret with caution.
(nH) = non-Hispanic
Hyphen (-) equals estimate less than 500 people.
Source: California Health Interview Survey, 2003, 2009, 2011-2012.

- The percent of teens who did volunteer work appeared to fluctuate from a low of 56% to a high of 63% during the 2003-2012 timeframe.
- While data are statistically unstable, it appears that females were more likely to do volunteer work than males.

Exhibit 30. People prepared for a major disaster, 2009

	Percent
Gender	
Male	78.0
Female	77.2
Race/Ethnicity	
Asian (nH)	85.8*
Black (nH)	76.2*
Hispanic/Latino, any race	75.7
Multi-Race (nH)	70.9*
Native American/Alaskan Native (nH)	60.2*

	Percent
White (nH)	79.4

*Statistically unstable, interpret with caution.
(nH) = non-Hispanic
Source: California Health Interview Survey, 2013.

- Though statistically unstable, men and women were about equally prepared for a major disaster.
- By race/ethnic groups, Asian/Pacific Islander residents were more likely to be prepared (86%) and American Indian/Alaskan Native residents were least likely to be prepared (60%).

Exhibit 31. Registered and likely voters

Year	Eligible	Registered	Percent Registered	Percent Democratic	Percent Republican	Percent No Pref.	Percent Other
2012*	232,233	166,290	72	52	24	20	4
2010	238,281	160,221	67	53	26	18	4
2008*	233,761	158,391	68	50	27	19	4
2006	228,889	145,540	64	48	31	17	4
2004*	228,973	156,233	68	49	32	16	4

*Indicates a presidential election year
Source: California Secretary of State, 2004, 2006, 2008, 2010, 2012.

- In 2012, 72 percent of residents were registered to vote, with just over half registered as Democratic, one quartered registered as Republican, and the balance as "no preference" or other party.
- From 2004 through 2010, the percentage of registered Democrats increased while the percentage of registered Republicans decreased.

Social Supports

Social supports, defined here as quality interactions with family, friends, coworkers, and others, is a crucial quality of life indicator of a community's social environment that can have a "profound effect on individual health." Social support has been found to improve fetal growth for pregnant women as well as protect people from the negative psychological effects of life stress and negative physical conditions such as strokes and cardiovascular disease. Neighborhoods or communities in which residents feel social cohesiveness toward their neighbors tend to have lower mortality rates compared to neighborhoods that do not have strong social bonds.

Exhibit 32. Availability of others for understanding problems, 2003

Resident responses	Percent
No one is available	7.9
Someone is available a little	7.6

Resident responses	Percent
Someone is sometimes available	14.5
Someone is mostly available	26.8
Someone is always available	43.3

Source: California Health Interview Survey, 2013.

Exhibit 33. Availability of someone to help with daily chores when sick, 2003

Resident responses	Percent
No one is available	17.5
Someone is available a little	10.0
Someone is sometimes available	17.2
Someone is mostly available	20.0
Someone is always available	35.2

Source: California Health Interview Survey, 2013.

Exhibit34. Availability of someone who loves you and makes you feel wanted, 2003

Resident responses	Percent
No one is available	3.1
Someone is available a little	7.5
Someone is sometimes available	8.8
Someone is mostly available	22.0
Someone is always available	58.6

Source: California Health Interview Survey, 2013.

Exhibit 35. Availability of others for relaxation purposes, 2003

Resident responses	Percent
Someone is sometimes available	21.9
Someone is mostly available	31.6
Someone is always available	30.1

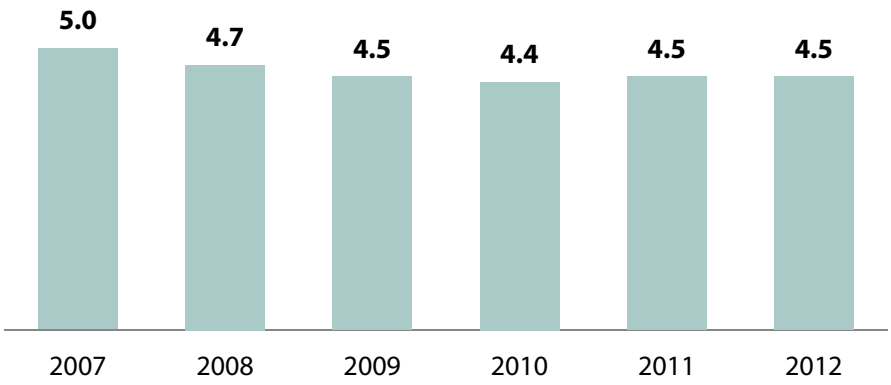
Source: California Health Interview Survey, 2013.

- Taken together, these measures of social support and connectedness indicate that 55% to 81% of Monterey County residents have someone "mostly available" or "always available" in their lives, with this range varying based on the four support functions described above. Residents with "no one" or someone "a little" available range from 11% to 28%.

Public and Medical Transportation

Monterey Salinas Transit (MST) covers 1/5th of California's coastline with 60 routes and comprehensive paratransit services. While ridership has dropped off in recent years, MST has recorded a 10-fold increase in ridership since 1972, growing from 415,000 passengers in its first year to 4.5 million in 2012.

Exhibit 36. MST annual passenger boarding (in millions)



Source: Monterey Salinas Transit 2013

MST services are divided into two major categories; an ADA compliant paratransit program (RIDES), and travel services for riders who do not require paratransit services.

MST Fixed route:
Service Area: 280 square miles
Fleet Size: 111
Budget FY 2012: $29,175,938
Passengers Carried: 4,333,843
Farebox Recovery Ratio: 28.1%
Number of Stops in Service Area: 1,308
Number of Miles Traveled: 4,248,467
Number of Routes: 60
Number of Employees: 236

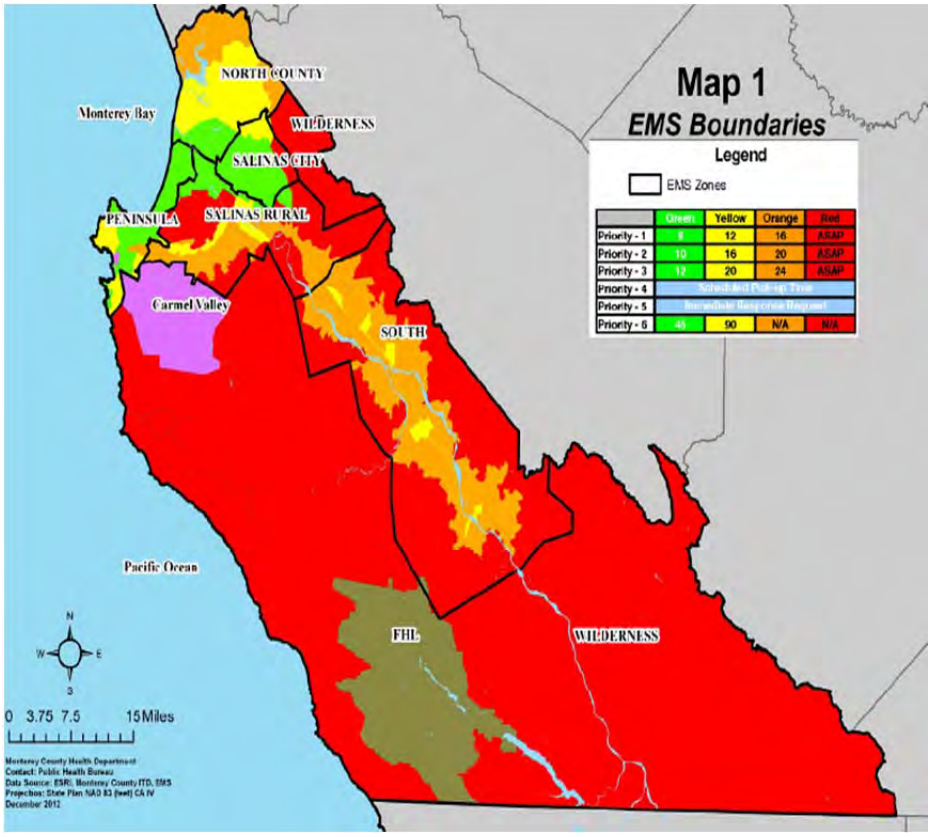
MST RIDES:
Fleet Size: 32
Budget FY 2012: $2,714,000
Passengers Carried: 115,045
Farebox Recovery Ratio: 15.2%
Number of Miles Traveled: 1,050,114

MST provides transit connections between Monterey County and public transit systems in neighboring Santa Cruz, San Luis Obispo, and Santa Clara Counties. Routes are categorized into four types: Local, Primary, Regional and Commuter. Discounts are available for those age 18 and younger, and aged 65 and older; active duty military, individuals with disabilities, and Medicare Card holders

MST's Special Medical Trips provide medical transportation two days per month to the Bay Area. The program is open to all Monterey County residents. MST has established a taxi voucher program, in conjunction with the Monterey County Regional Taxi Authority, to assist seniors and persons with disabilities in accessing important locations within their community.

Emergency medical transportation is provided through Monterey County Health Department Emergency Medical Services (EMS), which coordinates and evaluates emergency medical services to ensure that emergency medical care is available and consistent at the emergency scene, during transport and in the emergency room. Ambulance services are currently contracted through American Medical Response (AMR), which provides emergency and non-emergency medical transport. AMR Monterey County employs approximately 200 paramedics and emergency medical technicians who handle approximately 25,000 trips annually. Pre-hospital aircraft transportation to trauma centers in neighboring counties is provided by EMS through contracts with CALSTAR (California Shock Trauma Air Rescue), Mercy Air Service Inc., and Reach Air Medical Services. The Monterey County EMS System consists of over 100 fire and law enforcement agencies, ambulance providers, hospitals, and emergency communications.

Exhibit 37. Ambulance Zone Response



Source: Monterey County Health Department, Emergency Medical Services Unit, 2011.

Public Park Use

Exhibit 38. Children visiting a public park, playground, or open space in the prior month by Race/Ethnicity

	Percent	
	2009	2011-12
Asian (nH)	89.7*	100.0*
Black (nH)	100.0*	47.7*
Hispanic/Latino, any race	78.3*	92.6*
Multi-Race (nH)	100.0*	100.0*
Native American/Alaskan Native (nH)	-	100.0*
White (nH)	87.6*	85.3*
All Children (ages 1 – 11 years)	**80.9***	**90.4***

* Statistically unstable; interpret with caution.
(nH) = non-Hispanic
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- Overall, a large majority of children reported visiting a park, playground or open space.

Exhibit 39. Children visiting a park, playground or open space in the prior month by gender

	Percent	
	2009	2011-12
Male	78.4*	90.7*
Female	83.1*	90.0*
All Children (ages 1 – 11 years)	**80.9***	**90.4***

* Statistically unstable; interpret with caution.
Source: California Health Interview Survey, 2013.

- Girls and boys ages 1 to 11 were equally as likely to have visited a park, playground or open space.

Exhibit 40. Teens visiting a park, playground or open space in the prior month by race/ethnicity

	Percent		
	2007	2009	2011-12
Asian (nH)	–	–	–
Black (nH)	–	–	–
Hispanic/Latino, any race	81.7*	78.8*	72.0*
Multi-Race (nH)	59.3*	–	100.0*
Native American/Alaskan Native (nH)	–	–	–

	Percent		
	2007	2009	2011-12
White, non-Hispanic	64.1*	56.7*	72.0
All Teens (ages 12 – 17 years)	**77.0***	**74.3***	**72.8***

* Statistically unstable; interpret with caution.
(nH) = non-Hispanic
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- Approximately three-quarters of teens reported visiting a park, playground or open space in the prior month; this percentage decreased in 2011-12 compared to 2007.

Exhibit 41. Teens visiting a park, playground, or open space in the prior month by gender

	Percent		
	2007	2009	2011-12
Male	64.6*	89.4*	69.2*
Female	88.7*	56.1*	77.4*
All Teens (ages 12 – 17 years)	**77.0***	**74.3***	**72.8***

* Statistically unstable; interpret with caution.
Source: California Health Interview Survey, 2013.

- The percentages of male and female teens visiting a park, playground, or open space in the prior month appear to have fluctuated in recent years, although data are statistically unstable.

Neighborhood and School Safety

Exhibit 42. Perceptions of neighborhood safety all or most of the time by race/ethnicity

	Percent	
	2005	2007
Asian (nH)		83.5*
Black (nH)	100.0*	100.0*
Hispanic/Latino, any race	91.0	91.8*
Multi-Race (nH)	86.9*	98.7*
Native American/Alaskan Native (nH)	100.0*	–
White (nH)	97.2*	96.0*

* Statistically unstable; interpret with caution.
(nH) = non-Hispanic
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- Perceptions of neighborhood safety may be lower for Asian and White race/ethnic groups, however, these data are statistically unstable and should be interpreted with caution.

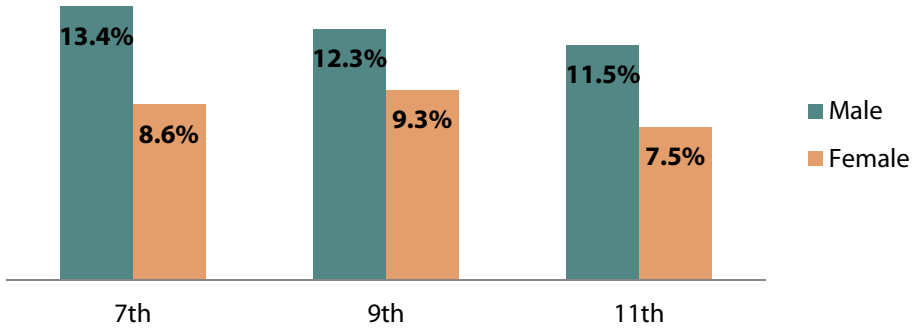
Exhibit 43. Perceptions of neighborhood safety all or most of the time by gender

	Percent	
	2005	2007
Male	93.5*	95.6*
Female	94.8	90.6

Source: California Health Interview Survey, 2013.

- There may be a growing disparity in perceptions of neighborhood safety most or all the time for males compared to females.

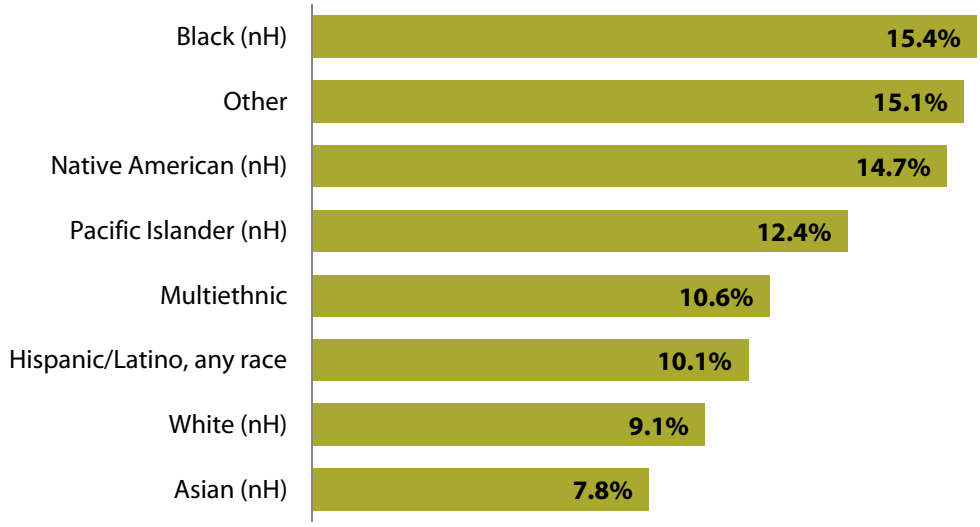
Exhibit 44. Students who feel unsafe or very unsafe at school by gender and grade (2008-10)



Source: California Healthy Kids Survey, 2013.

- Males were more likely to feel "unsafe" or "very unsafe" than females.
- Younger students were generally more likely to feel "unsafe" or "very unsafe" than older students.

Exhibit 45. Students who feel unsafe or very unsafe at school by race/ethnicity, 2008-2010



Source: California Healthy Kids Survey, 2013.

- Black, Other race/ethnicity, and Native American students were most likely to report feeling unsafe or very unsafe at school.

Health Indicators

In 1948, the World Health Organization (WHO) defined health as "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity."[8] Measuring physical, mental, and social health and wellness is done using standard and accepted indicators, which are measurable characteristics that describe:

- The health of a population – that is, life expectancy, mortality, disease incidence or prevalence, or other states of health;
- Determinants of health – such as health behaviors, health risk factors, physical environments, and socioeconomic environments; and
- Health care access, cost, quality, and patient use.[9]

Health status measures traditionally include blood pressure, height and weight, serum cholesterol, pulmonary function, physical fitness and the like. An important new perspective came approximately 30 years ago with the publication of the International Classification of Functioning, Disability, and Health[10] by the WHO, which focused increasing attention on the ability to function in day-to-day life. This way of looking at health indicators is from the standpoint of functionality, biomedical status, fitness, and psychosocial status.

Healthy People 2020, our nation's benchmarks for health objectives, uses health indicators to measure the country's progress toward achieving improvements in these areas:

- General population health status
- Health-related quality of life and well-being
- Environmental determinants of health
- Equity in accessibility and quality care[11]

Indicators of health serve as launching points for creating health policy, program and technological improvements, research, and innovative solutions for a society in which all people live long, healthy lives.[12]

General Health Status

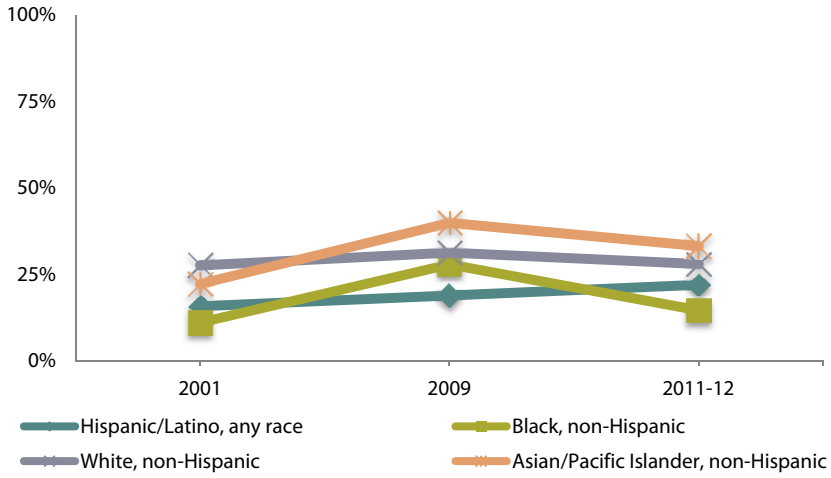
Exhibit 46. General health status by age group

	Percent											
									2011-12			
Good	27.6	41.7	30.5	26.0	32.5	43.1	36.7	32.4	21.2	22.1*	31.4	37.8
Poor	–	1.6*	2.9	9.0	–	2.5*	4.5*	7.0*	1.8*	5.7*	4.6*	10.8*

*Statistically unstable; interpret with caution.
- (hyphen) = estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- Young children ages 0-11 were most likely to report excellent health (53% in 2011-2012) compared to other age groups. The majority of children ages 12-17 (45%) had very good health, while the majority of adults ages 18-64 reported being in good health (31%).

Exhibit 47. Excellent health status by race/ethnicity



Source: California Health Interview Survey, 2013.

- Compared to 2001, more people of every race or ethnic group reported excellent health in 2011-12, although some of these percentages are statistically unstable and should be interpreted with caution.

Exhibit 48. General health status by race/ethnicity

	2001				2009				2011-12			
	API	Bl	H/L	Wh	API	Bl	H/L	Wh	API	Bl	H/L	Wh
Excellent	22.3*	11.1*	15.8	27.6	39.9*	27.9*	18.9	31.3	33.2*	14.6*	22.0	28.0
Very Good	28.7	30.8*	22.0	35.9	22.7*	32.3*	16.5	35.7	32.1*	50.1*	18.5	34.9
Good	33.1	26.4*	36.6	23.6	18.3*	12*	46.2	24.3	10.7*	12.4*	35.9	23.3
Fair	16*	17.4*	23.0	10.2	11.8*	24*	14.5	5.9	11.3*	22.9*	18.1	10.2
Poor	–	14.4*	2.6*	2.7	7.4*	–	3.9*	2.9*	12.7*	–	5.4*	3.6*

*Statistically unstable; interpret with caution
Note: API=Asian/Pacific Islander; Bl=Black; H/L=Hispanic/Latino; Wh=White, non-Hispanic.
- (hyphen) = estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- Over the years examined, the percentage of White, non-Hispanic residents who reported being in excellent or very good health generally far exceeded the percentage of Hispanic residents.

Exhibit 49. General health status by gender

											2011-12	
	M	F	M	F	M	F	M	F	M	F	M	F
Excellent	20.6	22.0	20.9	20.1	28.5	23.7	23.7	21.6	20.6	27.7	20.5	29.9
Very Good	28.5	28.3	29.8	26.3	30.7	23.8	26.7	24.6	23.1	26.1	25.8	25.1
Good	32.0	29.0	31.0	32.8	25.1	33.4	28.4	30.8	39.6	32.4	35.2	23.4
Fair	15.7	18.3	16.2	17.5	13.6	13.4	18.5	16.0	12.0	11.0	13.8	16.5
Poor	3.1	2.4	2.1*	3.3*	2.1*	5.6	2.7*	7.0	4.7*	2.8*	4.7*	5.2

*Statistically unstable; interpret with caution
Source: California Health Interview Survey, 2013.

- More females reported excellent health in 20011-12 (30%) compared to 2001 (22%); the percentages for males stayed the same.
- Percentages of both males and females who reported fair health status decreased in 2011-12 when compared to 2009.

Births and Birth Outcomes

For children, health care begins prior to birth with quality prenatal care. Preconception screening and counseling offer opportunities to identify and mitigate parental risk factors before pregnancy begins. Examples include mother's daily folic acid consumption (a protective factor), mother's alcohol use and substance use, and mother's use or exposure to smoking (risk factors).

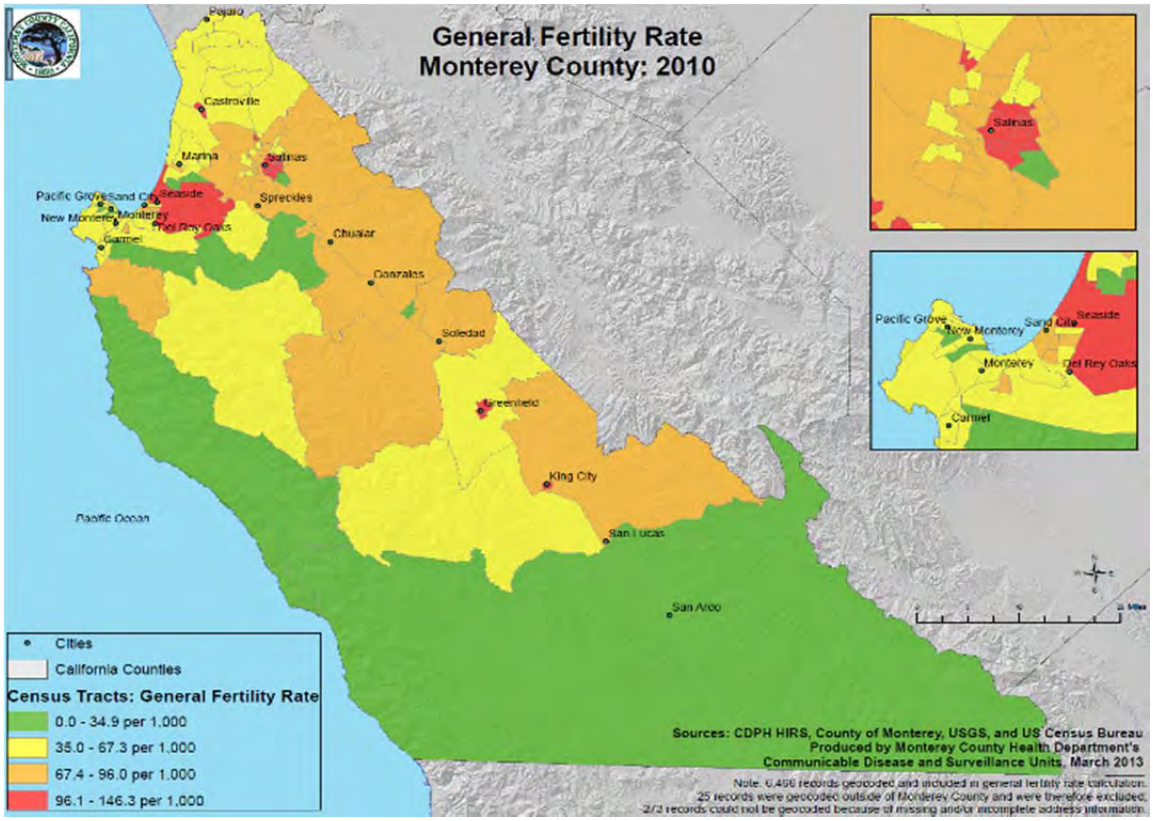
Timely, high-quality prenatal care can help to prevent poor birth outcomes that may result in fetal or infant death, preterm delivery, low birth weight, and other complications that may lead to disability.[13] More than half of all infant deaths are due to birth defects, disorders related to short gestation, sudden infant death syndrome, and respiratory distress syndrome.[14]

Teen mothers are themselves at risk for poor health outcomes: they are more likely to drop out of high school and thereby limit possibilities for employer-based health coverage; more likely to live in poverty; and more likely to have difficulty fulfilling their role as a parent.[15]

Social inequities and environmental conditions, however, can exacerbate birth and infant health disparities. Place-based stressors, such as neighborhood poverty, income inequality, poor housing, and social isolation, can influence birth outcomes in two ways: by affecting birth outcomes directly, and by increasing exposures to environmental toxins, such as lead.[16]

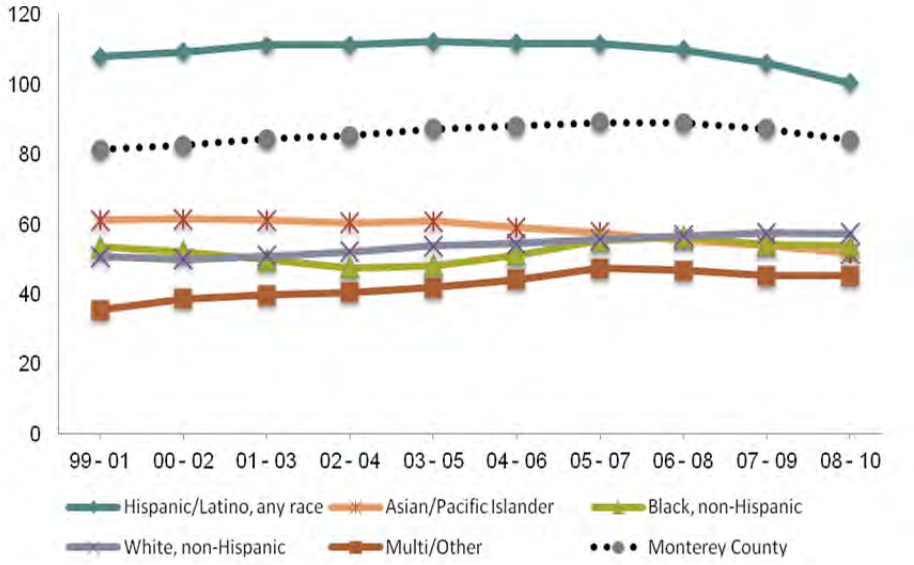
Fertility and birth rates

Exhibit 50. Monterey County general fertility rate per 1,000 females by census tracts



- In 2010, highest fertility rates were seen in Castroville, Salinas, Greenfield, King City, and in the Seaside/Marina coastal area.

Exhibit 51. General fertility rates per 1,000 females by race/ethnicity



Years	Rate per 1,000 99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Asian/Pacific Islander	61.0	61.3	61.0	60.3	60.8	58.8	57.6	55.3	53.7	51.5
African American	53.3	52.0	49.7	47.5	48.0	51.0	55.2	56.3	54.2	53.7
Hispanic, All Races	107.8	109.3	111.2	111.2	112.0	111.6	111.5	109.9	106.0	100.3
Multi/Other races (nH)	35.4	38.6	39.6	40.5	41.8	44.1	47.2	46.7	45.2	45.1
White, non-Hispanic	50.7	49.8	50.8	51.9	53.6	54.4	55.5	56.5	57.4	57.2
Monterey County	**81.3**	**82.4**	**84.3**	**85.3**	**87.2**	**87.9**	**89.0**	**88.8**	**87.1**	**83.9**

(nH) = non-Hispanic

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Hispanic/Latino residents had the highest fertility rate in Monterey County, with 100 births per 1,000 females in 2008-2010. All other race/ethnic groups were well below the county rate of 84 births per 1,000 females.

This 2013 Monterey County Community Health Assessment provides disparity analysis between race/ethnic, age groups, and gender, and also disparities over time. A disparity between groups is an inequality in opportunity, treatment, or status. A referent group is chosen as the standard to which other groups are compared, and in this report, the reference groups were White for race/ethnicity, male for gender, and age 16 to 34 for age groups. A disparity over time can demonstrate if change occurs at statistically different rates between groups. Either of these health outcome conditions likely deserves scrutiny.

Exhibit 52. Fertility rate disparity and trend analysis by female race/ethnicity

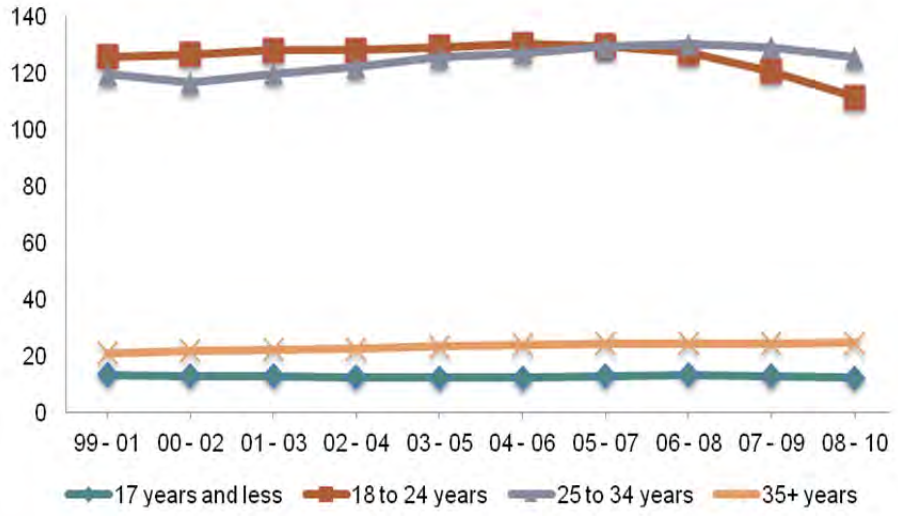
Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
Asian/Pacific Islander (nH)	**Significantly lower**	Not statistically significant
Black (nH)	Not statistically significant	Not statistically significant
Hispanic/Latino, any race	**Significantly higher**	Not statistically significant
Multiple/Other races (nH)	**Significantly lower**	Not statistically significant
White (nH)	Referent group	Not statistically significant

(nH) = non-Hispanic

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Exhibit 53. Births rates per 1,000 population by mothers' age group



	Rate per 1,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
17 years and less	13.4	13.0	13.1	12.5	12.5	12.3	13.0	13.5	13.1	12.5
18 to 24 years	125.7	126.7	128.2	128.2	129.3	130.3	129.7	127.2	120.7	111.6
25 to 34 years	119.7	116.7	119.9	122.3	125.7	127.1	129.5	130.3	129.3	125.6
35+ years	21.1	21.9	22.3	22.6	23.6	24.0	24.6	24.4	24.6	24.7

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

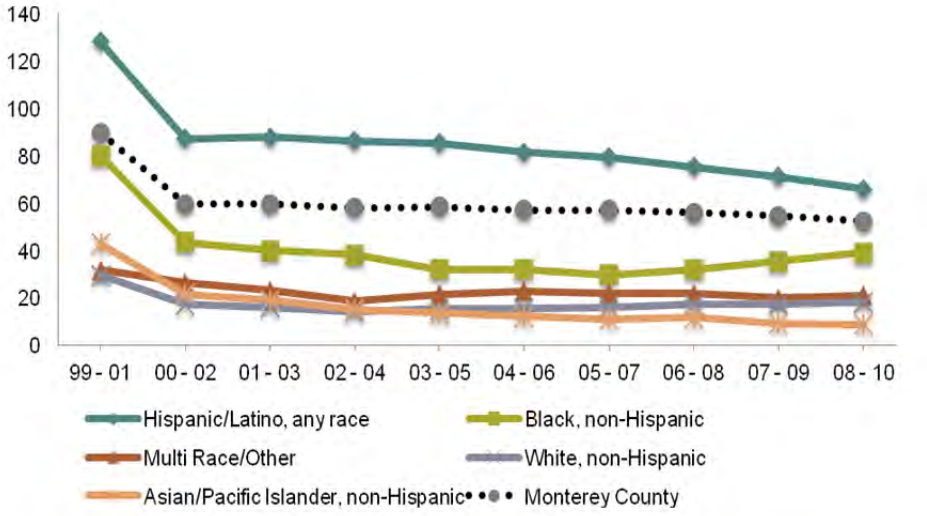
- In the last three time periods measured (2006-2010 inclusively), rates of births to women in the 25 to 34 year age group surpassed rates for the 18 to 24 year age group.
- Rates of births to women age 17 and less remained relatively unchanged from 1999 through 2010.

Exhibit 54. Birth rate disparity and trend analysis by mothers' age group

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
17 years and less	**Significantly lower**	Not statistically significant
18 to 24 years	**Significantly lower**	Not statistically significant
25 to 34 years	Referent group	Not statistically significant
35+ years	**Significantly lower**	Not statistically significant

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Exhibit 55. Rates of births to teen mothers (age 15 to 19) per 1,000 population by mothers' race/ethnicity



	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Asian/Pacific Islander (nH)	43.1	21.6	19.1	15.4	13.8	12.4	11.2	12.0	9.3	9.0
Black (nH)	80.4	43.5	40.3	38.3	32.1	32.1	29.8	32.2	35.6	39.2
Hispanic/Latino, any race	128.4	87.4	88.0	86.4	85.6	81.7	79.7	75.4	71.5	66.2
Multiple/Other races (nH)	32.0	26.5	23.2	18.7	21.6	23.1	22.2	22.0	20.2	21.3
White (nH)	29.8	17.4	16.1	14.4	15.6	15.6	16.3	17.4	17.5	18.2
Monterey County	**89.8**	**59.7**	**59.7**	**58.3**	**58.7**	**57.2**	**57.2**	**56.1**	**54.8**	**52.5**

(nH) = non-Hispanic
Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- In 2008-2010, Hispanic teens age 15 to 19 consistently had higher birth rates than all other teen race/ethnic groups, with 66 births per 1,000 population. Black teens age 15 to 19 had the next highest teen birth rate at 39 births per 100,000 population.

- The rate of births to teens age 15 to 19 for all race/ethnic groups dropped dramatically from 1999 to 2000.

Exhibit 56. Births to teens mothers (age 15 to 19) disparity and trend analysis by mothers' race/ethnicity

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
Asian/Pacific Islander (nH)	**Significantly lower**	**Significantly decreased**
Black (nH)	**Significantly higher**	**Significantly decreased**
Hispanic/Latino, any race	**Significantly higher**	**Significantly decreased**
Multiple/Other races (nH)	Not statistically significant	Not statistically significant
White (nH)	Referent group	Not statistically significant

(nH) = non-Hispanic

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Exhibit 57. Birth weight by percentage of all births, 2008-2010

	Percent 2008-10
Very low birth weight (<1,500 grams)	0.8
Low birth weight (<2,500 grams)	4.5
Normal birth weight (2,500 – 3,999 grams)	84.6
Excessive birth weight (>4,000 grams)	10.1

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Approximately 5% of all infants were born at low or very low birth weight from 2008 to 2010.
- Approximately 10% of all infants were born with excessive weight between 2008 and 2010.

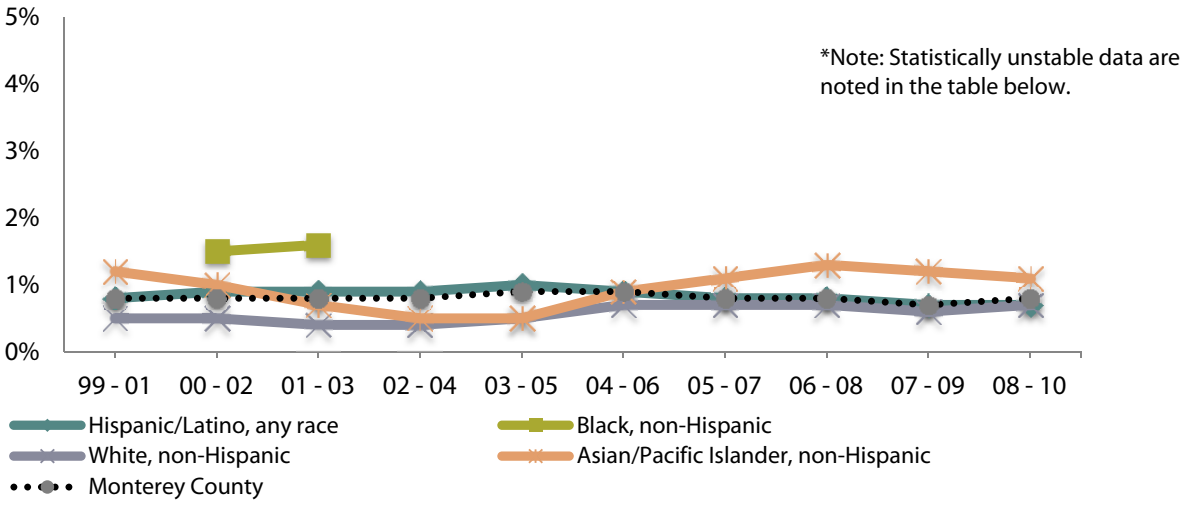
Exhibit 58. Very low birth weight by mothers' age group

25 to 34 years	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.7	0.7	0.8
35+ years	0.8*	0.8	0.9	0.9	1.2	1.4	1.4	1.3	1.0	1.1
Monterey County	**0.8**	**0.8**	**0.8**	**0.8**	**0.9**	**0.9**	**0.8**	**0.8**	**0.7**	**0.8**

*Statistically unstable; interpret with caution.
S=data are suppressed to preserve confidentiality.
Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- The rate of very low birth weight infants remained fairly steady for all age groups.

Exhibit 59. Very low birth weight by mothers' race/ethnicity



	Percent									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Asian/Pacific Islander (nH)	1.2*	1.0*	0.7*	0.5*	0.5*	0.9*	1.1*	1.3*	1.2*	1.1*
Black (nH)	S	1.5*	1.6*	S	S	S	S	S	S	S
Hispanic/Latino, any race	0.8	0.9	0.9	0.9	1.0	0.9	0.8	0.8	0.7	0.7
Multiple/Other races (nH)	S	S	S	S	S	S	S	S	S	S
White (nH)	0.5	0.5	0.4*	0.4*	0.5	0.7	0.7	0.7	0.6	0.7
Monterey County	**0.8**	**0.8**	**0.8**	**0.8**	**0.9**	**0.9**	**0.8**	**0.8**	**0.7**	**0.8**

(nH) = non-Hispanic
*Statistically unstable; interpret with caution.
S=data are suppressed to preserve confidentiality.

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Asian/Pacific Islander mothers were generally more likely to have a very low birth weight infant than other race/ethnic groups, although this difference was not statistically significant.

Exhibit 60. Very low infant birth weight disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
17 years and less	Not significantly different	Not statistically significant
18 to 24 years	Not significantly different	Not statistically significant
25 to 34 years	Referent group	Not statistically significant
35+ years	Not significantly different	Not statistically significant
Asian/Pacific Islander (nH)	Not significantly different	Not statistically significant
Black (nH)	Not significantly different	Not statistically significant
Hispanic/Latino, any race	Not significantly different	Not statistically significant
Multiple/Other races (nH)	Not significantly different	Not statistically significant
White (nH)	Referent group	Not statistically significant

(nH) = non-Hispanic
Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

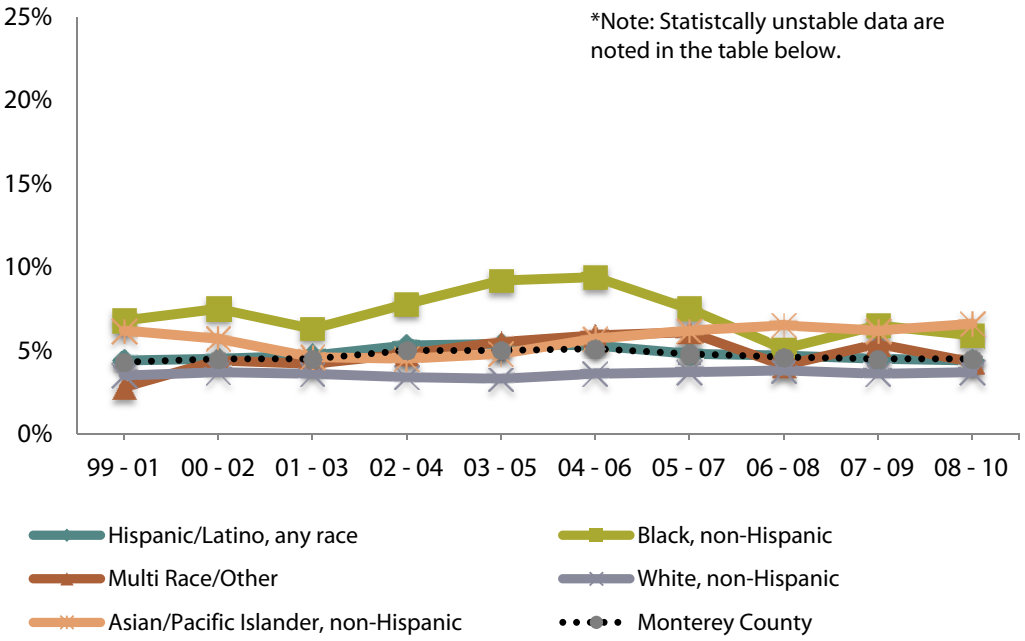
Exhibit 61. Low birth weight by mothers' age group

	5.6	5.0	7.0	7.7	8.3	7.3	6.8	6.7	6.4	5.5
18 to 24 years	4.3	4.4	4.6	5.5	5.4	5.4	4.7	4.5	4.3	4.5
25 to 34 years	4.3	4.4	4.0	4.1	4.3	4.5	4.4	4.2	4.1	4.1
35+ years	4.2	4.8	5.5	6.0	5.7	5.8	5.6	6.0	5.5	5.7
Monterey County	**4.3**	**4.5**	**4.5**	**5.0**	**5.0**	**5.1**	**4.8**	**4.6**	**4.5**	**4.5**

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Younger mothers (age 17 and less) and older mothers (35 years and older) were slightly more likely to have a low birth weight infant.

Exhibit 62. Low birth weight by mothers' race/ethnicity



	Percent									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Asian/Pacific Islander (nH)	6.2	5.7	4.6	4.5	4.8	5.7	6.2	6.5	6.2	6.6
Black (nH)	6.8	7.5	6.3	7.8	9.2	9.4	7.5	5.1*	6.5*	5.9*
Hispanic/Latino, any race	4.4	4.5	4.7	5.3	5.4	5.3	4.8	4.7	4.5	4.4
Multiple/Other races (nH)	2.8*	4.4*	4.2*	4.8*	5.5*	5.9*	6.1*	4.1*	5.4*	4.3*
White (nH)	3.5	3.7	3.6	3.4	3.3	3.6	3.7	3.8	3.6	3.7
Monterey County	**4.3**	**4.5**	**4.5**	**5.0**	**5.0**	**5.1**	**4.8**	**4.6**	**4.5**	**4.5**

(nH) = non-Hispanic

*Statistically unstable; interpret with caution.

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Black and Asian/Pacific Islander mothers were generally more likely to have a low birth weight infant than other race/ethnic groups. Rates declined slightly, but not significantly, for Black women from 1999 to 2010.

Exhibit 63. Low infant birth weight disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
17 years and less	Not significantly different	Not statistically significant
18 to 24 years	Not significantly different	Not statistically significant
25 to 34 years	Referent group	Not statistically significant
35+ years	**Significantly higher**	Not statistically significant
Asian/Pacific Islander (nH)	**Significantly higher**	Not statistically significant
Black (nH)	Not significantly different	Not statistically significant
Hispanic/Latino, any race	Not significantly different	Not statistically significant
Multiple/Other races (nH)	Not significantly different	Not statistically significant
White (nH)	Referent group	Not statistically significant

(nH) = non-Hispanic

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

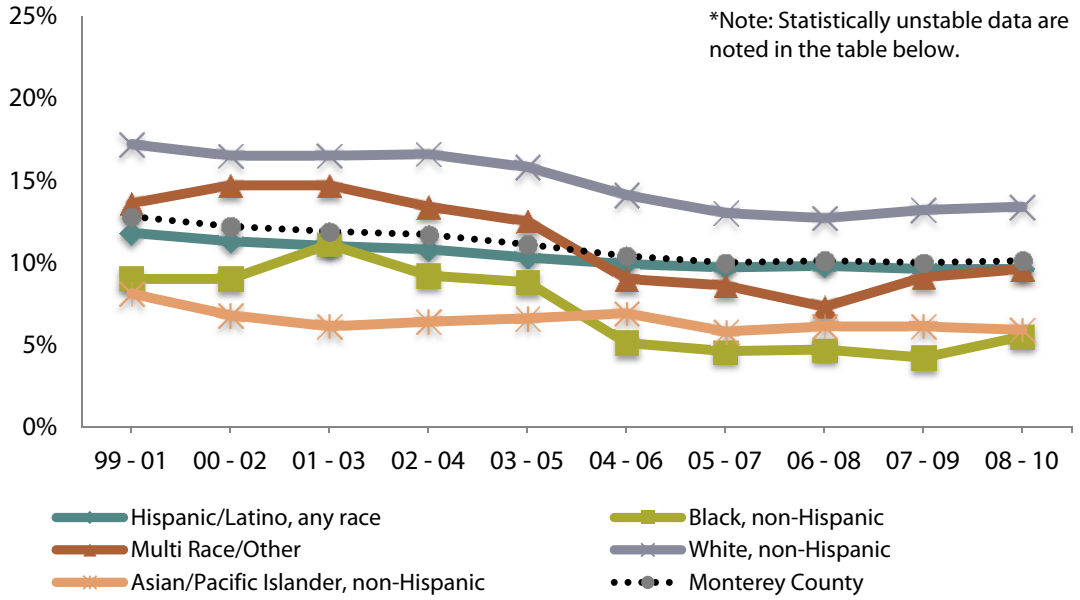
Exhibit 64. Excessive infant weight by mothers' age group

	6.8	6.2	5.7	6.2	6.0	6.2	5.4	4.7	4.0	5.1
18 to 24 years	9.9	9.3	9.8	9.2	9.0	8.3	8.7	8.4	8.0	7.7
25 to 34 years	14.9	14.4	13.7	13.6	12.7	11.8	10.9	11.1	11.1	11.2
35+ years	15.9	14.6	13.7	13.7	13.0	12.5	11.9	12.8	13.0	13.3
Monterey County	**12.8**	**12.2**	**11.9**	**11.7**	**11.1**	**10.4**	**10.0**	**10.1**	**10.0**	**10.1**

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Older mothers were generally more likely to give birth to infants with excessive weight (birth weight greater than 4,000 grams) than other age groups and the county average.
- The incidence of infants with excessive weight appeared to decrease slightly for all age groups between 1999 and 2010.

Exhibit 65. Excessive infant weight by mothers' race/ethnicity



Hispanic/Latino, any race	11.8	11.3	11.0	10.8	10.3	9.9	9.7	9.8	9.6	9.6
White (nH)	17.2	16.5	16.5	16.6	15.8	14.1	13.0	12.7	13.2	13.4

(nH) = non-Hispanic
*Statistically unstable; interpret with caution.
Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- White, non-Hispanic mothers were generally more likely to give birth to an infant with excessive weight than mothers of other race/ethnic groups.
- The proportion of infants with excessive weight significantly decreased for Black and Multiple/Other races from 1999 to 2010.

Exhibit 66. Excessive infant birth weight disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
25 to 34 years	Referent group	Not statistically significant
35+ years	**Significantly higher**	Not statistically significant
Asian/Pacific Islander (nH)	**Significantly lower**	Not statistically significant
Hispanic/Latino, any race	**Significantly lower**	Not statistically significant
Multiple/Other races (nH)	Not significantly different	**Significantly decreased**
White (nH)	Referent group	Not statistically significant

(nH) = non-Hispanic
Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Reproductive Health

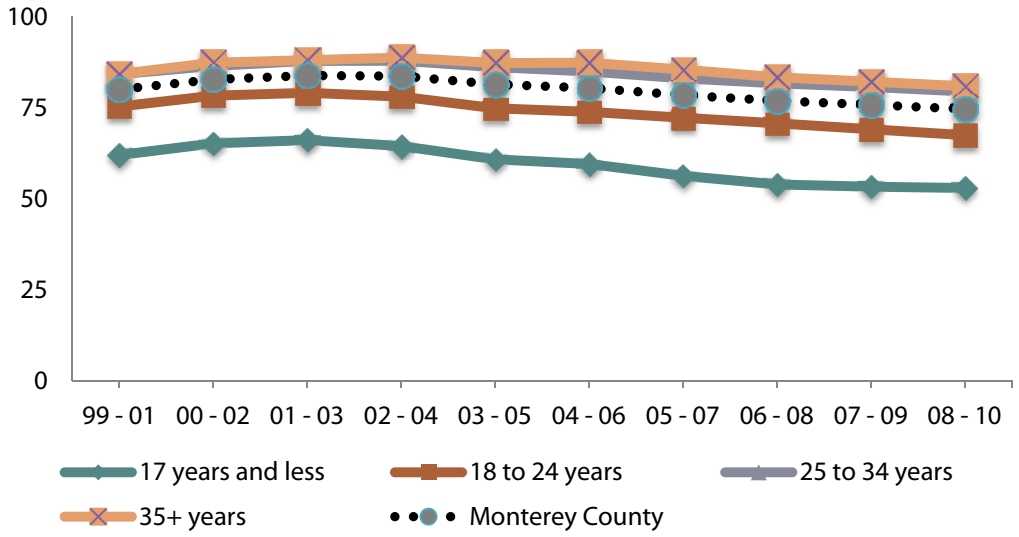
Having a healthy pregnancy is one of the best ways to promote a healthy birth. Getting early and regular prenatal care improves the chances of a healthy pregnancy because prenatal care can help detect and prevent health risks for women and their infants.[17] Health risks that can affect pregnancy and childbirth include:

- Hypertension and heart disease
- Diabetes
- Depression
- Genetic conditions
- Sexually transmitted diseases (STDs)
- Tobacco use and alcohol abuse[18]
- Inadequate nutrition
- Unhealthy weight

Many factors can affect pregnancy and childbirth, including:

- Preconception health status
- Mother's and father's age
- Access to appropriate and adequate health care
- Environmental and other socio-demographic factors such as family income, access to adequate health care, and educational attainment
- Chronic stress[19]

Exhibit 67. Entry into prenatal care during first trimester by mothers' age group

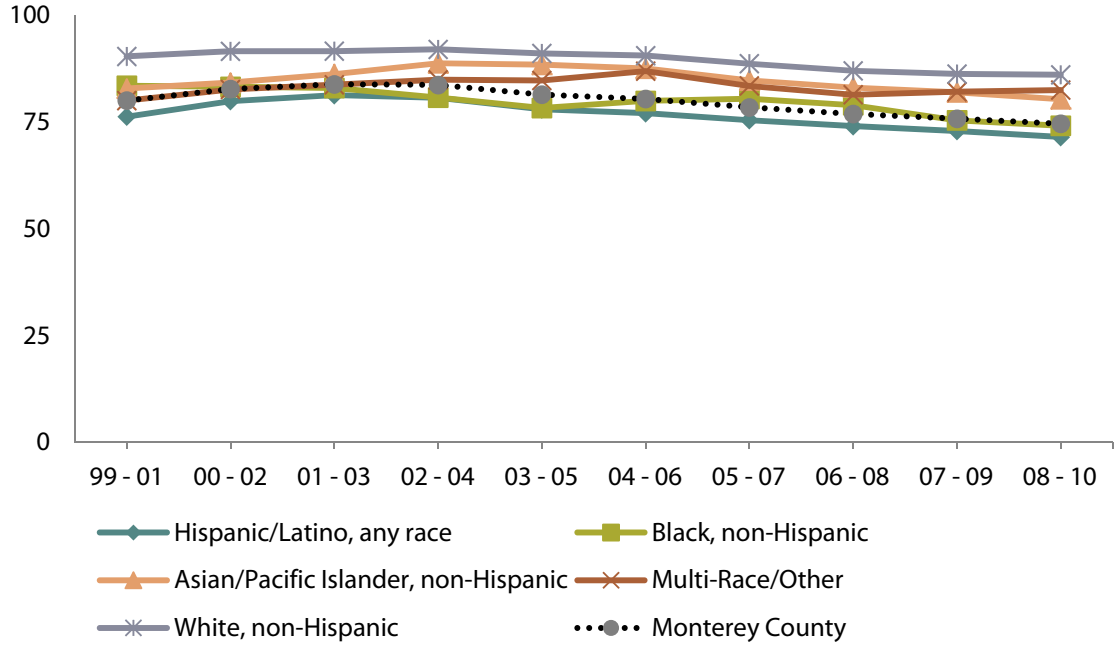


25 to 34 years	84.2	86.4	87.8	87.9	86.1	84.9	83.0	81.7	80.7	79.5
35+ years	84.2	87.3	88.0	88.8	87.2	87.3	85.4	83.3	82.1	80.9
Monterey County	**80.0**	**82.7**	**83.8**	**83.7**	**81.4**	**80.4**	**78.4**	**76.9**	**75.8**	**74.6**

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Of the four age groups, pregnant teens age 17 years and less consistently had the lowest percentages of entry into prenatal care during the first trimester than women in other age groups.
- The rate of entry into prenatal care during the first trimester declined for all age groups from 1999-2001 to 2008-2010.

Exhibit 68. Rate of entry into prenatal care during the first trimester by mothers' race/ethnicity



	Crude Rate per 100 Females									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Asian/Pacific Islander (nH)										
Black (nH)	83.5	83.2	82.9	80.7	78.3	79.9	80.4	78.9	75.4	74.1
Hispanic/Latino, any race	76.2	79.9	81.3	80.7	78.0	77.0	75.4	74.0	72.9	71.5
Multiple/Other races (nH)	80.0	82.6	83.7	84.9	84.7	86.9	83.4	81.4	82.1	82.5
White (nH)	90.4	91.5	91.6	92.0	91.0	90.5	88.6	87.0	86.2	86.0
Monterey County	**80.0**	**82.7**	**83.8**	**83.7**	**81.4**	**80.4**	**78.4**	**76.9**	**75.8**	**74.6**

(nH) = non-Hispanic

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- White, non-Hispanic women were the most likely to enter into prenatal care in the first trimester (86% in 2008-2010) from 1999 through 2010; Hispanic women of all races were the least likely (71% in 2008-2010) and significantly lower.
- The rate of entry into first trimester care for all race/ethnic groups combined dropped slightly between the early 2000s and 2010, although not statistically significant.

Exhibit 69. Entry into prenatal care during the first trimester disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
17 years and less	**Significantly lower**	Not statistically significant
18 to 24 years	**Significantly lower**	Not statistically significant

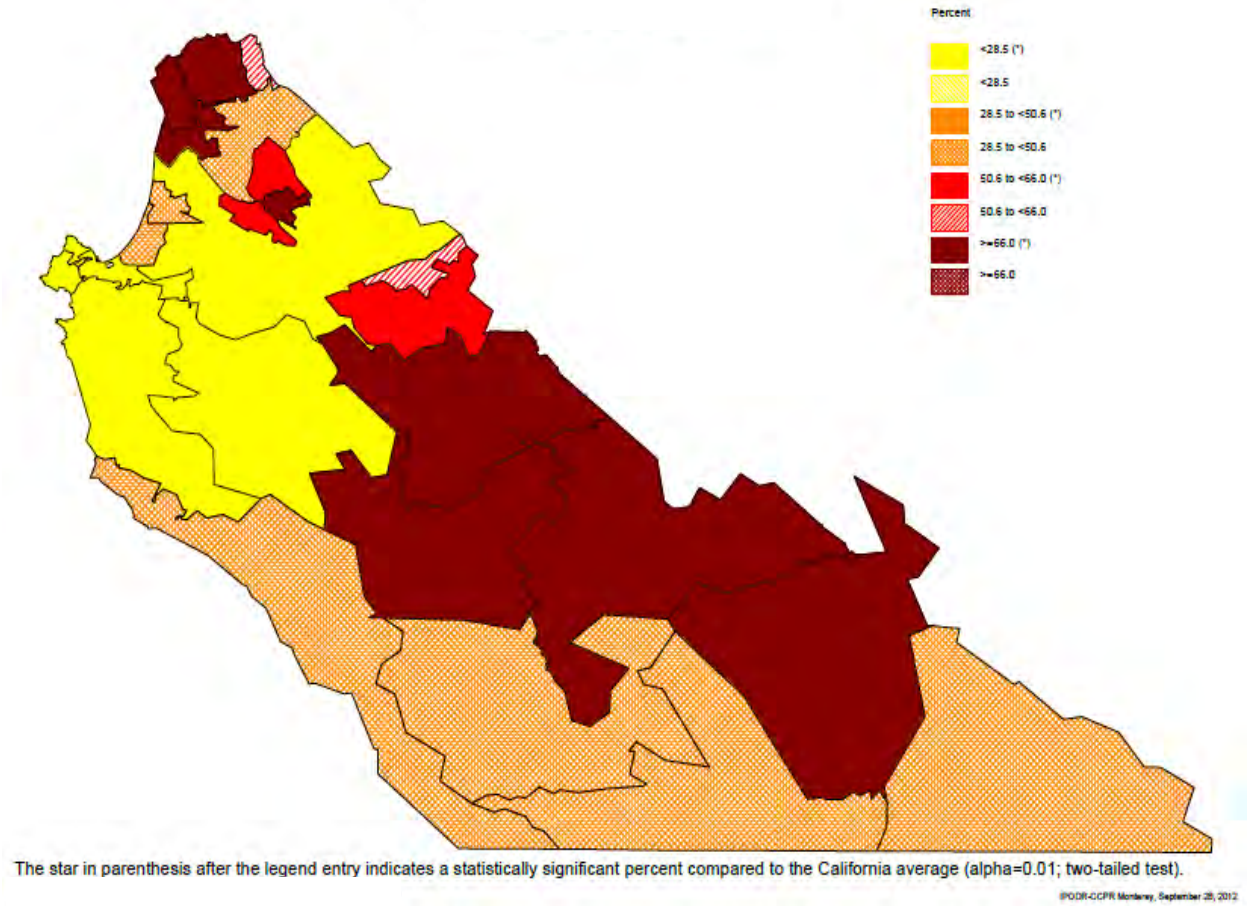
Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
25 to 34 years	Referent group	Not statistically significant
35+ years	Not significantly different	Not statistically significant
Asian/Pacific Islander (nH)	Not significantly different	Not statistically significant
Black (nH)	Not significantly different	Not statistically significant
Hispanic/Latino, any race	**Significantly lower**	Not statistically significant
Multiple/Other races (nH)	Not significantly different	Not statistically significant
White (nH)	Referent group	Not statistically significant

(nH) = non-Hispanic

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Exhibit 70. Percentage of births with government funding as primary payer by Census tract, 2008-2010



Source: California Department of Public Health, Improved Perinatal Outcome Data Reports, September 28, 2012

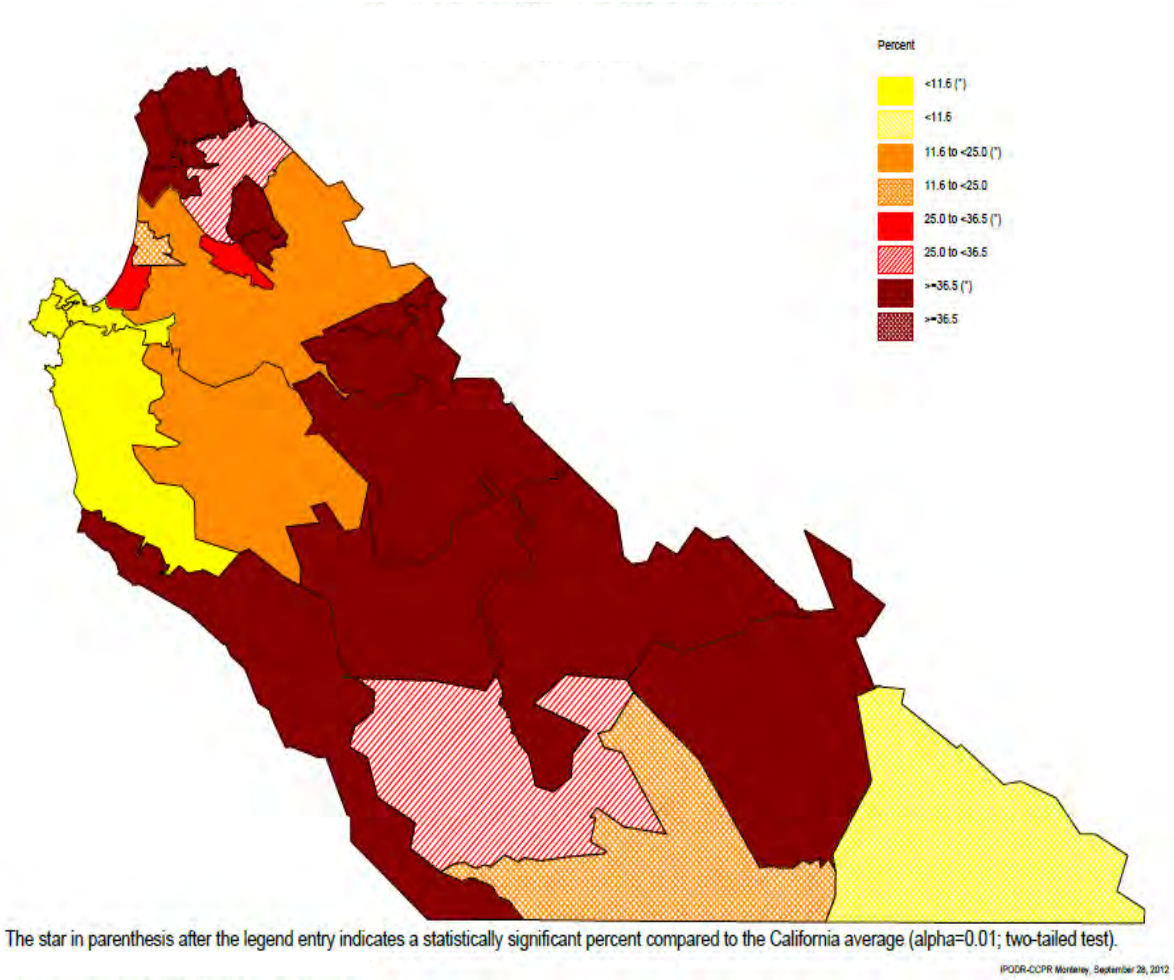
- Higher percentages of government-funded births appeared in the north, south, and greater Salinas areas of the county.

Exhibit 70a. Percentage of births with government funding as primary payer, 2008-2010

	Percent									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Medi-Cal and other government payment for delivery	57.6	58.4	59.4	60.0	60.2	60.1	60.4	61.7	63.9	67.2

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Exhibit 71. Percentage of births to mothers without high school degrees by Census tract, 2008-2010



Source: California Department of Public Health, Improved Perinatal Outcome Data Reports, September 28, 2012

- Higher percentages of births to mothers without high school degrees appeared in the north, greater Salinas, south, and southern coastal regions of the county.

Exhibit 71a. Percentage of births to mothers without high school degrees, 2008-2010

	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Mothers without high school degrees	39.7	40.3	40.2	39.8	40.0	43.8	45.0	44.7	41.0	40.0

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Early Childhood Development

The purpose of focusing on early childhood development is to promote the health and well-being of young children, thereby enabling them to enter school ready and able to learn. The California Department of Public Health promotes these five strategies among local health departments and their collaborative partners to create a strong foundation for children and their futures:

- **Access to Medical Homes:** Providing comprehensive physical and child development services for all children, including Children with Special Health Care Needs. Providing assessment, intervention and referral of children with developmental, behavioral, or psycho-social problems.
- **Mental Health and Social-Emotional Development:** Availability of services to address the needs of children at-risk for the development of mental health problems. Service delivery pathways to facilitate entrance of at-risk children into appropriate child development and mental health delivery systems. Early Care and Education Services: Services from birth through five years of age that support children's early learning, development of social competence and health (including medical, mental, dental, vision and other key health services).
- **Early Care and Education Services:** Services from birth through five years of age that support children's early learning, development of social competence and health (including medical, mental, dental, vision and other key health services).
- **Parent Education:** Services that provide support to parents in their role of prime educators of their children.
- **Family Support Services:** Services that address the stressors impairing the ability of families to nurture and support the healthy development of their children.[20]

Exhibit 72. Available licensed child care center and large home slots, 2010

Zip Code and City	Number	Zip Code and City	Number
93901 Salinas	675	93927 Greenfield	238
93905 Salinas	1,488	93930 King City	383
93906 Salinas	1,237	93933 Marina	384
93907 Prunedale	389	93940 Monterey	595
93908 Salinas	305	93950 Pacific Grove	230
93920 Big Sur	36	93955 Sand City	841
93923 Carmel	264	93960 Soledad	310
93924 Carmel Valley	29	93962 Spreckels	14
93925 Chualar	109	95004 Aromas	30
93926 Gonzales	199	95012 Castroville	413
95076 Watsonville	434	**TOTAL**	**8,603**

Source: US Census Bureau, 2010

Exhibit 73. Annual cost of child care, by age group, 2009

Source: Kids Data.org, 2009. Retrieved February 2013 from http://www.kidsdata.org/

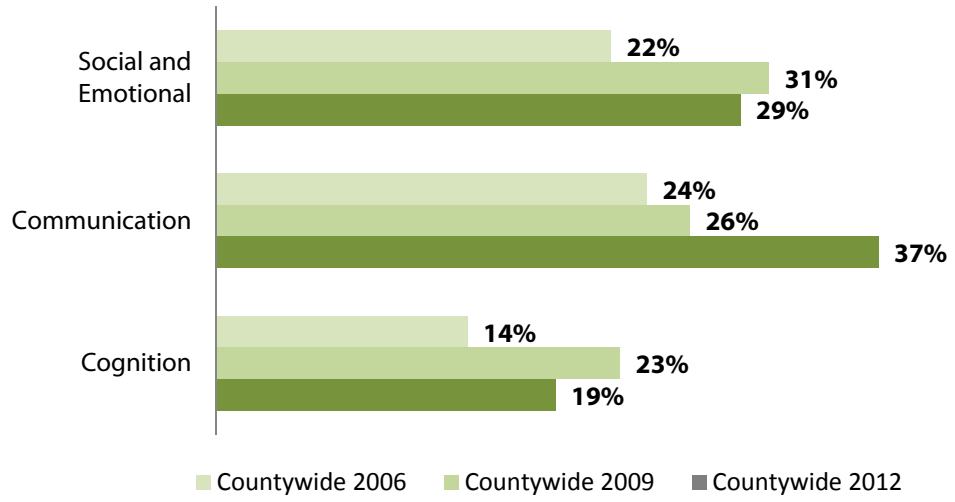
- The annual cost of child care is more expensive in a licensed child care center than in an informal care setting that is offered in private homes.

Exhibit 74. Child attends preschool, nursery school, or Head Start at least 10 hours per week

	Percent			
	2005	2007	2009	2011-12
Children under age 6	19.0	8.1	8.1	4.1

Note: this indicator represents children under age 6 who attend at least 10 hours per week.
* Statistically unstable; interpret with caution.
- (hyphen) = Estimate is less than 500 people.
Source: California Health Interview Survey, 2013.

Exhibit 75. Percentage of children achieving mastery in key developmental domains upon kindergarten entry



Source: 2012 Kindergarten Readiness Assessment, First 5 Monterey County

- The percent of children who, upon kindergarten entry, achieved mastery in the social and emotional domain and the cognition domain increased from 2006 to 2009, and then declined in 2012. The domain of communication increased consistently from 2006 to 2012.

Exhibit 76. Parents of kindergarteners who read to children daily, 2012

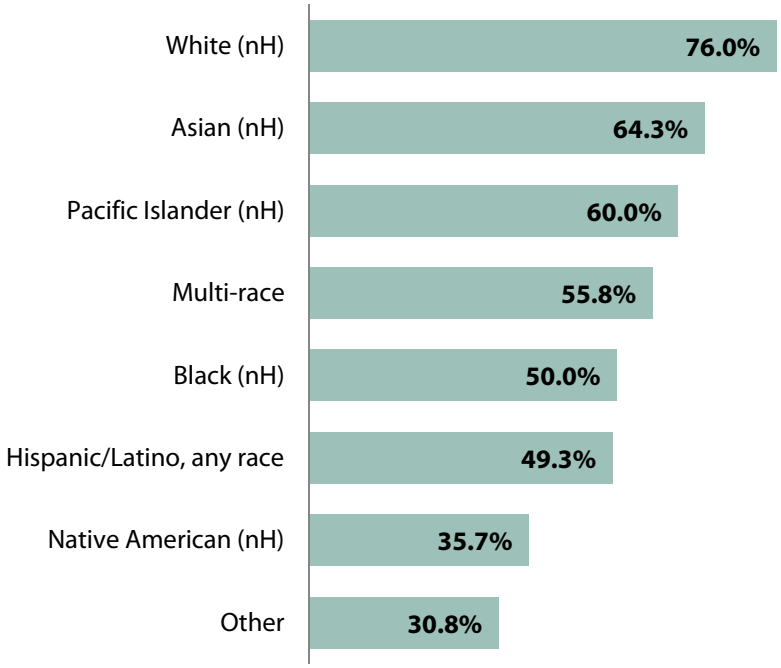


Exhibit 77. Parents Reading to kindergarten children by race/ethnicity, 2012

	Percent			
Hispanic/Latino, any race	2.8	9.0	38.9	49.3
Multi-race	0.6	4.2	39.4	55.8
Native American (nH)	4.8	9.5	50.0	35.7
Other	7.7	23.1	38.5	30.8
Pacific Islander (nH)	0.0	0.0	40.0	60.0

(nH) = non-Hispanic

Source: 2012 Kindergarten Readiness Assessment, First 5 Monterey County

- Parents of White, non-Hispanic (76%), Asian (64%), and Pacific Islander (60%) children were more likely to read to their children on a daily basis than other race/ethnic groups.

Exhibit 78. Kindergarteners with all immunizations required for school

	Percent				
	2007	2008	2009	2010	2011
Kindergartens with all immunizations for school	95.4	93.9	93.6	93.5	93.8

Source: Kids Data.org, 2007, 2008, 2009, 2010, 2011. Retrieved February 2013 from http://www.kidsdata.org/

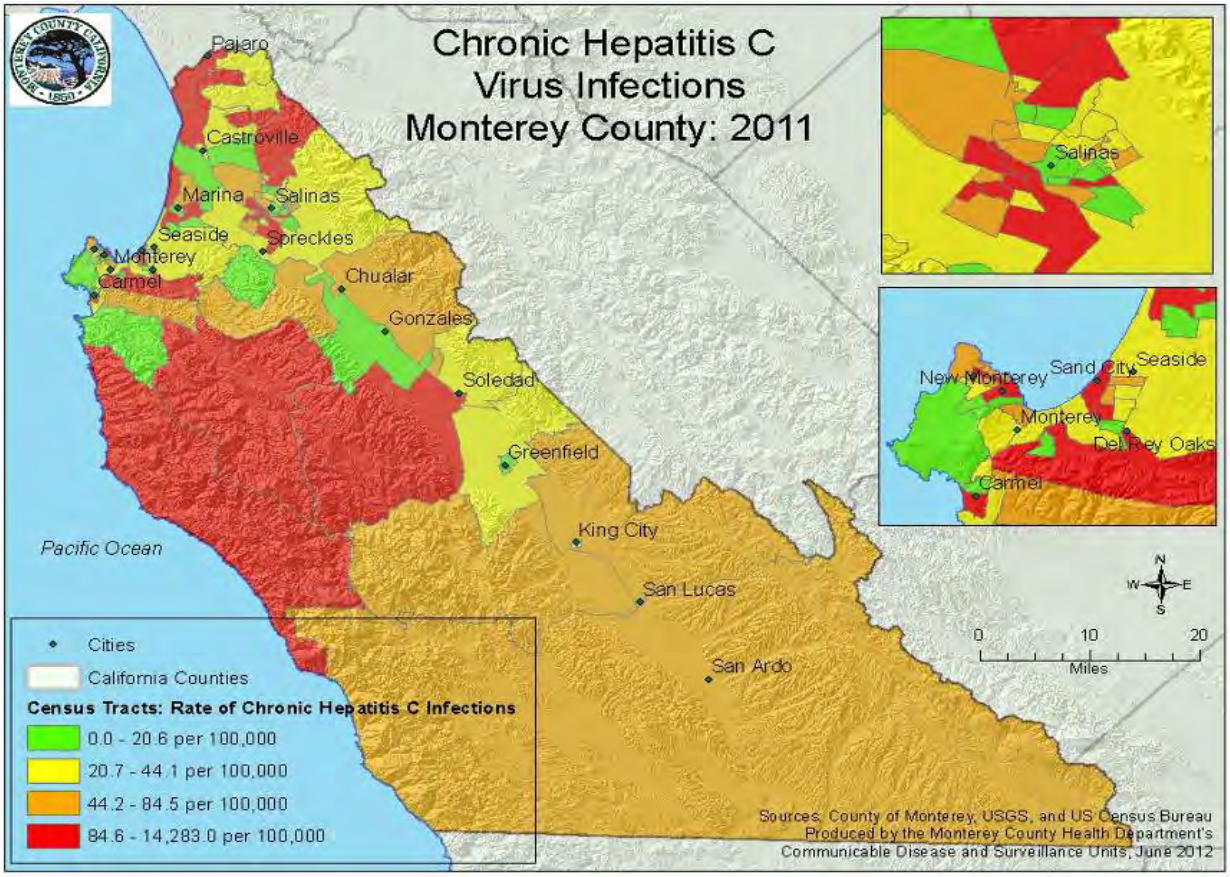
- A large majority of children enter kindergarten with all immunizations required for entry to school (note that immunizations required for school entry do not represent all medically-recommended immunizations).

Communicable Disease

"We live in a world where infections pass easily across social and geographic borders," writes Harvard anthropologist and physician Paul Farmer.[21] The emergence of HIV and resurgence of drug-resistant tuberculosis are two examples of how global infectious diseases can move through national and socio-economic borders to impact the residents of Monterey County. HIV/AIDS, while the most extensively studied infection in human history, disproportionately affects those who cannot afford effective antiviral agents and protease inhibitors that cost from $12,000 to $16,000 a year.[22] On a global scale, tuberculosis, according to leading researchers, is not so much a reemergence of a known disease, as the emergence of the disease among the ranks of the poor, of which Dr. Frank Ryan said, "Ostensibly, effective drugs were used too late, inappropriately, or not at all."[23],[24]

Because communicable disease remains the world's leading cause of death, and because underlying social activity, behavioral choices, and population patterns spur its emergence and dissemination, National Center for Infectious Diseases physician Ruth Benkelman states that "clinicians, microbiologists, epidemiologists, public health officials, historians, sociologists, and anthropologists must work together to prevent infectious diseases and to detect emerging diseases quickly."[25]

Exhibit 79. Monterey County chronic hepatitis C rates by Census Tract, 2012



- Higher rates of chronic hepatitis C in Monterery County are scattered throughout the north, center, and peninsula.

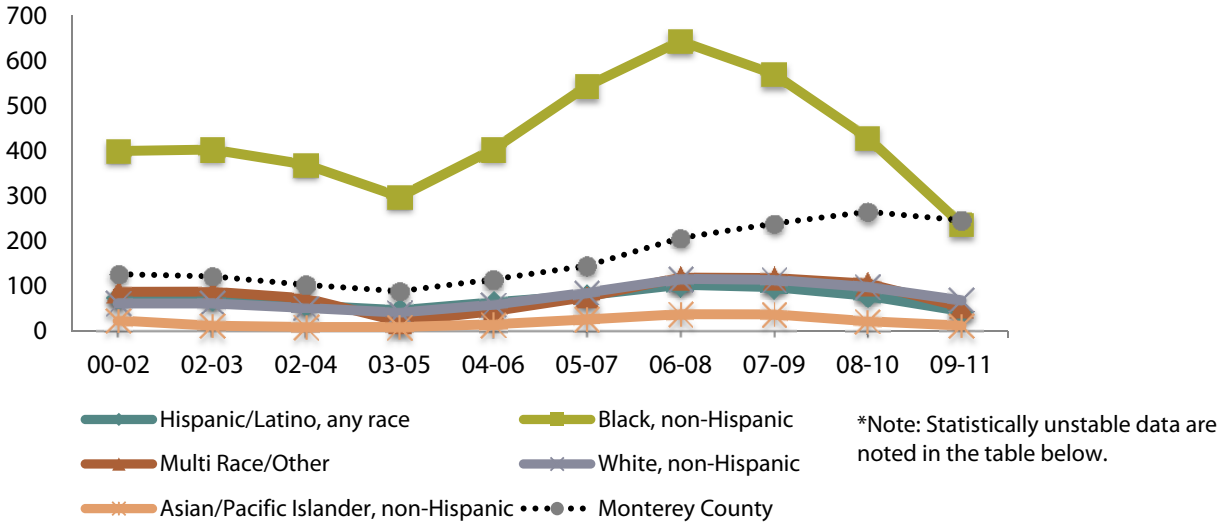
Exhibit 80. Newly diagnosed chronic hepatitis C cases per 100,000 by age group

	Age-specific rate per 100,000									
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
0 to 14 years	0.3*	0.3*	0.0*	0.0*	0.0*	0.0*	0.3*	0.7*	1.0*	
15 to 24 years	27.0	30.4	34.7	26.3	30.8	31.8	38.4	42.9	44.8	48.7
25 to 44 years	204.4	198.8	167.7	135.2	174.8	218.6	315.8	350.2	385.5	343.0
45 to 64 years	271.2	256.0	210.7	191.9	250.1	317.2	456.9	546.7	613.6	582.3
65+ years	49.4	44.5	29.7	29.2	43.3	60.9	73.2	76.8	83.6	80.1
Monterey County	**126.0**	**121.1**	**102.1**	**87.9**	**114.4**	**144.3**	**206.2**	**238.1**	**264.6**	**245.2**

*Statistically unstable; interpret with caution.
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Persons ages 25 to 64 had the highest rates of chronic hepatitis C infection between 2000-2002 and 2009-2011 than other age groups.
- The rate of chronic hepatitis C significantly increased across all age groups, except 0-14 year olds, from 2000-2002 and 2009-2011.

Exhibit 81. Newly diagnosed chronic hepatitis C cases per 100,000 by race/ethnicity



	Rate per 100,000									
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
Asian/Pacific Islander (nH)	23.2*	11.4*	8.7*	8.6*	14.6*	25.4	37.1	36.8	21.2*	11.6*
Black (nH)	399.4	402.6	369.2	297.6	402.7	543.0	643.3	570.1	428.7	236.9

	Rate per 100,000									
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
Hispanic/Latino, any race	72.9	70.3	56.5	45.8	63.2	78.9	102.3	97.1	77.9	44.1
Multiple/Other races (nH)	86.8	87.0	72.2	20.6*	43.6*	75.3	118.5	117.4	105.0	53.4
White (nH)	60.7	60.9	50.9	40.6	58.1	85.0	115.5	113.5	97.4	68.0
Monterey County	**126.0**	**121.1**	**102.1**	**87.9**	**114.4**	**144.3**	**206.2**	**238.1**	**264.6**	**245.2**

*Statistically unstable; interpret with caution.
(nH) = non-Hispanic
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012. Statistical Analyses Performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- While Black residents consistently had the highest rates of newly diagnosed chronic hepatitis C infection between 2000-2002 and 2009-2011 among race/ethnic groups, these rates decreased from 2006-2008 to 2009-2011.
- The rate of newly diagnosed chronic hepatitis C infection increased between 2000-2002 and 2009-2011 for Asian, Multiple/other races, and White residents.

Exhibit 82. Newly diagnosed chronic hepatitis C cases per 100,000 by gender

	Rate per 100,000									
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
Male	205.8	199.3	171.1	142.7	188.8	241.8	355.4	412.2	462.4	431.0
Female	39.7	37.6	28.8	29.9	35.8	41.5	49.8	55.8	57.6	50.7
Monterey County	**126.0**	**121.1**	**102.1**	**87.9**	**114.4**	**144.3**	**206.2**	**238.1**	**264.6**	**245.2**

Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

- Men were more than eight times as likely to be diagnosed with chronic hepatitis C infection as women from 2000-2002 to 2009-2011, although these data may be biased due to increased screening among correctional facility inmates.
- The rate of chronic hepatitis C increased for both men and women from 2000-2002 to 2009-2011; the rate for men doubled during that time.

Exhibit 83. Newly diagnosed chronic hepatitis C infection disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
0 to 14 years	**Significantly lower**	Not statistically significantly
15 to 24 years	**Significantly lower**	**Significantly increased**
25 to 44 years	**Significantly lower**	**Significantly increased**
45 to 64 years	Referent group	**Significantly increased**

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
65+ years	**Significantly lower**	**Significantly increased**
Asian/Pacific Islander (nH)	**Significantly lower**	**Significantly increased**
Black (nH)	**Significantly higher**	**Significantly decreased**
Hispanic/Latino, any race	**Significantly lower**	Not statistically significant
Multiple/Other races (nH)	Not statistically significant	**Significantly increased**
White (nH)	Referent group	**Significantly increased**
Male	Referent group	**Significantly increased**
Female	**Significantly lower**	**Significantly increased**

(nH) = non-Hispanic
Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012 (these data are provisional); statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

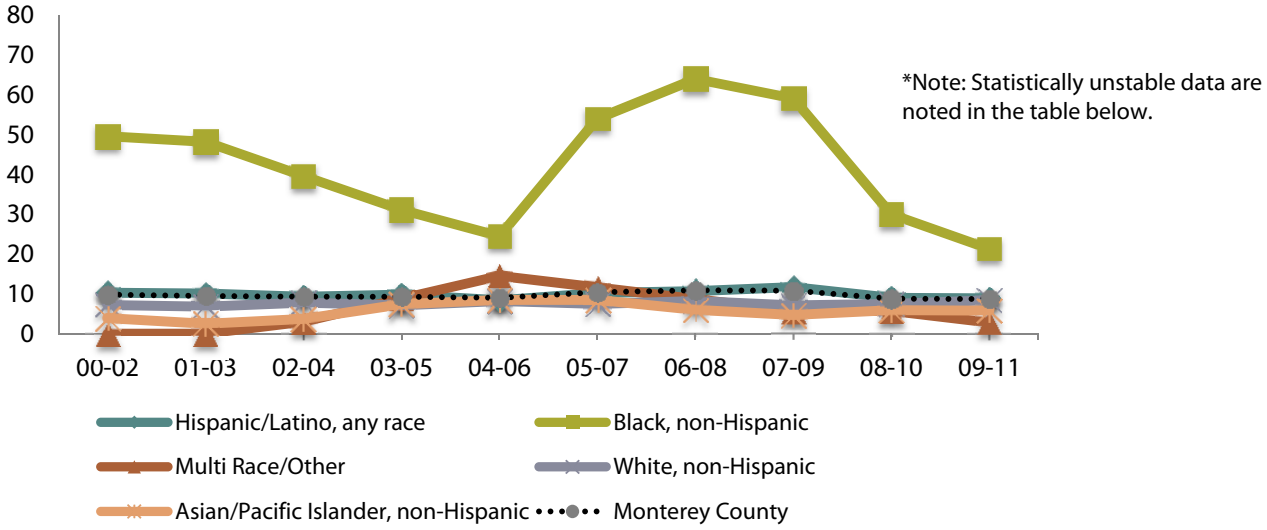
Exhibit 84. Newly reported HIV/AIDS cases per 100,000 by age group

	Rate per 100,000									
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
0 to 14 years	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.0*	0.3*	1.0*	1.0*
15 to 24 years	3.7*	3.7*	3.1*	3.6*	4.1*	6.7*	8.7*	7.7*	7.1*	4.6*
25 to 44 years	23.3	23.2	22.6	21.3	18.6	20.8	21.8	23.8	18.8	18.5
45 to 64 years	10.3	9.1	10.0	11.9	13.1	15.3	15.0	13.4	9.8	11.0
65+ years*	0.8*	0.8*	0.8*	0.8*	2.3*	1.5*	1.5*	0.0*	0.7*	2.1*
Monterey County	**9.8**	**9.5**	**9.3**	**9.3**	**9.0**	**10.4**	**10.9**	**10.8**	**8.8**	**8.7**

*Statistically unstable; interpret with caution.
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Rates of newly reported HIV/AIDS cases between 2000-2002 and 2009-2010 were higher among residents ages 25 to 44 than other age groups, though only statistically different for ages 0-14.

Exhibit 85. Newly reported HIV/AIDS cases per 100,000 by race/ethnicity



	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
Asian/Pacific Islander (nH)										
Black (nH)	49.6	48.2	39.6*	31.1*	24.5*	54.0*	64.0	59.1	30.0*	21.3*
Hispanic/Latino, any race	10.3	10.1	9.3	9.8	8.4	10.2	10.7	11.7	9.0	8.9
Multiple/Other races (nH)	0.0*	0.0*	3.0*	8.8*	14.5*	11.6*	8.7*	5.7*	5.7*	2.8*
White (nH)	7.2	6.8	7.8	7.1	8.2	7.5	8.2	7.1	7.5	8.4
Monterey County	**9.8**	**9.5**	**9.3**	**9.3**	**9.0**	**10.4**	**10.9**	**10.8**	**8.8**	**8.7**

*Statistically unstable; interpret with caution.
(nH) = non-Hispanic
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Although much of the data are statistically unstable, rates of newly reported HIV/AIDS cases between 2000-2002 and 2009-2010 appeared to be highest among Black residents than other race/ethnic groups.

Exhibit 86. Newly reported HIV/AIDS cases per 100,000 by gender

	Rate per 100,000									
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
Male	16.2	14.8	13.7	13.5	13.4	16.3	17.9	18.1	14.4	14.9
Female	3.0*	3.8	4.6	4.9	4.4	4.2	3.5	3.2	2.9*	2.2*
Monterey County	**9.8**	**9.5**	**9.3**	**9.3**	**9.0**	**10.4**	**10.9**	**10.8**	**8.8**	**8.7**

*Statistically unstable; interpret with caution.
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Rates of newly reported HIV/AIDS cases between 2000-2002 and 2009-2010 were significantly higher among males than females.
- During many time periods, rates for males were more than four times greater than rates for females.

Exhibit 87. Newly reported HIV/AIDS disparity and trend analysis by age group

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
25 to 44 years	Not significantly different	Not statistically significant
45 to 64 years	Referent group	Not statistically significant
65+ years	**Significantly lower**	Not statistically significant
Asian/Pacific Islander (nH)	Not significantly different	Not statistically significant
Black (nH)	Not significantly different	Not statistically significant
Multiple/Other races (nH)	Not significantly different	Not statistically significant
Male	Referent group	Not statistically significant
Female	**Significantly lower**	Not statistically significant

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Exhibit 88. Chlamydia infection rates by census tracts

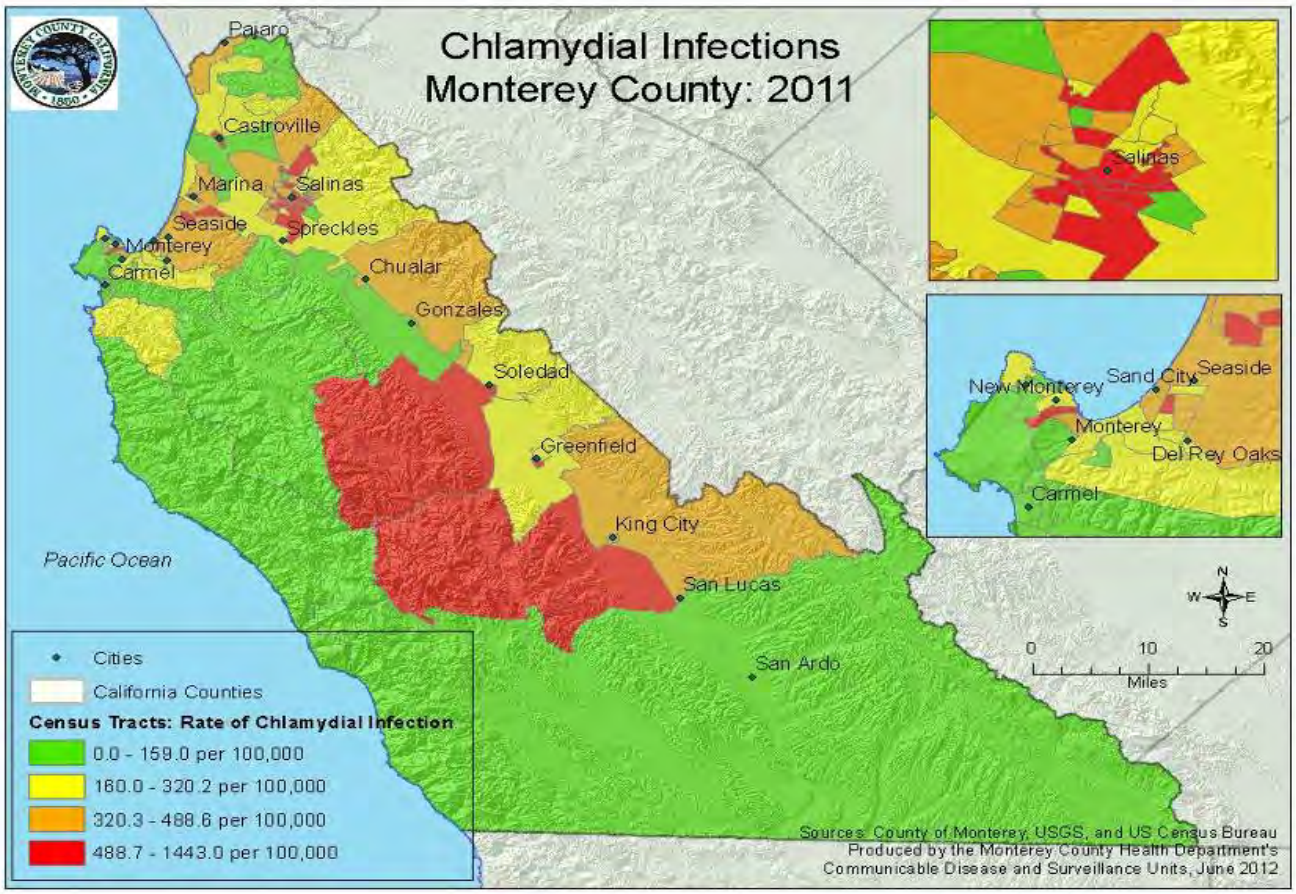


Exhibit 89. Chlamydia infection rates per 100,000 by age group

25 to 44 years	273.5	289.6	303.1	317.7	341.2	364.0	380.0	384.5	392.9	410.1
45 to 64 years	16.8	20.2	17.7	17.2	16.0	23.1	22.7	23.3	20.6	28.3
65+ years	3.2*	0.8*	2.3*	3.1*	3.8*	4.5*	4.4*	2.9*	0.7*	0.0*

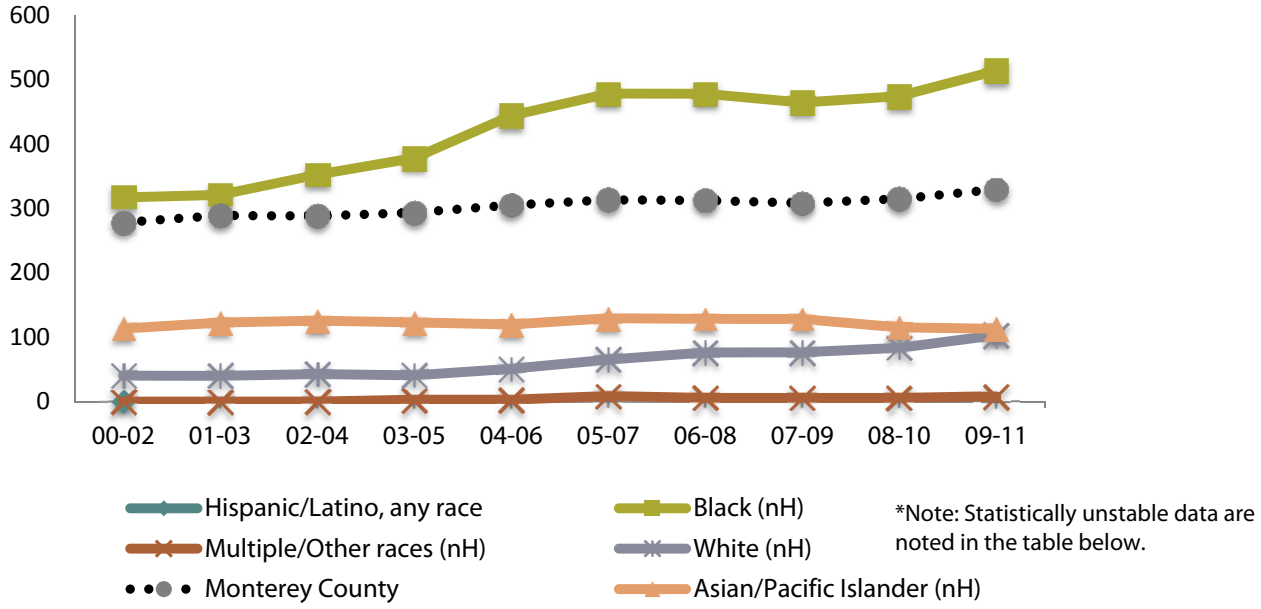
*Statistically unstable; interpret with caution.

Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Rates of chlamydia infection were consistently highest among 15 to 24 year old residents.

- From 2000-2002 to 2009-2011, rates of chlamydia infection were generally four times higher among 15 to 24 year olds compared to the second highest group – the 25 to 44 year olds.

Exhibit 90. Chlamydia infection rates per 100,000 by race/ethnicity



	Rate per 100,000									
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
Asian/Pacific Islander (nH)	113.2	122.5	125.5	122.9	119.5	129.4	128.2	128.1	115.2	112.9
Black (nH)	316.7	320.7	351.8	377.8	443.5	477.6	477.4	463.8	473.7	513.2
Hispanic/Latino, any race	339.2	326.6	300.4	288.4	300.0	305.1	306.4	302.8	312.9	331.5
Multiple/Other races (nH)	0.0*	0.0*	0.0*	2.9	2.9	8.7	5.8	5.7	5.7	8.4
White (nH)	40.1	40.0	42.6	40.8	50.9	65.1	76.2	76.4	83.4	103.0
Monterey County	**277.9**	**288.5**	**287.9**	**293.0**	**304.7**	**313.0**	**311.9**	**307.9**	**314.5**	**329.1**

*Statistically unstable; interpret with caution.
(nH) = non-Hispanic
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012. Statistical Analyses Performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- From 2000-2002 to 2009-2011, Hispanic/Latino and Black residents were more likely to be diagnosed with chlamydia infections than other race/ethnic groups.

Exhibit 91. Chlamydia infection rates per 100,000 by gender

	Rate per 100,000									
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
Male	99.6	109.1	115.8	123.0	125.4	125.5	129.2	129.9	137.8	148.9
Female	465.2	478.6	469.7	471.7	492.9	509.5	503.2	493.8	498.8	516.3
Monterey County	**277.9**	**288.5**	**287.9**	**293.0**	**304.7**	**313.0**	**311.9**	**307.9**	**314.5**	**329.1**

Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- From 2000 to 2011, females were much more likely to be diagnosed with chlamydia than men, which may be a function of more frequent testing during annual well woman examinations.
- The rate of chlamydia diagnoses increased significantly in both men and women from 2000 to 2011.

Exhibit 92. Chlamydia infection rate disparity and trend analysis by age group

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
25 to 44 years	**Significantly higher**	**Significantly increased**
45 to 64 years	Referent group	Not statistically significant
65+ years	Not significantly different	Not statistically significant
Asian/Pacific Islander (nH)	Not significantly different	Not statistically significant
Black (nH)	**Significantly higher**	Not statistically significant
Multiple/Other races (nH)	**Significantly lower**	Not statistically significant
White (nH)	Referent group	Not statistically significant
Male	Referent group	**Significantly increased**

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Exhibit 93. Gonorrhea infection rates by census tracts

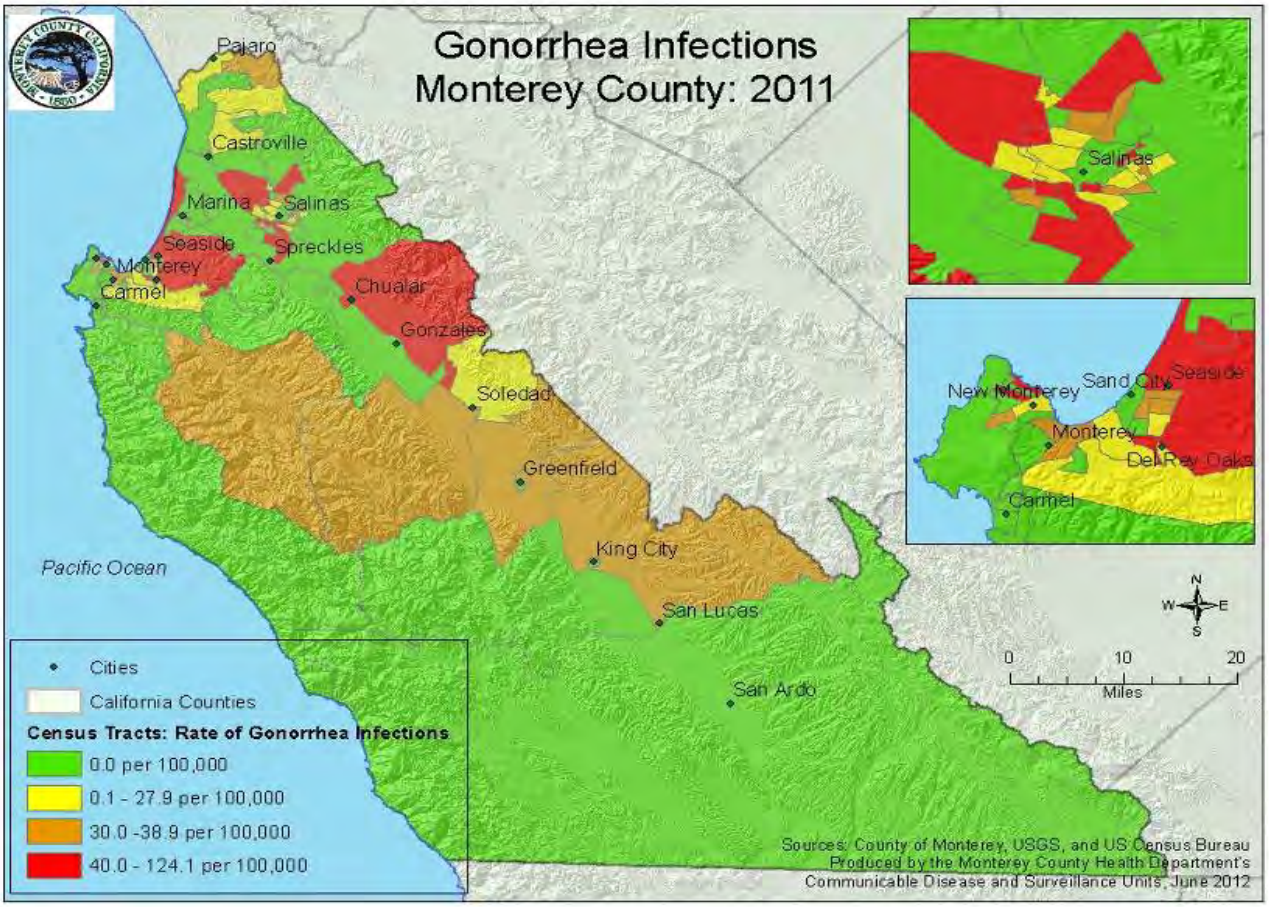


Exhibit 94. Gonorrhea infection rates per 100,000 by age group

25 to 44 years	27.3	40.2	53.0	65.8	70.0	63.9	58.9	44.8	38.7	33.3
45 to 64 years	2.9*	6.0*	7.3	9.3	9.5	10.0	10.1	6.8	5.7*	4.3*
65+ years	0.8*	0.8*	0.0*	2.3*	2.3*	2.3*	0.0*	0.0*	0.0*	0.0*

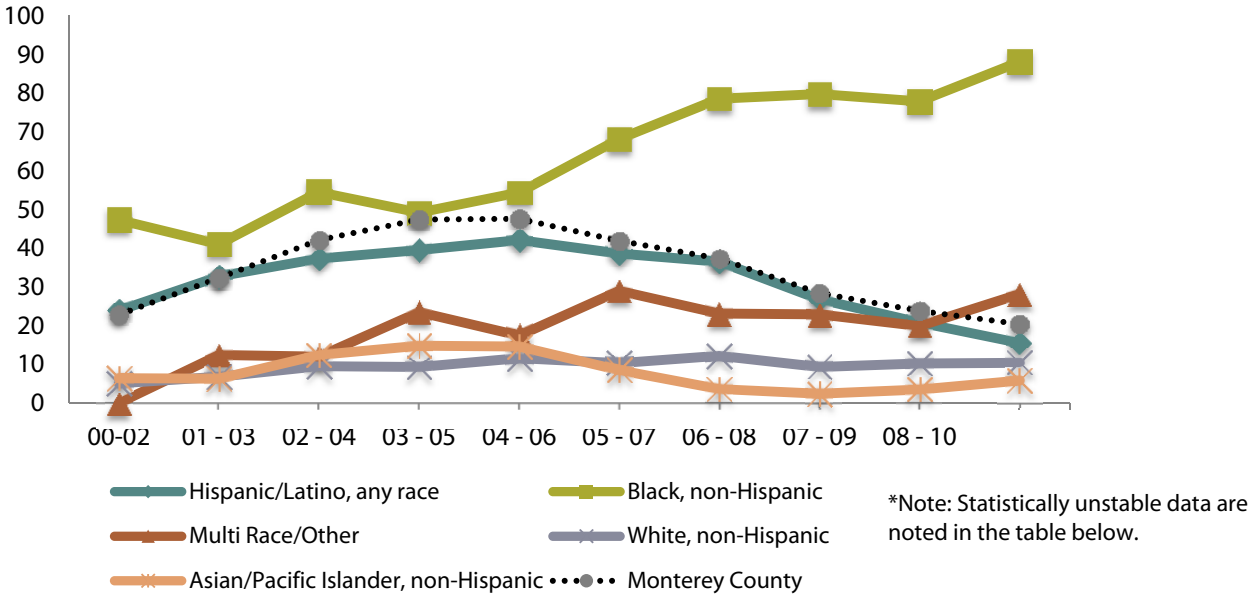
*Statistically unstable; interpret with caution.

Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012); statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Gonorrhea infection rates were significantly higher for 15 to 24 and 25 to 44 year olds from 2000-2002 to 2009-2011.

- Gonorrhea infection rates decreased from 2000-2002 to 2009-2011 among residents ages 15 to 24.

Exhibit 95. Gonorrhea infection rates per 100,000 by race/ethnicity



	Rate per 100,000									
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
Asian/Pacific Islander (nH)	6.4*	6.3*	12.4*	14.8*	14.6*	8.5*	3.6*	2.4*	3.5*	5.8*
Black (nH)	47.3	41.0	54.5	49.2	54.4	68.2	78.6	79.8	77.9	88.1
Hispanic/Latino, any race	23.9	32.7	37.3	39.5	42.1	38.6	36.5	26.8	20.8	15.5
Multiple/Other races (nH)	0.0*	12.4*	12.0*	23.5*	17.4*	29.0*	23.1*	22.9*	19.9*	28.1*
White (nH)	5.1	6.8	9.5	9.3	11.6	10.3	12.2	9.3	10.2	10.4
Monterey County	**22.8**	**32.3**	**42.1**	**47.4**	**47.6**	**41.9**	**37.3**	**28.4**	**23.8**	**20.4**

(nH) = non-Hispanic

*Statistically unstable; interpret with caution.

Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Gonorrhea infection rates were consistently higher for Black residents than any other race/ethnic group, and these rates significantly increased from 2000 to 2011.
- Gonorrhea diagnoses rates for Multi-race/Other residents more than doubled from 2001-2003 to 2009-2011.

Exhibit 96. Gonorrhea infection rates per 100,000 by gender

	Rate per 100,000									
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
Male	20.5	28.9	36.2	41.6	42.3	41.7	39.1	31.1	24.3	21.5
Female	25.4	35.8	48.1	53.4	53.3	42.2	35.4	25.5	23.3	19.3
Monterey County	**22.8**	**32.3**	**42.1**	**47.4**	**47.6**	**41.9**	**37.3**	**28.4**	**23.8**	**20.4**

Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- From 2000-2002 to 2005-2007, females had higher gonorrhea infection rates than men, but this trend reversed in 2006-2007.
- Gonorrhea infection rates significantly decreased for females from 2003-2005 to 2009-2011.

Exhibit 97. Gonorrhea infection rate disparity and trend analysis by age group

Race/Ethnicity	Disparity, 2008-2010	Time Trend, 1999-2010
25 to 44 years	**Significantly higher**	Not statistically significant
45 to 64 years	Referent group	Not statistically significant
65+ years	Not significantly different	Not statistically significant
Asian/Pacific Islander (nH)	Not significantly different	**Significantly decreased**
Black (nH)	**Significantly higher**	**Significantly increased**
Multiple/Other races (nH)	Not significantly different	**Significantly increased**
White (nH)	Referent group	Not statistically significant
Male	Referent group	Not statistically significant

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Exhibit 98. Pertussis infection rates by census tract

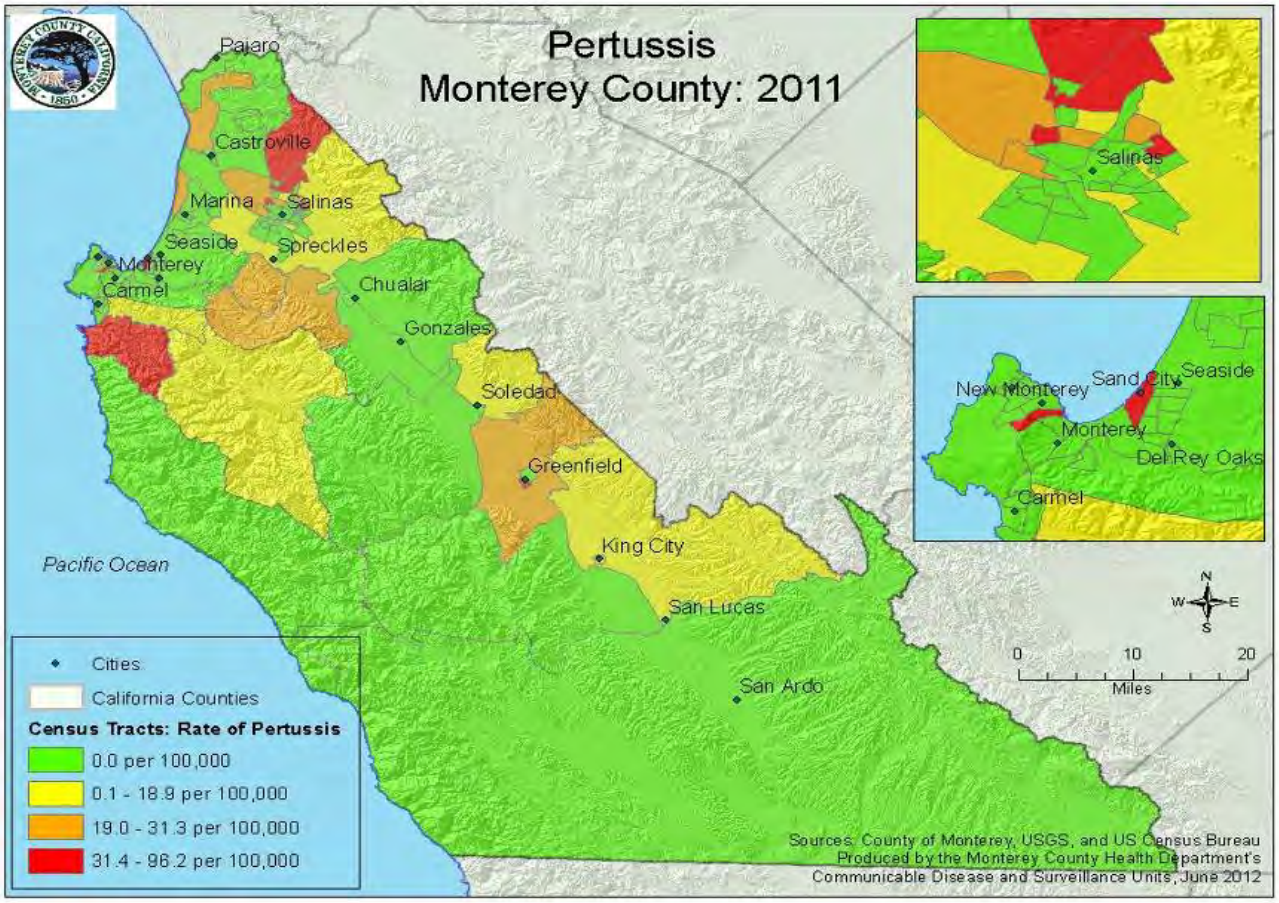


Exhibit 99. Pertussis infection rates per 100,000 by age group

25 to 44 years	2.1*	1.1*	3.2*	4.1*	5.0	3.9*	2.8*	2.6*	6.0	6.8
45 to 64 years	0.0*	0.0*	2.3*	2.2*	2.9	1.4*	1.4*	1.7*	3.4*	5.7*
65+ years	0.0*	0.8*	1.6*	1.5*	0.8	0.0*	0.0*	0.0*	2.8*	4.8*

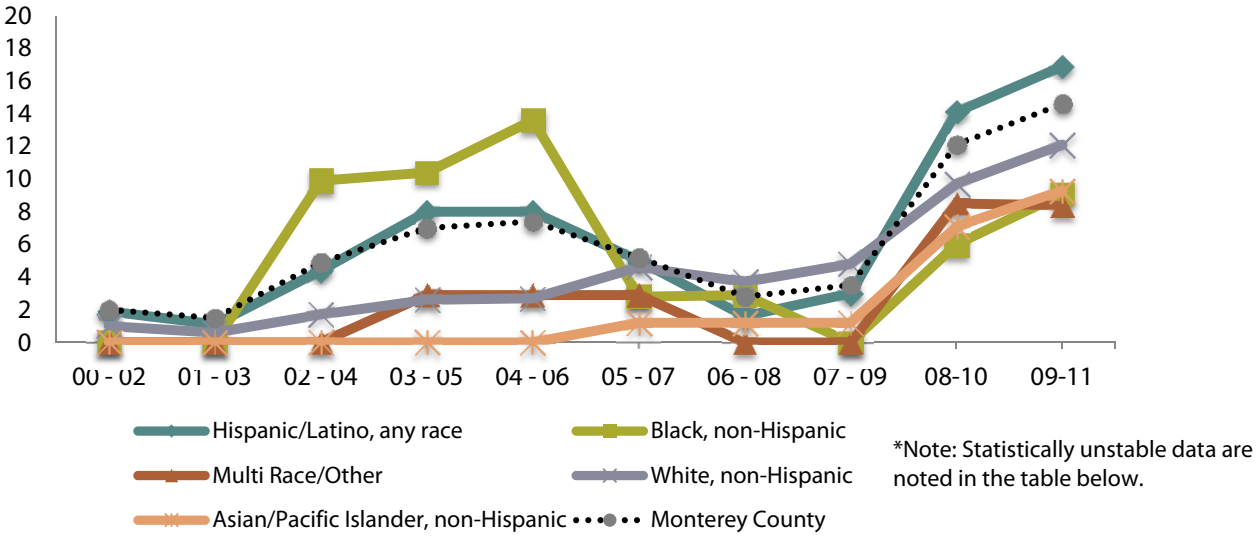
*Statistically unstable; interpret with caution.

Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012); statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Pertussis rates increased for every age group examined from 2000-2002 to 2009-2011.

- Pertussis rates increased significantly among 0 to 14 year olds, and most dramatically after the 2007-2009 time period.

Exhibit 100. Pertussis infection rates per 100,000 by race/ethnicity



	Rate per 100,000									
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
Asian/Pacific Islander (nH)	0.0*	0.0*	0.0*	0.0*	0.0*	1.2*	1.2*	1.2*	7.1*	9.3*
Black (nH)	0.0*	0.0*	9.9*	10.4*	13.6*	2.8*	2.9*	0.0*	6.0*	9.1*
Hispanic/Latino, any race	1.9*	1.1*	4.4	8.0	8.0	5.0	1.6*	3.0	14.1	16.9
Multi-Race/Other (nH)	0.0*	0.0*	0.0*	2.9*	2.9*	2.9*	0.0*	0.0*	8.5*	8.4*
White (nH)	1.0*	0.6*	1.7*	2.6*	2.7*	4.6	3.7*	4.8	9.7	12.1
Monterey County	***2.0***	***1.5***	***4.9***	***7.0***	***7.4***	***5.2***	***2.8***	***3.5***	***12.1***	***14.6***

(nH) = non-Hispanic
*Statistically unstable; interpret with caution.
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Pertussis rates increased for all race/ethnic groups, although most of these rates are unstable and should be interpreted with caution.
- Pertussis rates increased dramatically from 2007-2009 to 2009-2011.
- Pertussis rates significantly increased over time for several age and race/ethnic groups.

Exhibit 101. Pertussis infection rates per 100,000 by gender

	Rate per 100,000									
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
Male	2.0*	1.4*	3.5	4.8	4.9	4.0	2.5*	3.4	11.2	13.4
Female	1.8*	1.7*	6.4	9.4	10.0	6.5	3.2	3.7	13.0	15.7
Monterey County	**2.0**	**1.5**	**4.9**	**7.0**	**7.4**	**5.2**	**2.8**	**3.5**	**12.1**	**14.6**

*Statistically unstable; interpret with caution.
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Pertussis rates increased significantly for males and females over time, but the differences between genders were not statistically significant.

Exhibit 102. Pertussis infection rate disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
25 to 44 years	Referent group	Not statistically significant
45 to 64 years	Not significantly different	**Significantly increased**
65+ years	Not significantly different	**Significantly increased**
Asian/Pacific Islander (nH)	Not significantly different	**Significantly increased**
Black (nH)	Not significantly different	Not statistically significant
Hispanic/Latino, any race	Not significantly different	**Significantly increased**
Multiple/Other races (nH)	Not significantly different	**Significantly increased**
Male	Referent group	**Significantly increased**

Note Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

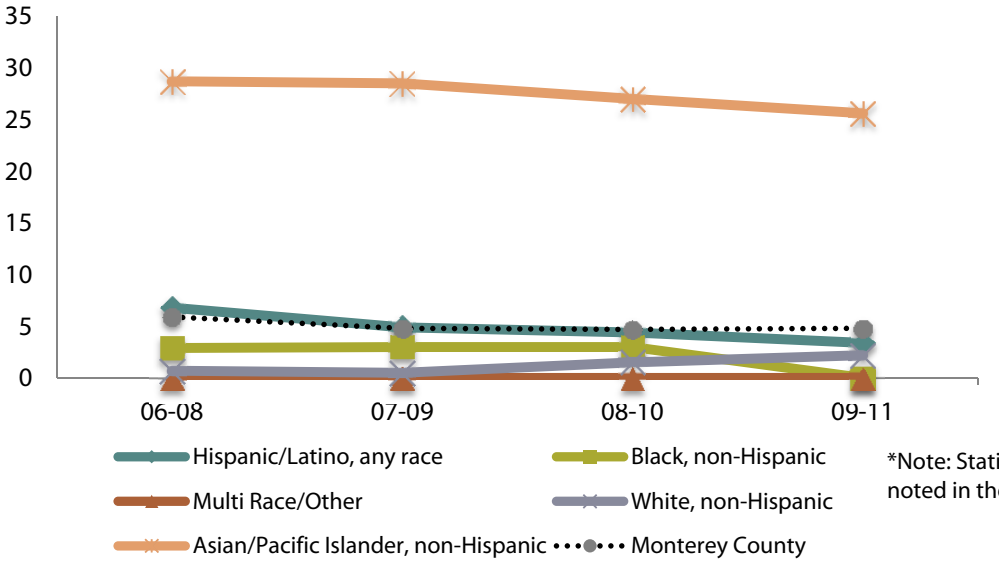
Exhibit 103. Tuberculosis infection rates per 100,000 by age group

	Age-specific rate per 100,000			
	06-08	07-09	08-10	09-11
<5 years	6.5*	4.7*	6.6*	5.7*
5 to 19 years	3.1*	2.4*	2.0*	0.7*
20 to 49 years	5.6*	4.9*	3.9*	5.4*
50+ years	8.6	6.9	7.9	7.7
Monterey County	**5.9**	**4.8**	**4.7**	**4.8**

*Statistically unstable; interpret with caution.
Source: Monterey County Health Department, Tuberculosis Control Unit; data are current as of June 15, 2012

- Between 2006-2008 and 2009-2011, tuberculosis infection rates were significantly lower for residents aged 5 to 19 years compared to the referent group (20-49 years).
- Tuberculosis infection rates appeared to decrease slightly from 2006-2008 to 2009-2011 for all age groups.

Exhibit 104. Tuberculosis infection rates per 100,000 by race/ethnicity



*Note: Statistically unstable data are noted in the table below.

		28.5	27.0	25.6
Black (nH)	2.9*	3.0*	3.0*	0.0*
Hispanic/Latino, any race	6.8	4.9	4.4	3.4
Multiple/Other races (nH)	0.0*	0.0*	0.0*	0.0*
White (nH)	0.7*	0.5*	1.5*	2.2*

		4.8	**4.7**	**4.8**

(nH) = non-Hispanic
*Statistically unstable; interpret with caution.
Source: Monterey County Health Department, Tuberculosis Control Unit; data are current as of June 15, 2012.

- From 2006-2008 to 2009-2011, the rate of tuberculosis infection was significantly higher among Asian/Pacific Islander residents than other race/ethnic groups, with a rate that was five times greater than the overall county rate in 2009-2011.
- Tuberculosis rates appear to have decreased for all race/ethnicities from 2006-2008 to 2009-2011, although some of these rates were statistically unstable.

Exhibit 105. Tuberculosis infection rates per 100,000 by gender

	Age-adjusted rate per 100,000			
	06-08	07-09	08-10	09-11
	8.1	6.1	5.8	5.1
Female	3.5	3.5	3.8	4.9
Monterey County	**5.9**	**4.8**	**4.7**	**4.8**

Source: Monterey County Health Department, Tuberculosis Control Unit; data are current as of June 15, 2012

- Tuberculosis infection rates steadily decreased for men from 2006 to 2011 while rates increased slightly for women during this time.

Exhibit 106. Tuberculosis infection rate disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
20 to 49 years	Referent group	Not statistically significant
50+ years	Not significantly different	Not statistically significant
Asian/Pacific Islander (nH)	**Significantly higher**	Not statistically significant
Black (nH)	Not significantly different	Not statistically significant
Hispanic/Latino, any race	Not significantly different	Not statistically significant
Multiple/Other races (nH)	Not significantly different	Not statistically significant
White (nH)	Referent group	Not statistically significant
Male	Referent group	Not statistically significant
Female	Not significantly different	Not statistically significant

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: Monterey County Health Department, Tuberculosis Control Unit; data are current as of June 15, 2012.

Exhibit 107. Animal Rabies Cases per Year by Region*

	Number				
	2007	2008	2009	2010	2011
Peninsula/Big Sur	0	2	2	0	2
North County	3	3	4	4	0
Salinas Area	2	1	0	1	0
South County	1	0	0	0	0
Total	**6**	**6**	**6**	**5**	**2**

*ZIP codes included in the above regions: North County: 93907, 95004, 95012, 95039, 95076; Monterey Peninsula/Big Sur: 93920, 93921, 93922, 93923, 93924, 93933, 93940, 93942, 93943, 93944, 93950, 93953, 93955; Salinas: 93901, 93902, 93905, 93906, 93908, 93912, 93915, 93962; South County: 93426, 93450, 93451, 93925, 93926, 93927, 93928, 93930, 93932, 93954, and 93960.
Source: Monterey County Health Department, Public Health Laboratory; data are current as of June 15, 2012. Statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit, December 2012.

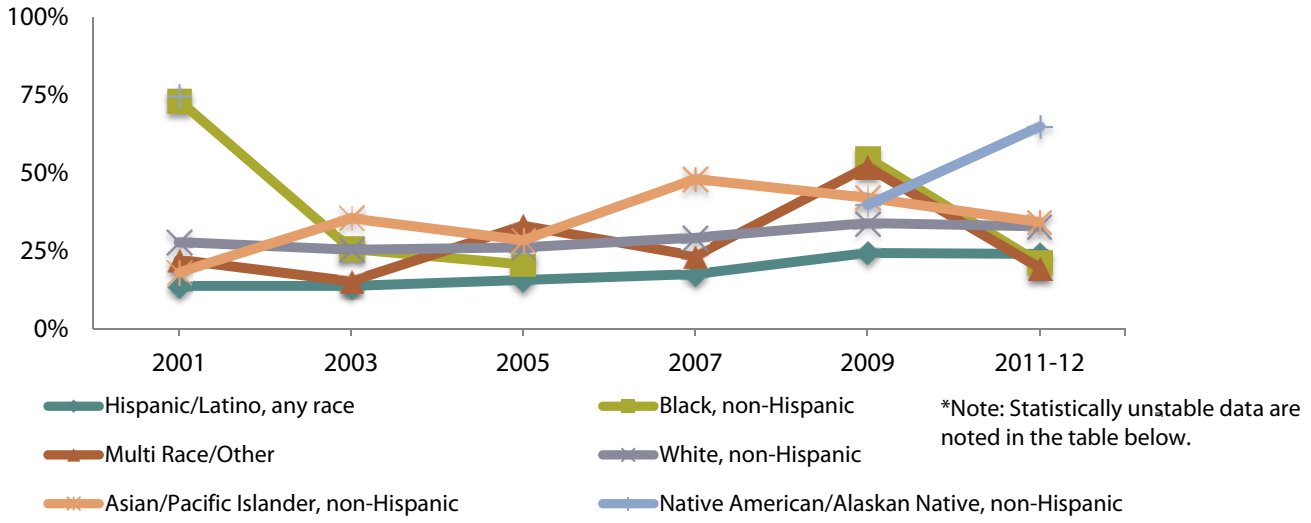
- For the five years from 2007 through 2011 combined, North County had more cases of animal rabies (14) than any other region of the county.
- These results may reflect more rabies testing in the North County area compared to other county areas, rather than an increased prevalence in North County.

Chronic Disease

Chronic health conditions and diseases are those that have a long course of illness, can rarely resolve spontaneously, and are generally not cured by medication or prevented by vaccine.[26] Chronic diseases are among the most prevalent, costly, and preventable of all health problems. According to the Centers for Disease Control and Prevention, seven of every 10 Americans die each year of a chronic disease. Cancer, heart disease and stroke are the three most common chronic disease causes of mortality for Monterey County residents.[27] While genetics and environmental factors influence health outcomes, personal choices and lifestyle behaviors can have substantial, direct impact a person's present and future health. Four modifiable health risk behaviors—lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption—are responsible for much of the illness, suffering, and early mortality related to chronic diseases.[28]

Diagnosis and mortality rates

Exhibit 108. Ever diagnosed with high blood pressure by race/ethnicity



	Percent					
	2001	2003	2005	2007	2009	2011-12
Asian/Pacific Islander (nH)	18.2*	35.5	28.5*	48.1	42.1	34.3*
Black (nH)	73.3*	25.7*	20.7*	–	55*	21.2*
Hispanic/Latino, any race	13.8	13.8	15.7	17.6	24.4	24.1
Multiple/Other races (nH)	22.2*	15.3*	33.1*	23.4*	52*	19.6*
Native American/Alaskan Native (nH)	74.9*	–	–	–	39.8*	64.9*
White (nH)	27.9	25.4	26.2	29.3	34.0	32.9

(nH) = non-Hispanic
*Statistically unstable; interpret with caution
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- While the data are statistically unstable, the percentages of those ever diagnosed with high blood pressure appear to have increased for Asian/Pacific Islander, Hispanic, and White non-Hispanic residents from 2001 to 2011-2012.

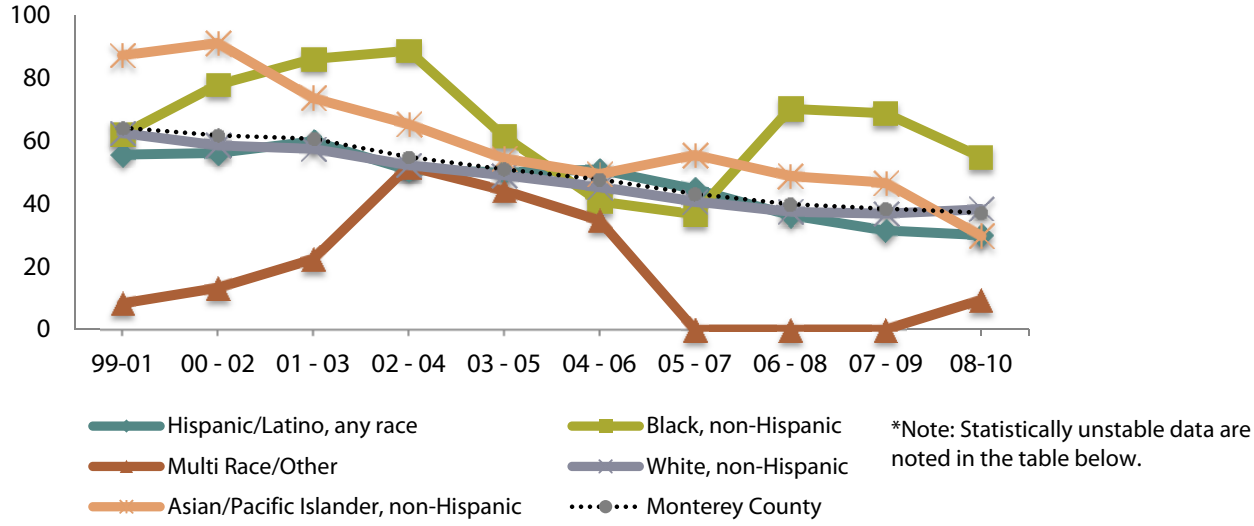
Exhibit 109. Ever diagnosed with high blood pressure by gender

	Percent					
	2001	2003	2005	2007	2009	2011-12
Male	22.6	18.4	16.3	21.7	34.1	30.4
Female	22.0	23.1	26.4	30.5	27.1	25.9

Source: California Health Interview Survey, 2013.

- The percentage of residents ever diagnosed with high blood pressure increased dramatically between 2001 and 2009 for males and less dramatically for females.

Exhibit 110. Age-adjusted stroke mortality rates per 100,000 by race/ethnicity



	Age-adjusted rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Asian/Pacific Islander (nH)	87.1*	91.0*	73.5*	65.3*	54.3*	49.4*	55.5*	48.7*	46.7*	29.8*
Black (nH)	62.0*	77.8*	86.0*	88.6*	61.4*	40.7*	36.6*	70.1*	68.7*	54.8*
Hispanic/Latino, any race	55.6*	56.1*	59.8*	50.7*	50.0*	50.8*	44.6*	36.3*	31.5*	30.0*
Multiple/Other races (nH)	8.3*	13.2*	22.3*	51.8*	44.2*	34.7*	0.0*	0.0*	0.0*	9.4*
White (nH)	62.4	58.5	57.4	52.2	49.0	45.3	40.7	37.4	36.8	38.2
Monterey County	**64.1**	**61.7**	**60.6**	**54.8**	**50.9**	**47.7**	**43.1**	**39.8**	**38.4**	**37.1**

*Statistically unstable; interpret with caution.
(nH) = non-Hispanic
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

- Overall, significant declines were seen from 1999-2001 to 2008-2010 in the stroke mortality rate countywide and across all race/ethnic groups. When examined by race/ethnicity, all rates other than White, non-Hispanic were statistically unstable.

Exhibit 111. Age adjusted stroke mortality rates per 100,000 by gender

	64.4*	57.5*	55.9*	52.7*	48.7*	46.4*	40.6*	39.7*	41.1	38.6
Female	63.4	64.1	63.1	55.5	51.7	47.6	43.6	38.9	35.7	35.3
Monterey County	**64.1**	**61.7**	**60.6**	**54.8**	**50.9**	**47.7**	**43.1**	**39.8**	**38.4**	**37.1**

*Statistically unstable; interpret with caution.
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

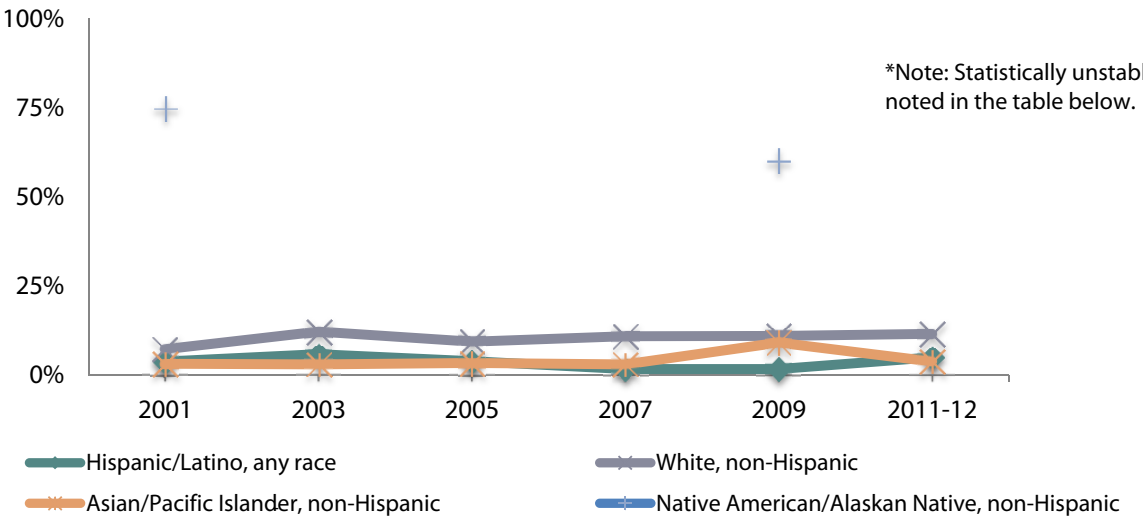
- The stroke death rate significantly decreased between 1999-2001 and 2008-2010 for both males and females.

Exhibit 112. Age adjusted stroke mortality rate disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
Hispanic/Latino, any race	Not statistically significant	**Significantly decreased**
Multiple/Other races (nH)	Not statistically significant	
White (nH)	Referent group	**Significantly decreased**
Male	Not statistically significant	
Female	Referent group	**Significantly decreased**

(nH) = non-Hispanic
Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

Exhibit 113. Ever diagnosed with heart disease by race/ethnicity



	Percent					
	2001	2003	2005	2007	2009	2011-12
Asian/Pacific Islander (nH)	3.2*	3.0*	3.4*	3.0*	9.1*	3.8*
Black (nH)	–	–	–	–	8.8*	–
Hispanic/Latino, any race	3.8*	5.9*	3.9*	1.7*	1.7*	5.0*
Multiple/Other races (nH)	18.9*	–	–	–	–	–
Native American/Alaskan Native (nH)	74.9*		–	–	60.2*	–
White (nH)	7.3	12.2	9.4	10.9	11.0	11.6

(nH) = non-Hispanic
*Statistically unstable; interpret with caution
- (hyphen) = Estimate is less than 500 people
Note: Black and Multiple/Other races excluded from graph due to lack of data
Source: California Health Interview Survey, 2013.

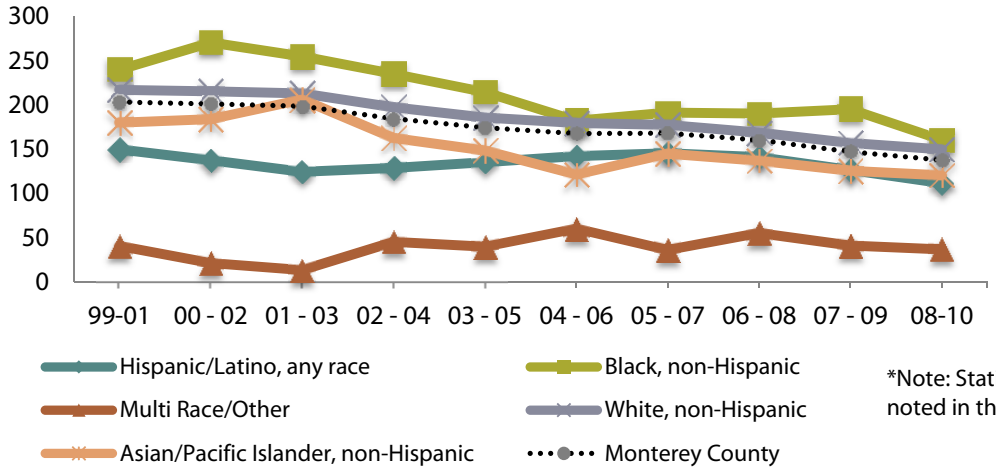
- The percentages of White residents ever diagnosed with heart disease appeared to increase from 2001 to 2011-2012.

Exhibit 114. Ever diagnosed with heart disease by gender

*Statistically unstable; interpret with caution
Source: California Health Interview Survey, 2013.

- The percentage of those ever diagnosed with heart disease fluctuated between 2001 and 2009 for males and females.
- Males appear to have experienced an upturn in heart disease diagnosis in 2011-2012; females appear to have experienced a downturn.

Exhibit 115. Age-adjusted heart disease mortality rates per 100,000 by race/ethnicity



*Note: Statistically unstable data are noted in the table below.

	Age-adjusted rate per 100,000									
Asian/Pacific Islander (nH)										
Hispanic/Latino, any race	149.6*	137.2*	124.3	128.6*	135.1*	142.0*	145.3*	140.8*	126.2*	111.4*
Multiple/Other races (nH)	40.2*	20.9*	13.1	44.9*	39.5*	60.0*	35.8*	54.9*	40.9*	36.4*
White (nH)	216.9	215.3	212.9	197.2	185.6	179.4	177.3	168.5	156.8	149.5

*Statistically unstable; interpret with caution.
(nH) = non-Hispanic
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

- The heart disease mortality rate from 1999-2001 to 2008-2010 was consistently lowest among multiple/other racial groups.

Exhibit 116. Age-adjusted heart disease mortality rates per 100,000 by gender

	252.3*	244.4*	240.4*	218.3*	207.5*	205.7*	212.0*	201.5*	183.4*	168.3*
Female	166.1	167.6	166.4	157.5	148.4	138.5	134.8	128.7	118.9	113.5
Monterey County	**203.2**	**201.0**	**198.5**	**184.3**	**174.2**	**167.5**	**167.8**	**160.0**	**146.9**	**137.5***

*Statistically significant change over time (p<.05)
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

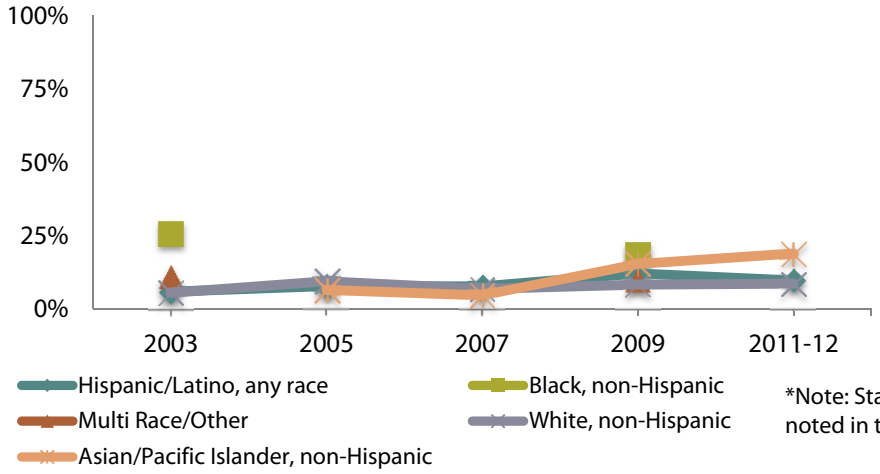
- The heart disease death rate from 1999-2001 to 2008-2010 significantly decreased for males and females but was consistently higher for males than for females

Exhibit 117. Age adjusted heart disease mortality rate disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
Hispanic/Latino, any race	Not significantly different	Not statistically significant
Multiple/Other races (nH)	**Significantly lower**	
White (nH)	Referent group	**Significantly decreased**
Male	Not significantly different	
Female	Referent group	**Significantly decreased**

(nH) = non-Hispanic
Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012 (these data are provisional); statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Exhibit 118. Ever diagnosed with diabetes by race/ethnicity



	Percent				
	2003	2005	2007	2009	2011-12
Asian/Pacific Islander (nH)	–	6.6*	4.7*	15.4*	19.0*
Black (nH)	25.7*	–	–	18.8*	–
Hispanic/Latino, any race	6.0	7.9*	7.8*	12.2	9.8
Multiple/Other races (nH)	11.1*	–	–	10.1*	–
Native American/Alaskan Native (nH)	–	–	–	–	–
White (nH)	5.6	9.5	6.9	8.4	8.7

(nH) = non-Hispanic
*Statistically unstable; interpret with caution
- (hyphen) = Estimate is less than 500 people
Note: Native American/Alaskan Native excluded from graph due to lack of data
Source: California Health Interview Survey, 2013.

- The percentages of those ever diagnosed with diabetes appeared to fluctuate for Hispanic and White non-Hispanic residents from 2003 to 2011-2012, although the instability of these percentages is likely due to a small sample size.
- Diabetes diagnosis appears to have increased for Asian/Pacific Islander residents from 2005 to 2011-2012, although the instability of these percentages is likely due to a small sample size.

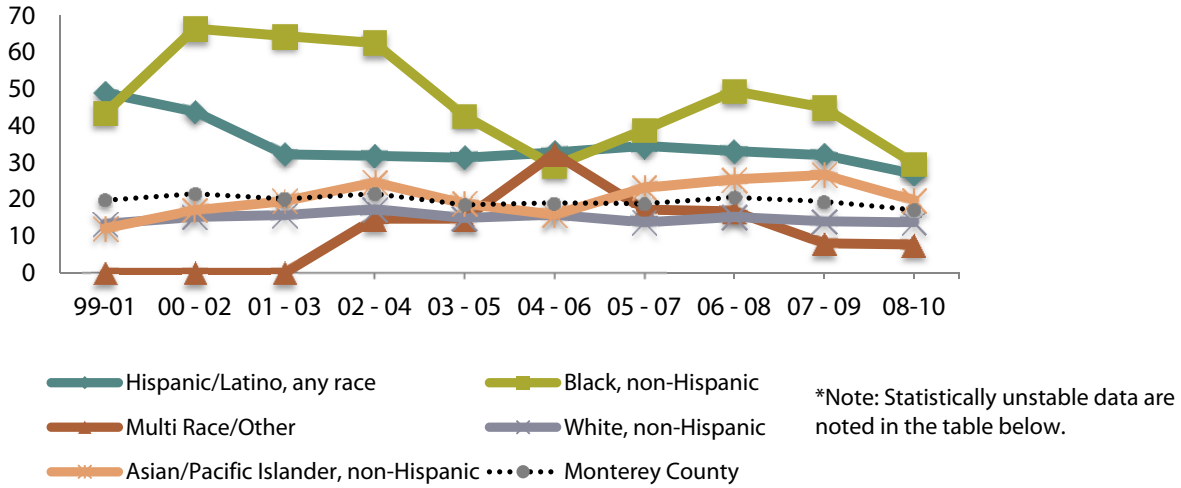
Exhibit 119. Ever diagnosed with diabetes by gender

	Percent				
	2003	2005	2007	2009	2011-12
Male	6.8	9.6	8.8*	10.4	9.7
Female	5.3	6.5	8.0*	11.7	9.7

*Statistically unstable; interpret with caution
Source: California Health Interview Survey, 2013.

- The percentages of those ever diagnosed with diabetes increased from 2003 to 2011-2012; percentages for female residents nearly doubled during that time.

Exhibit 120. Age-adjusted diabetes mortality rates per 100,000 by race/ethnicity



	Age-adjusted rates per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Asian/Pacific Islander (nH)	12.1*	17.0*	19.5*	24.6*	18.8*	15.8*	23.1*	25.4*	26.6*	19.7*
Black (nH)	43.4*	66.4*	64.4*	62.5*	42.7*	29.0*	38.9*	49.4*	44.9*	29.7*
Hispanic/Latino, any race	48.9*	43.8*	32.2*	31.8*	31.3*	32.7*	34.5*	33.1*	32.0*	26.9*
Multiple/Other races (nH)	0.0*	0.0*	0.0*	14.7*	14.7*	32.4*	17.2*	16.7*	8.0*	7.7*
White (nH)	13.3	15.2	15.7	17.3	14.9	15.8	13.7	15.2	14.0	13.7
Monterey County	**19.7**	**21.5**	**20.1**	**21.5**	**18.5**	**19.0**	**18.8**	**20.5**	**19.4**	**17.1**

*Statistically unstable; interpret with caution.
(nH) = non-Hispanic
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

- The diabetes mortality rate from 1999-2001 to 2008-2010 was significantly higher for Hispanic/Latino and Black residents compared to other race/ethnic groups and the county overall.

Exhibit 121. Age-adjusted diabetes mortality rates per 1,000 by gender

	Age adjusted mortality rates per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Male	22.3*	23.7*	23.8*	25.1*	22.0*	22.7*	23.8*	25.4	23.8	20.2
Female	17.6	19.6	16.9	18.7	15.7	16.1	15.0	16.9	16.1	14.5
Monterey County	**19.7**	**21.5**	**20.1**	**21.5**	**18.5**	**19.0**	**18.8**	**20.5**	**19.4**	**17.1**

*Statistically unstable; interpret with caution.
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

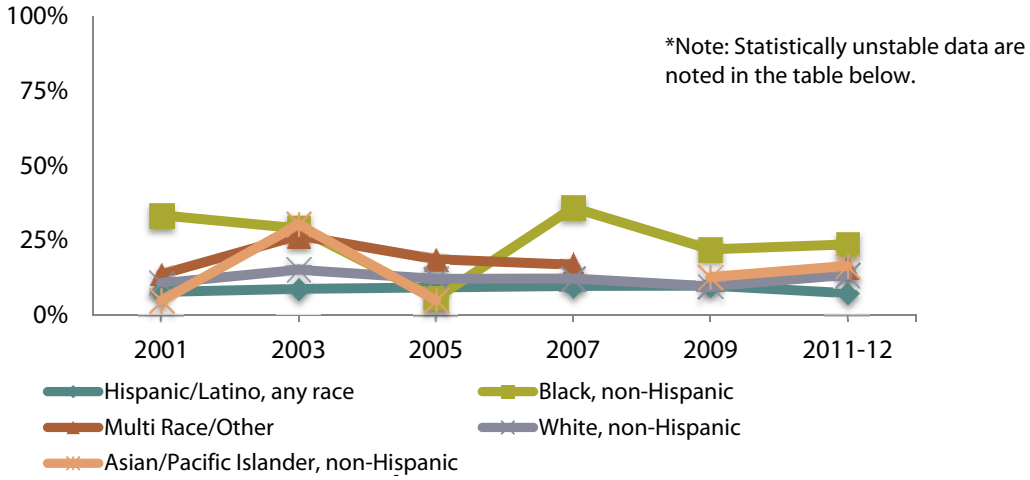
- The diabetes mortality rate from 1999-2001 to 2008-2010 appeared to be consistently higher for men compared to women, although the difference was not statistically significant.
- The diabetes mortality rate from 1999-2001 to 2008-2010 appeared to fluctuate for both males and females.

Exhibit 122. Age adjusted diabetes mortality rate disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
Hispanic/Latino, any race	**Significantly higher**	**Significantly decreased**
Multiple/Other races (nH)	Not significantly different	
White (nH)	Referent group	Not statistically significant
Male	Not significantly different	
Female	Referent group	Not statistically significant

(nH) = non-Hispanic
Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Exhibit 123. Ever diagnosed with asthma by race/ethnicity



	Percent					
	2001	2003	2005	2007	2009	2011-12
Asian/Pacific Islander (nH)	4.8*	30.3*	5.0*	–	12.8*	16.5*
Black (nH)	33.4*	29.0*	5.7*	35.9*	22.0*	23.7*
Hispanic/Latino, any race	7.8	8.8	9.3	9.8	9.9	7.4
Multiple/Other races (nH)	13.7*	26.6*	18.7*	16.9*	–	16.2*
Native American/Alaskan Native (nH)	–	–	100.0*	–	–	–
White (nH)	10.7	15.2	12.2	12.3	9.7	13.5

(nH) = non-Hispanic
*Statistically unstable; interpret with caution
- (hyphen) = Estimate is less than 500 people
Note: Native American/Alaskan Native excluded from graph due to lack of data
Source: California Health Interview Survey, 2013.

- The percentages of Hispanic and White, non-Hispanic residents who were ever diagnosed with asthma fluctuated slightly from 2001 to 2011-2012.

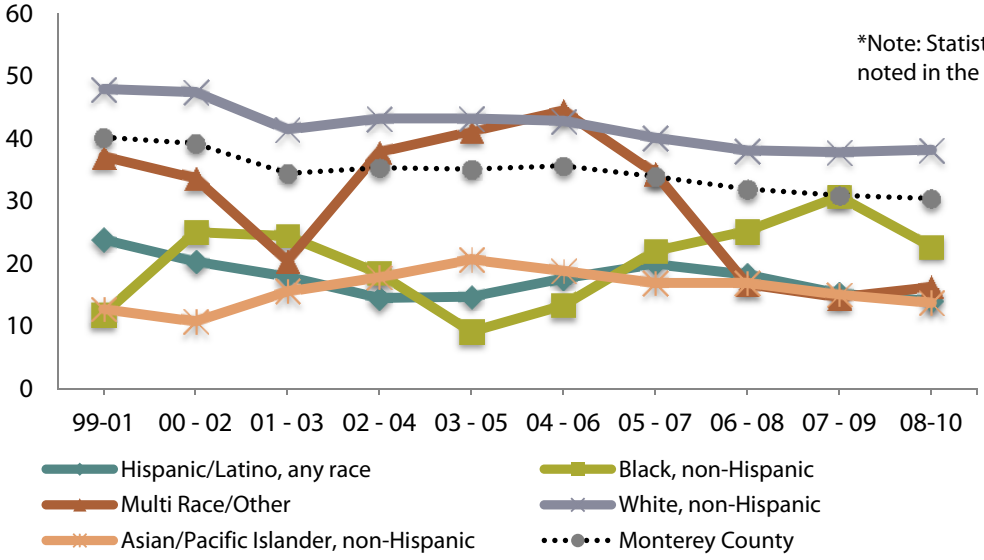
Exhibit 124. Ever diagnosed with asthma by gender

	Percent					
	2001	2003	2005	2007	2009	2011-12
Male	11.1	13.4	10.0	10.1	10.4	6.7
Female	7.5	13.7	10.3	12.8	9.8	14.6

Source: California Health Interview Survey, 2013.

- The percentages of males and females ever diagnosed with asthma fluctuated from 2001 to 2011-12.

Exhibit 125. Age-adjusted chronic obstructive pulmonary disease (COPD) mortality rates per 100,000 by race/ethnicity



Asian/Pacific Islander (nH)										
Black (nH)	11.9*	25.0*	24.4*	18.4*	9.1*	13.3*	22.0*	25.2*	30.7*	22.7*
Hispanic/Latino, any race	23.8*	20.3*	17.9*	14.5*	14.7*	17.6*	19.9*	18.2*	15.2*	14.0*
Multiple/Other races (nH)	37.1*	33.6*	20.4*	37.8*	41.1*	44.4*	34.4*	16.7*	14.6*	16.2*
White (nH)	47.9	47.4	41.4	43.2	43.2	42.8	40.1	38.1	37.8	38.2
Monterey County	**40.2**	**39.2**	**34.4**	**35.3**	**35.1**	**35.6**	**33.9**	**31.9**	**30.9**	**30.4**

(nH) = non-Hispanic
*Statistically unstable; interpret with caution
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

- White, non-Hispanic residents consistently had the highest rate of mortality due to COPD, and significantly higher rates than Hispanic or Asian residents.

Exhibit 126. Age-adjusted COPD mortality rates per 100,000 by gender

	Age-adjusted mortality rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Male	44.0*	44.0*	42.8*	43.7*	42.1*	40.9*	38.4*	34.8*	33.9*	35.5*
Female	38.1	36.2	28.9	29.5	30.2	31.8	30.9	30.2	29.4	27.4
Monterey County	**40.2**	**39.2**	**34.4**	**35.3**	**35.1**	**35.6**	**33.9**	**31.9**	**30.9**	**30.4**

Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

- Although not statistically significant, the rate of mortality due to COPD generally appeared to be greater for men than for women from 1999-2001 to 2008-2010.
- Although not statistically significant, mortality rates due to COPD appeared to decrease for both men and women from 1999-2001 to 2008-2010.

Exhibit 127. Age adjusted COPD mortality rate disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
Hispanic/Latino, any race	**Significantly lower**	Not significantly different
Multiple/Other races (nH)	Not significantly different	
White (nH)	Referent group	Not significantly different
Male	Not significantly different	
Female	Referent group	Not significantly different

(nH) = non-Hispanic

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.

Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Cancer diagnosis and mortality rates

Cancer is a class of diseases characterized by any malignant growth or tumor that is caused by abnormal and uncontrolled cell division. Because most cancer patients can experience better outcomes if their cancer is detected and treated at an early stage of development, routine and regular cancer screening for some cancers, especially breast, cervix, and colon/rectum cancers, is recommended.[29] People at risk for various cancers include those who use tobacco, have high dietary fat intake, and are overweight/obese.[30] While mortality rates for the most common cancers – prostate, breast, lung, and colorectal – are declining nationally, there continue to be unexplained cancer-related health disparities among subpopulations: nationally, African Americans and people with low socioeconomic status have the highest rates of new cancers and cancer deaths.[31]

Exhibit 128. Diagnosed with any cancer by race/ethnicity

	Percent	
	2003	2005
Asian/Pacific Islander (nH)	15.7*	9.5*
Black (nH)	–	–
Hispanic/Latino, any race	1.8*	1.1*
Multiple/Other races (nH)	11.7*	28.8*
Native American/Alaskan Native (nH)	–	–
White (nH)	14.0	13.8

* Statistically unstable; interpret with caution.
(nH) = non-Hispanic
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- The percentages of residents diagnosed with cancer, when stratified by race/ethnicity over two data points, are too unstable to reliably interpret.

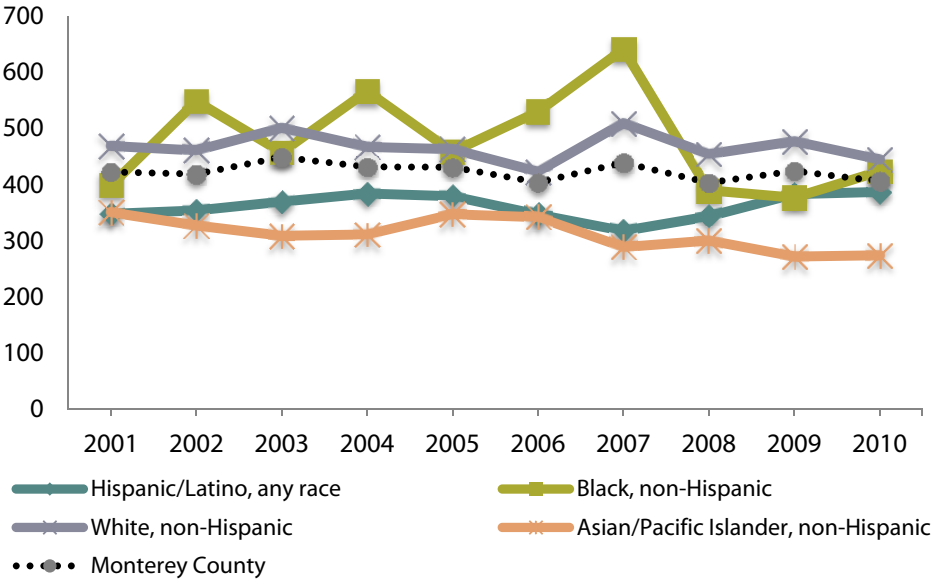
Exhibit 129. Diagnosed with any cancer by gender

	Percent	
	2003	2005
Male	5.5*	6.0
Female	11.0	8.5

* Statistically unstable; interpret with caution.
Source: California Health Interview Survey, 2013.

- Females were more likely than males to report being diagnosed with any cancer.

Exhibit 130. Age-adjusted cancer incidence (all cancers) per 100,000 by race/ethnicity



	Age adjusted rate per 100,000										
Hispanic, any race	347.8	353.8	369.3	383.9	379.2	346.6	317.2	343.3	382.8	386.7	0.4
Monterey County	**422.1**	**418.5**	**448.4**	**431.4**	**430.8**	**403.7**	**438.7**	**403.2**	**423.9**	**405.6**	**.0.7**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
(nH) = non-Hispanic
Note: Time trend was determined through least squares regression analysis.
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

- Incidence rates for all cancers decreased significantly from 2001 to 2010 for Asian and White, non-Hispanic residents, and within the county overall.
- Decreases for Black and Hispanic residents were not statistically significant.

Exhibit 131. Age-adjusted cancer incidence (all cancers) per 100,000 by gender

	Age adjusted rate per 100,000										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	APC
Male	480.0	496.6	533.3	515.7	484.8	486.6	512.4	474.3	487.9	451.0	-0.7
Female	385.0	362.1	392.6	374.4	399.9	347.8	382.5	353.2	382.5	377.3	-0.8
Monterey County	**422.1**	**418.5**	**448.4**	**431.4**	**430.8**	**403.7**	**438.7**	**403.2**	**423.9**	**405.6**	**422.1**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

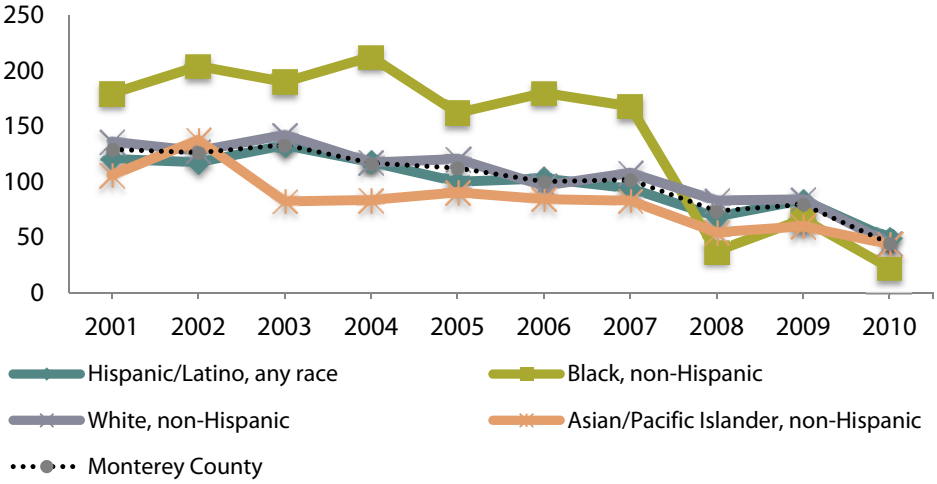
- Incidence rates for all cancers decreased significantly from 2001 to 2010 for males and females.

Exhibit 132. Age-adjusted cancer incidence trend analysis

Population Groups	Time Trend, 2001-2010
Asian/Pacific Islander (nH)	**Significantly decreased**
Black (nH)	Not statistically significant
Hispanic/Latino, any race	Not statistically significant
White (nH)	**Significantly decreased**
Male	**Significantly decreased**
Female	**Significantly decreased**
Monterey County	**Significantly decreased**

(nH) = non-Hispanic
Note: Significance of time trend was determined through least squares regression analysis.
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

Exhibit 133. Age-adjusted cancer (all cancers) mortality per 100,000 by race/ethnicity



			82.2	83.5	90.2	84.2	82.7	54.4	59.7	43.5	-6.1
Black (nH)	179.3	203.9	189.7	212.5	161.9	179.9	167.8	37.4	66.1	22.4	-5.8
Hispanic/Latino, any race	120.4	117.4	132.7	117.5	99.9	102.7	93.9	68.4	83.3	48.6	-4.5
White (nH)	135.9	127.6	142	117.2	120.3	96.3	107.8	83.0	84.0	43.9	-5.2
Monterey County	**129.0**	**126.0**	**133.1**	**116.6**	**112.2**	**99.9**	**101.7**	**73.5**	**79.3**	**44.5**	**-5.2**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
(nH) = non-Hispanic
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

- Cancer mortality decreased significantly from 2001 to 2010 across all race/ethnic groups.
- Cancer mortality disparities significantly decreased between White, non-Hispanic and all other race/ethnic groups.

Exhibit 134. Age-adjusted cancer (all cancers) mortality per 100,000 by gender

	Age adjusted rate per 100,000										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	APC
Male	147.2	138.0	157.9	138.6	144.3	116.6	107.9	81.9	92.2	53.4	-5.5
Female	115.7	115.2	115.1	98.9	87.7	85.0	95.5	66.5	68.8	37.0	-5.1
Monterey County	**129.0**	**126.0**	**133.1**	**116.6**	**112.2**	**99.9**	**101.7**	**73.5**	**79.3**	**44.5**	**-5.2**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)

Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

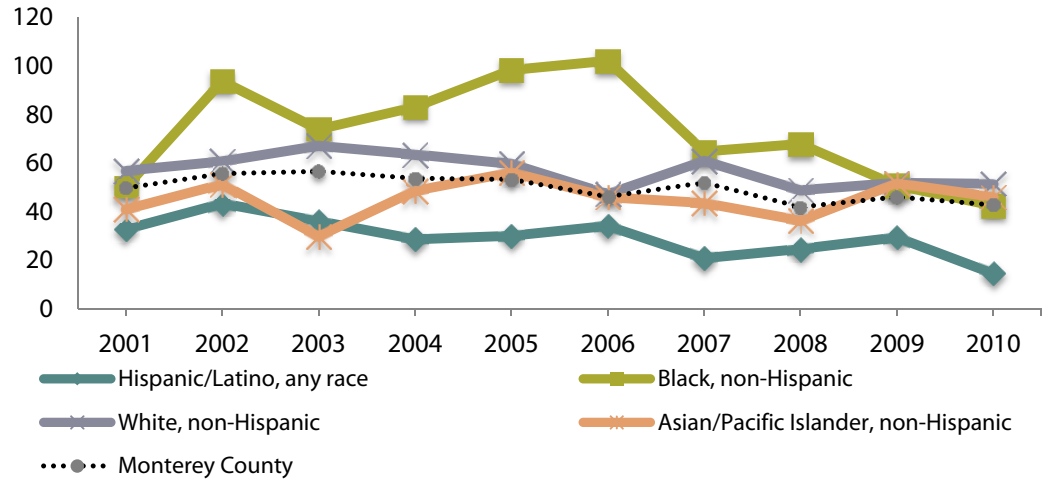
- Cancer mortality decreased significantly from 2001 to 2010 for males and females.

Exhibit 135. Age-adjusted cancer mortality trend analysis

Population Groups	Time Trend, 2001-2010
Asian/Pacific Islander (nH)	**Significantly decreased**
Black (nH)	**Significantly decreased**
Hispanic/Latino, any race	**Significantly decreased**
White (nH)	**Significantly decreased**
Male	**Significantly decreased**
Female	**Significantly decreased**
Monterey County	**Significantly decreased**

(nH) = non-Hispanic
Note: Significance of time trend was determined through least squares regression analysis.
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

Exhibit 136. Age-adjusted lung cancer incidence per 100,000 by race/ethnicity



Hispanic/Latino, any race	32.8	43.4	36.1	28.7	30.1	34.2	20.9	24.7	29.5	14.6	-3.2

	Age adjusted rate per 100,000										
White (nH)	56.9	60.7	67.1	63.6	59.7	47.3	60.9	48.9	51.9	51.5	-1.9
Monterey County	**49.8**	**55.7**	**56.6**	**53.8**	**53.3**	**46.2**	**52.0**	**42.0**	**46.1**	**42.8**	**-2.0**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
(nH) = non-Hispanic
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

- Nearly half of lung cancer incidence in Monterey County is among White, non-Hispanic residents.
- Lung cancer incidence decreased significantly from 2001 to 2010 for White, non-Hispanic residents and the county overall.

Exhibit 137. Age-adjusted lung cancer incidence per 100,000 by gender

	Age adjusted rate per 100,000										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	APC
Male	61.8	63.4	66.4	65.2	66.4	57.4	53.1	46.4	56.5	46.4	-2.6
Female	39.8	50.1	49.6	45.0	43.1	37.4	50.8	38.2	38.6	40.4	-1.4
Monterey County	**49.8**	**55.7**	**56.6**	**53.8**	**53.3**	**46.2**	**52.0**	**42.0**	**46.1**	**42.8**	**-2.0**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

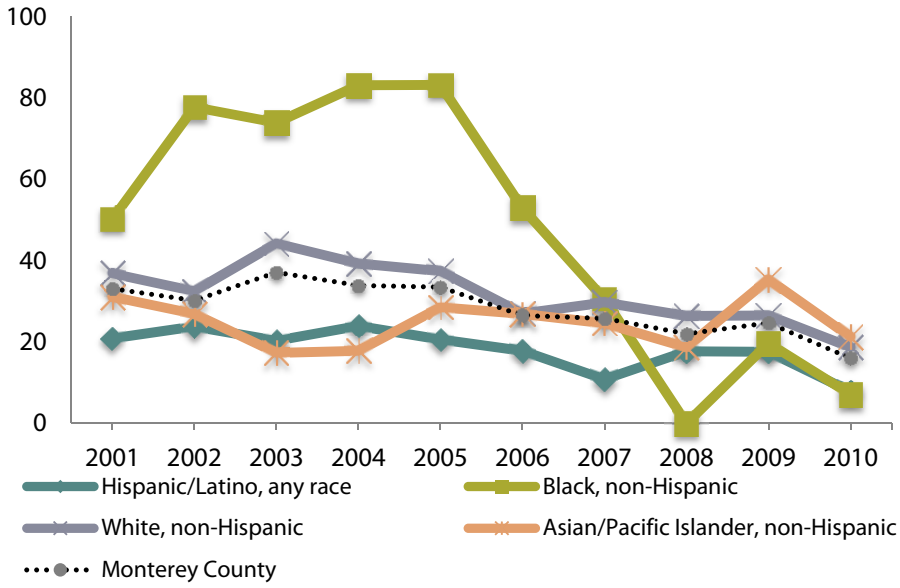
- Lung cancer incidence decreased significantly from 2001 to 2010 for males and females.

Exhibit 138. Age-adjusted lung cancer incidence trend analysis

Population Groups	Time Trend, 2001-2010
Asian/Pacific Islander (nH)	Not statistically significant
Black (nH)	Not statistically significant
Hispanic/Latino, any race	**Significantly decreased**
White (nH)	**Significantly decreased**
Male	**Significantly decreased**
Female	**Significantly decreased**
Monterey County	**Significantly decreased**

(nH) = non-Hispanic
Note: Significance of time trend was determined through least squares regression analysis.
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

Exhibit 139. Age-adjusted lung cancer mortality per 100,000 by race/ethnicity



Hispanic/Latino, any race	20.9	23.8	20.3	23.9	20.6	17.8	10.8	17.7	17.6	7.8	-5.0
White (nH)	36.8	32.5	44.2	39.3	37.4	27.0	29.7	26.4	26.5	18.7	-3.8
Monterey County	**33.1**	**30.2**	**37.1**	**33.9**	**33.5**	**26.5**	**25.8**	**22.0**	**24.7**	**16.0**	**-3.8**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
S=numbers are too small to calculate
(nH) = non-Hispanic
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

- Lung cancer mortality rates were highest in 2009 and 2010 among Asian residents compared to other race/ethnic groups.
- Lung cancer mortality decreased significantly from 2001 to 2010 for White, non-Hispanic and Hispanic residents, as well as for the county overall.

Exhibit 140. Age-adjusted lung cancer mortality rates per 100,000 by gender

Male	41.3	32.5	42.0	41.6	41.4	30.3	27.6	25.3	29.8	17.7	-4.4
Female	25.6	28.5	33.3	28.1	27.2	22.5	24.2	18.9	21.0	14.9	-3.3

Monterey County	**33.1**	**30.2**	**37.1**	**33.9**	**33.5**	**26.5**	**25.8**	**22.0**	**24.7**	**16.0**	**-3.8**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

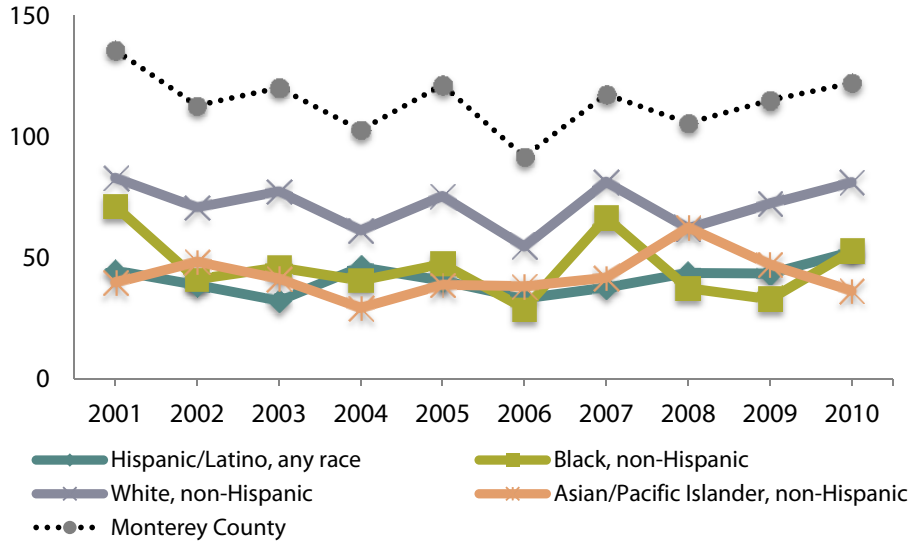
- Lung cancer mortality decreased significantly from 2001 to 2010 for males and females.

Exhibit 141. Age-adjusted lung cancer mortality trend analysis

Population Groups	Time Trend, 2001-2010
Hispanic, any race	**Significantly decreased**
Male	**Significantly decreased**
Female	**Significantly decreased**
Monterey County	**Significantly decreased**

(nH) = non-Hispanic
Note: Significance of time trend was determined through least squares regression analysis.
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

Exhibit 142. Age-adjusted breast cancer incidence per 100,000 by race/ethnicity (women)



	Age adjusted rate per 100,000										
Hispanic/Latino, any race	44.8	38.8	32.4	46.2	40.6	33.3	37.8	43.8	43.6	52.5	-0.8
White (nH)	83.1	70.8	77.4	61.3	75.5	54.7	81.3	62.2	72.3	81.2	-0.6
Monterey County	**71.7**	**59.5**	**64.3**	**54.8**	**64.1**	**47.9**	**62.5**	**54.5**	**60.6**	**63.2**	**-1.3**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
S=numbers are too small to calculate
(nH) = non-Hispanic
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

- Incidence of breast cancer was highest among White, non-Hispanic women.
- Incidence of breast cancer decreased significantly from 2001 to 2010 for the county overall.

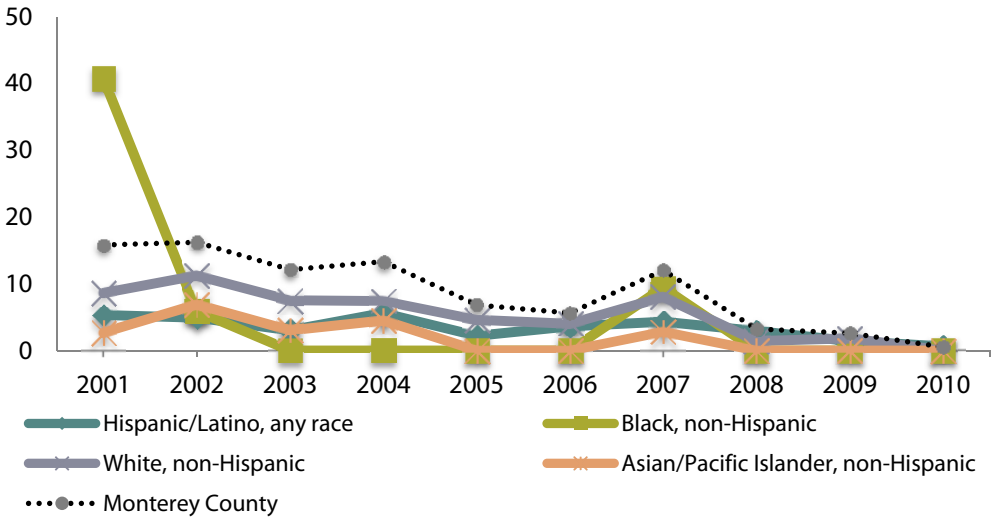
Exhibit 143. Age-adjusted breast cancer incidence trend analysis

Population Groups	Time Trend, 2001-2010
Asian/Pacific Islander (nH)	Not statistically significant
Black (nH)	Not statistically significant
Hispanic, any race	Not statistically significant

Population Groups	Time Trend, 2001-2010
White (nH)	Not statistically significant
Female	Not statistically significant

(nH) = non-Hispanic
Note: Significance of time trend was determined through least squares regression analysis.
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

Exhibit 144. Age-adjusted breast cancer mortality rates per 100,000 by race/ethnicity (women)



	Age adjusted rate per 100,000										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	APC
Asian (nH)	2.7	6.9	3.0	4.5	S	S	2.8	S	S	S	S
Black (nH)	40.7	5.9	S	S	S	S	9.4	S	S	S	S
Hispanic/Latino, any race	5.3	4.9	3.0	5.6	2.2	3.6	4.3	2.9	1.4	0.6	-11.7
White (nH)	8.6	11.2	7.5	7.4	4.6	4.0	8.0	1.4	1.8	S	S
Monterey County	**15.8**	**16.2**	**12.1**	**13.3**	**6.8**	**5.6**	**12.0**	**3.2**	**2.6**	**0.5**	**-9.1**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
S=numbers are too small to calculate
(nH) = non-Hispanic
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

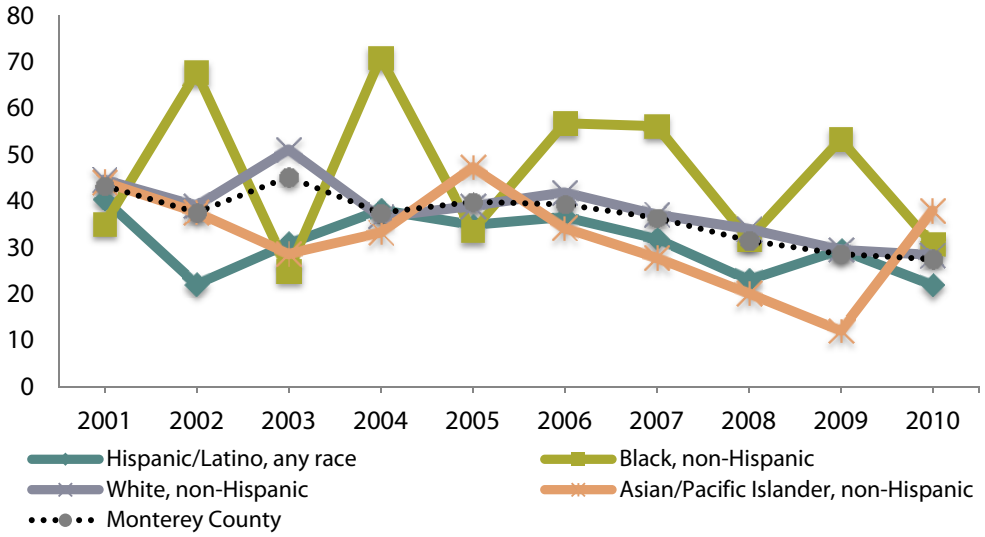
- Breast cancer mortality decreased significantly from 2001 to 2010 for Hispanic residents as well as in the county overall.

Exhibit 145. Age-adjusted breast cancer mortality trend analysis

Population Groups	Time Trend, 2001-2010
Asian/Pacific Islander (nH)	S
Black (nH)	S
Hispanic, any race	**Significantly decreased**
White (nH)	S
Monterey County	**Significantly decreased**

(nH) = non-Hispanic
S=numbers are too small to calculate
Note: Significance of time trend was determined through least squares regression analysis.
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

Exhibit 146. Age-adjusted colorectal cancer incidence per 100,000 by race/ethnicity



Hispanic/Latino, any race	40.3	22.1	30.8	38.1	34.9	36.6	31.9	29.0	29.5	21.9	-0.2
White (nH)	44.6	39.0	51.1	36.6	39.0	41.9	37.1	34.0	29.5	28.4	-2.5
Monterey County	**43.3**	**37.6**	**45.2**	**37.5**	**39.9**	**39.3**	**36.4**	**31.5**	**28.6**	**27.5**	**-2.6**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

- In 2010, colorectal cancer incidence was highest among Asian residents compared to other race/ethnic groups.
- Incidence of colorectal cancer decreased significantly from 2001 to 2010 among Asian, Black, and White, non-Hispanic residents, as well as the county overall.

Exhibit 147. Age-adjusted colorectal cancer incidence per 100,000 by gender

	Age adjusted rate per 100,000										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	APC
Male	49.5	45.5	44.1	41.9	45.0	41.5	47.5	35.7	33.5	28.0	-2.8
Female	38.6	30.0	46.4	34.6	36.8	38.2	27.2	27.1	24.9	27.3	-2.4
Monterey County	**43.3**	**37.6**	**45.2**	**37.5**	**39.9**	**39.3**	**36.4**	**31.5**	**28.6**	**27.5**	**-2.6**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

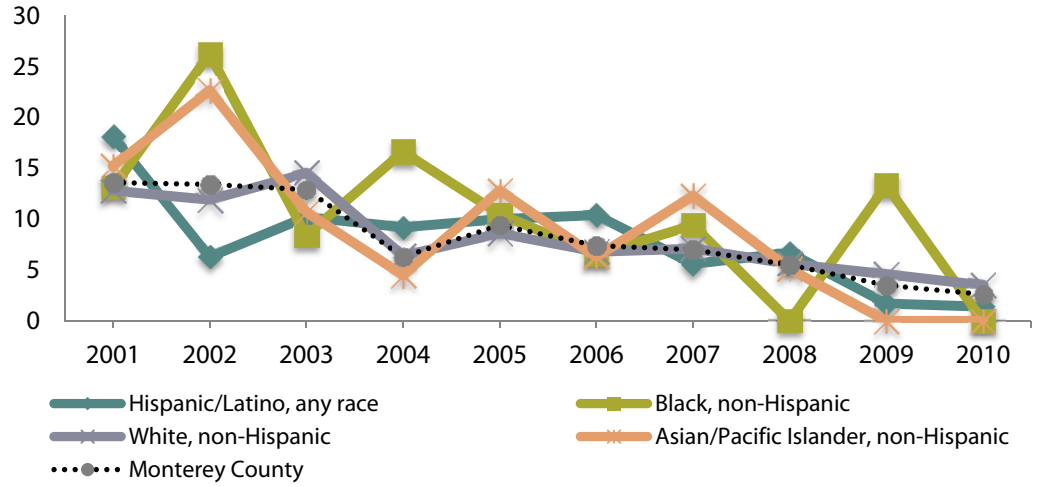
- Incidence of colorectal cancer decreased significantly from 2001 to 2010 among males and females.

Exhibit 148. Age-adjusted colorectal cancer incidence trend analysis

Population Groups	Time Trend, 2001-2010
Asian/Pacific Islander (nH)	**Significantly decreased**
Black (nH)	**Significantly decreased**
Hispanic, any race	**Significantly decreased**
White (nH)	**Significantly decreased**
Male	**Significantly decreased**
Female	**Significantly decreased**
Monterey County	**Significantly decreased**

(nH) = non-Hispanic
Note: Significance of time trend was determined through least squares regression analysis.
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

Exhibit 149. Age-adjusted colorectal cancer mortality rates per 100,000 by race/ethnicity



Hispanic/Latino, any race	18.1	6.3	10.2	9.2	10.0	10.4	5.6	6.7	1.7	1.4	-4.9
White (nH)	12.8	11.9	14.5	6.4	8.6	6.8	7.1	5.6	4.6	3.5	-7.0
Monterey County*	**13.6**	**13.4**	**12.9**	**6.3**	**9.4**	**7.4**	**7.0**	**5.5**	**3.5**	**2.6**	**.7.3**

(nH) = non-Hispanic (least squares regression calculated from 1992-2010, not all data shown)
S=numbers are too small to calculate
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

- Colorectal cancer mortality decreased significantly from 2001 to 2010 among Hispanic and White, non-Hispanic residents.

Exhibit 150. Age-adjusted colorectal cancer mortality rates per 100,000 by gender

	Age adjusted rate per 100,000										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	APC
Male	17.7	15.9	12.6	7.0	11.7	7.9	7.6	8.0	4.4	2.7	-7.3
Female	10.8	11.2	13.5	5.5	7.7	6.6	6.3	3.3	2.7	2.3	-7.3
Monterey County	**13.6**	**13.4**	**12.9**	**6.3**	**9.4**	**7.4**	**7.0**	**5.5**	**3.5**	**2.6**	**-7.3**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

- Colorectal cancer mortality decreased significantly from 2001 to 2010 among males and females.

Exhibit 151. Age-adjusted colorectal cancer mortality trend analysis

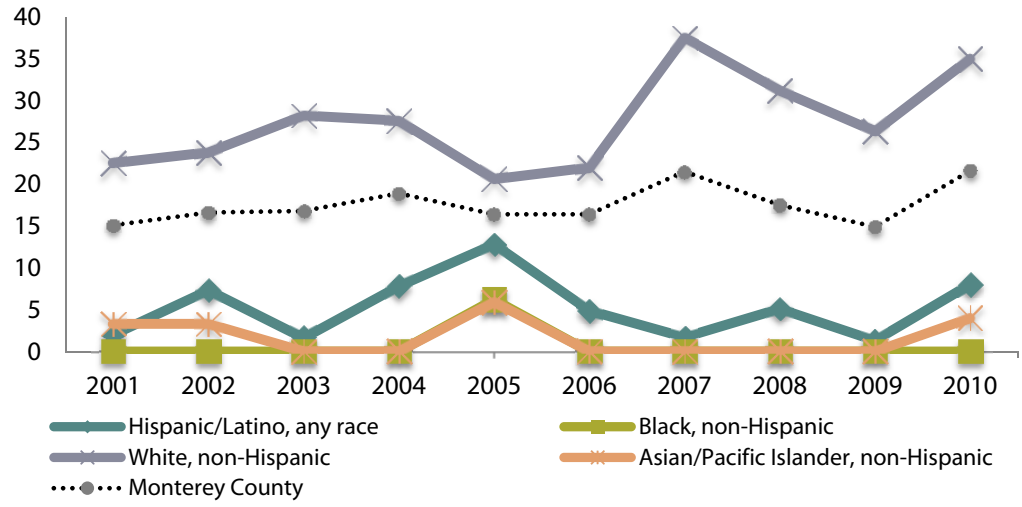
Population Groups	Time Trend, 2001-2010
Asian/Pacific Islander (nH)	No significant difference
Black (nH)	No significant difference
Hispanic, any race	**Significantly decreased**
White (nH)	**Significantly decreased**
Male	**Significantly decreased**
Female	**Significantly decreased**
Monterey County	**Significantly decreased**

(nH) = non-Hispanic

Note: Significance of time trend was determined through least squares regression analysis.

Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

Exhibit 152. Age-adjusted skin cancer incidence per 100,000 by race/ethnicity



	Age adjusted rate per 100,000										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	APC
Asian (nH)	3.3	3.3	S	S	5.9	S	S	S	S	4.0	S
Black (nH)	S	S	S	S	6.2	S	S	S	S	S	S
Hispanic/Latino, any race	2.0	7.3	1.6	7.8	12.8	4.9	1.7	5.1	1.3	8.0	S
White (nH)	22.5	23.8	28.2	27.6	20.6	22.0	37.5	31.2	26.3	35.0	3.6
Monterey County	**15.1**	**16.6**	**16.8**	**18.9**	**16.4**	**16.4**	**21.5**	**17.5**	**14.9**	**21.6**	**1.8**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
S=numbers are too small to calculate
(nH) = non-Hispanic
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

- Skin cancer incidence was highest among White, non-Hispanic residents.
- Incidence of skin cancer has increased significantly from 2001 to 2010 among White, non-Hispanic residents and for Monterey County overall.

Exhibit 153. Age-adjusted skin cancer incidence per 100,000 by gender

	Age adjusted rate per 100,000										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	APC
Male	17.0	22.2	17.6	22.2	17.3	21.8	29.4	18.9	20.8	30.1	2.1
Monterey County	**15.1**	**16.6**	**16.8**	**18.9**	**16.4**	**16.4**	**21.5**	**17.5**	**14.9**	**21.6**	**1.8**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

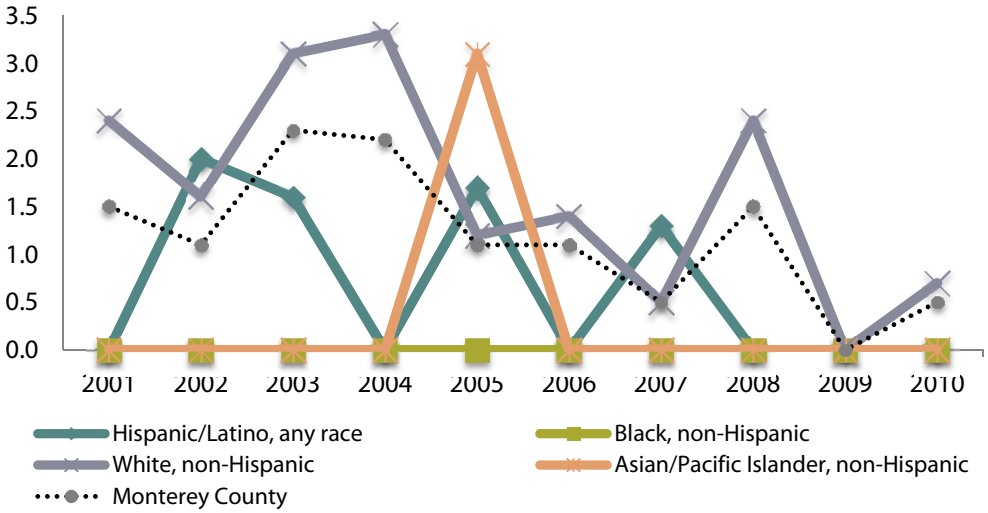
- Incidence of skin cancer is higher among males compared to females, and increased significantly among males from 2001 to 2010.

Exhibit 154. Age-adjusted skin cancer incidence trend analysis

Population Groups	Time Trend, 2001-2010
Asian/Pacific Islander (nH)	S
Black (nH)	S
Hispanic, any race	S
White (nH)	**Significantly increased**
Male	**Significantly increased**
Female	No significant difference
Monterey County	**Significantly increased**

(nH) = non-Hispanic
S=numbers are too small to calculate
Note: Significance of time trend was determined through least squares regression analysis.
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

Exhibit 155. Age-adjusted skin cancer mortality rates per 100,000 by race/ethnicity



	Age adjusted rate per 100,000									2010	APC
Asian (nH)										S	S
Black (nH)	S	S	S	S	S	S	S	S	S	S	S
Hispanic/Latino, any race	S	2.0	1.6	S	1.7	S	1.3	S	S	S	S
White (nH)	2.4	1.6	3.1	3.3	1.2	1.4	0.5	2.4	S	0.7	S
Monterey County	**1.5**	**1.1**	**2.3**	**2.2**	**1.1**	**1.1**	**0.5**	**1.5**	**S**	**0.5**	S

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
S=numbers are too small to calculate
(nH) = non-Hispanic
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

- Mortality due to skin cancer is low among all race/ethnicities.

Exhibit 156. Age-adjusted skin cancer mortality rates per 100,000 by gender

	Age adjusted rate per 100,000										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	APC
Male	1.3	1.6	3.8	4.6	0.9	1.9	0.5	1.7	S	0.7	S
Female	1.5	0.5	1.1	0.5	1.2	0.4	0.6	1.5	S	0.4	S
Monterey County	**1.5**	**1.1**	**2.3**	**2.2**	**1.1**	**1.1**	**0.5**	**1.5**	**S**	**0.5**	S

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
S=numbers are too small to calculate
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy

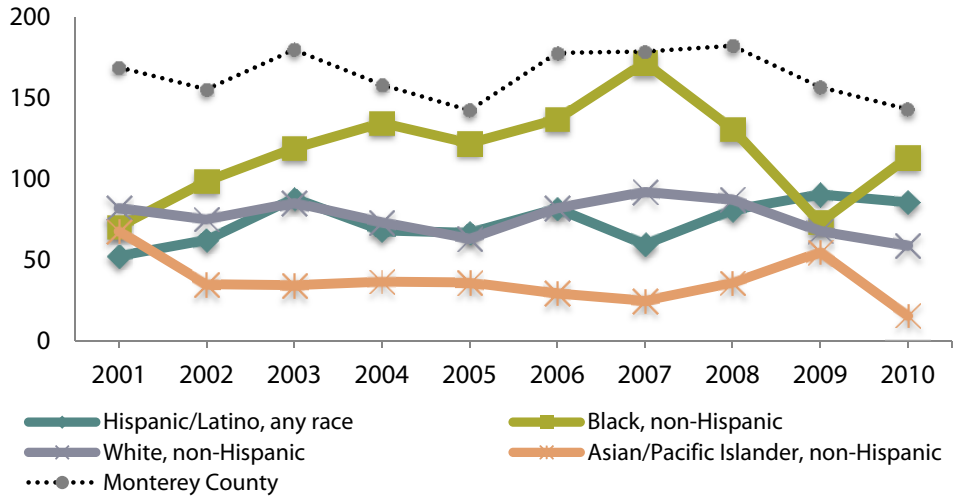
- Mortality due to skin cancer generally fluctuated at low levels from 2001 to 2010 for both males and females.

Exhibit 157. Age-adjusted skin cancer mortality trend analysis

Population Groups	Time Trend, 2001-2010
Asian/Pacific Islander (nH)	S
Black (nH)	S
Hispanic, any race	S
White (nH)	S
Male	S
Female	S
Monterey County	S

(nH) = non-Hispanic
S=numbers are too small to calculate
Note: Significance of time trend was determined through least squares regression analysis.
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

Exhibit 158. Age-adjusted prostate cancer incidence per 100,000 by race/ethnicity



Hispanic/Latino, any race	52.4	62.3	88.0	68.2	66.7	81.7	59.6	80.7	90.4	85.6	2.9
Monterey County	**168.9**	**155.3**	**179.7**	**158.2**	**142.3**	**177.8**	**178.6**	**182.2**	**156.7**	**143.0**	**-0.4**

APC=Annual Percent Change (least squares regression calculated from 1992-2010, not all data shown)
(nH) = non-Hispanic
S=numbers are too small to calculate
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

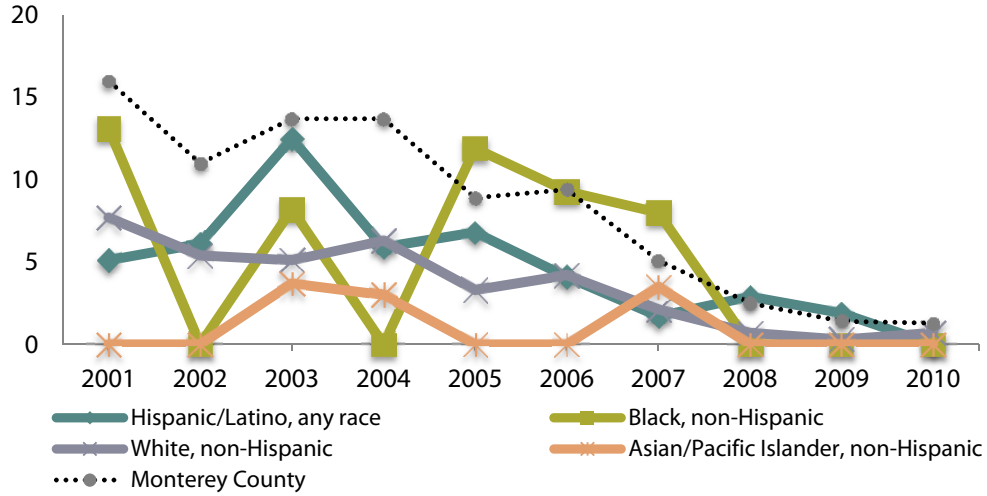
- Prostate cancer incidence was generally higher among Black residents from 2001 to 2010.
- From 2001 to 2010, incidence of prostate cancer has decreased significantly among Asian residents and increased significantly among Hispanic residents.

Exhibit 159. Age-adjusted prostate cancer incidence trend analysis

Population Groups	Time Trend, 2001-2010
Hispanic, any race	**Significantly increased**
White (nH)	Not statistically significant
Monterey County	Not statistically significant

(nH) = non-Hispanic
Note: Significance of time trend was determined through least squares regression analysis.
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

Exhibit 160. Age-adjusted prostate cancer mortality rates per 100,000 by race/ethnicity



	2001		2003	2004			2007		2009		APC
							3.5		S		S
Black (nH)	13.1	S	8.2	S	11.9	9.3	8.0	S	S	S	S
Hispanic/Latino, any race	5.1	6.1	12.5	5.9	6.8	4.1	1.7	2.9	1.9	S	S
White (nH)	7.7	5.4	5.1	6.3	3.3	4.2	2.1	0.7	0.3	0.7	-12.2+
Monterey County	**16.0**	**11.0**	**13.7**	**13.7**	**8.9**	**9.4**	**5.1**	**2.5**	**1.4**	**1.3**	**-12.3+**

APC=Annual Percent Change; S=numbers are too small to calculate; (nH) = non-Hispanic (least squares regression calculated from 1992-2010, not all data shown)

+Statistically significant annual percentage change over time

Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the Nov. 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

- Mortality rates due to prostate cancer from 2001 to 2010 decreased significantly among White, non-Hispanic residents and in the county overall.

Exhibit 161. Age-adjusted prostate cancer mortality trend analysis

Population Groups	Time Trend, 2001-2010
Hispanic, any race	S
White (nH)	**Significantly decreased**
Monterey County	**Significantly decreased**

(nH) = non-Hispanic
S=numbers are too small to calculate
Note: Significance of time trend was determined through least squares regression analysis.
Source: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov), released April 2013, based on the November 2012 submission. Statistical analyses performed by Monterey County Health Department Planning, Evaluation, and Policy Unit.

Mental Health

Mental health is defined as a state of successful performance of mental function that results in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity. Mental disorders are characterized by alterations in thinking, mood, or behavior (or some combination thereof), which are associated with distress or impaired functioning and may cause disability, pain, or death.[32]

The causes and origins of mental disorders are complex, with current research indicating that the vast majority of mental disorders are caused by the interaction of genetics with environmental, social, behavioral and cultural factors. While genetic susceptibility is not a determinant, when a family history of mental disorders is known, proactive and appropriate measures to diagnose problems early can ensure the best possible likelihood of recovery from or effective living with mental disorders.[33]

Mental health treatment is subject to cultural influences, as patients of different cultures (race/ethnicity, gender, age, and socio-economic factors) may regard and describe their symptoms to clinicians in very different ways. Cultures also vary with respect to the way patients understand their illness and distress, that is, the deep-seated attitudes and beliefs a culture holds about whether an illness is "real" or "imagined," whether it is of the body or the mind (or both), whether it warrants sympathy, how much stigma surrounds it, what might cause it, and what type of person might be susceptible to it. Cultural meanings of illness have real consequences in terms of whether people are motivated to seek treatment, how they cope with their symptoms, how supportive their families and communities are, where they seek help, the types of services they seek, and how well they fare in treatment.[34] The consequences can be grave — extreme distress, disability, and possibly, suicide — when people with severe mental illness do not receive appropriate treatment.

The data in this section of the CHA describe indicators related to mental health. Data include bullying and harassment of children, depression, and drug-related and suicide deaths.

Bullying

Exhibit 162. Bullying/harassment for any reason by grade level, 2008-2010

	Percent			
	0 Times	1 Time	2-3 Times	4 or More Times
7th Grade	58.5	15.2	9.9	16.5
11th Grade	73.3	8.7	7.4	10.6
Non-Traditional	70.1	8.2	6.0	15.7

Source: California Healthy Kids Survey, 2013.

- Younger children (7th and 9th grades) reported being bullied or harassed more often than older children (11th grade)

Depression

Exhibit 163. Likely had serious psychological distress during past month by age group

	Percent		
	2007	2009	2011-12
Teen (12-17 years)	9.7*	6.5*	6.5*
Adult (18-64 years)	3.7*	2.8*	3.8
Senior (65+ years)	1.4*	–	–

* Statistically unstable; interpret with caution.
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- These data must be interpreted with caution as they are statistically unstable and are based on small sample sizes.

Exhibit 164. Likely had serious psychological distress during past month by gender

	Percent		
	2007	2009	2011-12
Male	2.6*	3.2*	1.8*
Female	5.5*	2.5*	5.6

* Statistically unstable; interpret with caution.
Source: California Health Interview Survey, 2013.

- While these data must be interpreted with caution as they are statistically unstable, it appears that females are generally more likely to be diagnosed with psychological distress than males.

Exhibit 165. Likely had serious psychological distress during past month by race/ethnicity

	Percent		
	2007	2009	2011-12
Asian (nH)	2.5*	3.4*	–
Black (nH)	–	–	–
Hispanic/Latino, any race	5.1*	3.4*	5.0*
Multi-race (nH)	–	14*	–
Native American/Alaskan Native, (nH)	–	–	–
White (nH)	2.5*	1.7*	2.6*

* Statistically unstable; interpret with caution.
(nH) = non-Hispanic
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- These data must be interpreted with caution as they are statistically unstable and are based on small sample sizes.

Drug-related deaths and suicide

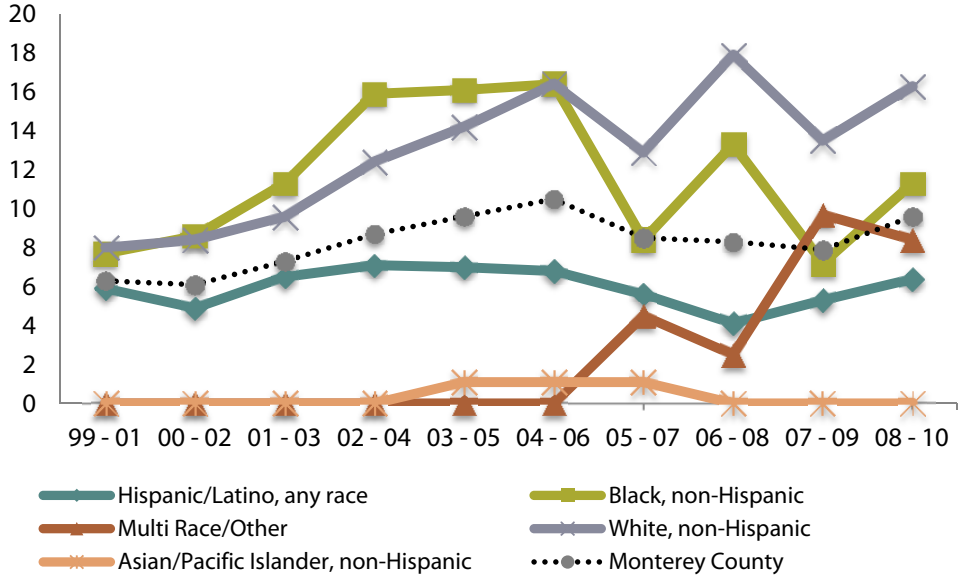
Exhibit 166. Accidental poisoning/unintentional drug-related mortality rates per 100,000 by age group

	Rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
<1	S	S	S	S	S	S	S	S	S	S
1 to 14	S	S	S	S	S	S	S	S	S	S
15 to 24 years	S	S	S	2.6*	2.6*	2.6*	S	2.6*	3.6*	4.6*
25 to 44 years	9.0	9.8	10.4	12.7	14.5	17.6	13.9	12.2	11.9	12.5
45 to 64 years	12.1	10.8	16.1	18.4	19.1	19.5	16.2	17.8	15.2	21.3
65+ years	5.0	5.0	S	S	S	S	S	S	S	S
Monterey County	**6.3**	**6.1**	**7.3**	**8.7**	**9.6**	**10.5**	**8.5**	**8.3**	**7.9**	**9.6**

*Statistically unstable; interpret with caution.
S=data are suppressed to preserve confidentiality
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

- The accidental poisoning/unintentional drug-related mortality rates were consistently higher among 45 to 64 year old residents, with rates typically more than twice the county rate.

Exhibit 167. Age-adjusted accidental poisoning/unintentional drug-related mortality rates per 100,000 by race/ethnicity



	Age-adjusted rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Asian/Pacific Islander (nH)	0.0	0.0	0.0	0.0	1.1	1.1	1.1	0.0	0.0	0.0
Black (nH)	7.7	8.6	11.3	15.9	16.1	16.4	8.4	13.3	7.2	11.3
Hispanic/Latino, any race	5.9	4.9	6.5	7.1	7.0	6.8	5.6	4.1	5.3	6.4
Multiple/Other races (nH)	0.0	0.0	0.0	0.0	0.0	0.0	4.5	2.5	9.7	8.4*
White (nH)	8.0	8.4	9.6	12.4	14.2	16.4*	12.9*	17.9*	13.5*	16.3*
Monterey County	**6.3**	**6.1**	**7.3**	**8.7**	**9.6**	**10.5**	**8.5**	**8.3**	**7.9**	**9.6**

*Statistically unstable; interpret with caution.
(nH) = non-Hispanic
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

- The accidental poisoning/unintentional drug-related mortality rates were highest among White, non-Hispanic and Black residents; rates for both groups were higher than the county rate.

Exhibit 168. Age-adjusted accidental poisoning/unintentional drug-related mortality rates per 100,000 by gender

	Age-adjusted rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Male	8.1	7.4	9.6	11.5	13.0	14.4	12.1	10.9	9.4	11.3
Female	4.6	4.7	4.8	5.6	6.1	6.4	4.7	5.4	6.4	7.6
Monterey County	**6.3**	**6.1**	**7.3**	**8.7**	**9.6**	**10.5**	**8.5**	**8.3**	**7.9**	**9.6**

Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

- From 1999-2001 to 2008-2010, males consistently had rates of accidental poisoning/unintentional drug-related mortality rates that exceeded female rates.

Exhibit 169. Accidental poisoning/unintentional drug-related mortality disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
15 to 24 years	**Significantly lower**	Not statistically significant
25 to 44 years	Referent group	Not statistically significant
45 to 64 years	Not significantly different	Not statistically significant
65+ years	S	Not statistically significant
Asian/Pacific Islander (nH)	**Significantly lower**	Not statistically significant
Black (nH)	Not significantly different	Not statistically significant
Hispanic/Latino, any race	**Significantly lower**	Not statistically significant
Multiple/Other races (nH)	Not significantly different	**Significantly increased**
White (nH)	Referent group	**Significantly increased**
Male	Not significantly different	Not statistically significant
Female	Referent group	Not statistically significant

(nH) = non-Hispanic

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.

Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

Exhibit 170. Suicide rates per 100,000 by age group

	Rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
1 to 14 years	S	S	S	S	S	S	S	S	S	S
15 to 24 years	4.8*	5.8*	6.3*	6.3*	6.3*	7.9*	6.8*	8.8*	7.8*	11.3
25 to 44 years	9.5	7.9	9.6	9.2	8.8	7.5	9.3	11.1	10.2	7.7

	Rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
45 to 64 years	9.9	11.6	16.5	16.8	16.1	12.4	14.0	16.7	18.4	17.8
65+ years	10.1*	9.9*	16.4	21.2	22.0	17.1	11.4*	12.1*	11.0*	16.9
Monterey County	**7.1**	**7.2**	**9.6**	**10.0**	**9.7**	**8.4**	**8.5**	**10.0**	**9.8**	**10.1**

S=data are suppressed to ensure confidentiality.
*Statistically unstable; interpret with caution.
Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010. Statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Suicide rates were consistently higher among residents age 45 and older compared to residents age 44 and younger.

Exhibit 171. Age-adjusted suicide rates per 100,000 by race/ethnicity

	Age-adjusted rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Asian/Pacific Islander (nH)	9.1*	11.9*	15.8*	14.8*	12.8*	9.0*	8.9*	6.1*	6.3*	7.3*
Black (nH)	4.8*	5.7*	9.2*	6.1*	4.3*	2.0*	4.0*	4.1*	3.6*	1.8*
Hispanic/Latino, any race	2.4	2.2	3.1*	3.7*	3.8*	3.9	4.6	5.7	4.8	4.2
Multiple/Other races (nH)	4.7*	3.8*	7.8*	10.6*	10.9*	8.3*	8.2*	11.6*	8.0*	9.0*
White (nH)	10.6	10.4	13.1	13.1	13.5	11.6	11.6	14.6	15.7	17.5*
Monterey County	**7.1**	**7.2**	**9.6**	**10.0**	**9.7**	**8.4**	**8.5**	**10.0**	**9.8**	**10.1**

*Statistically unstable; interpret with caution.
(nH) = non-Hispanic
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

- Suicide rates from 2003-2005 to 2008-2010 were higher for White, non-Hispanic residents compared to all other race/ethnic groups.
- Suicide rates for Black and Hispanic residents were significantly lower than White, non-Hispanic residents.

Exhibit 172. Age-adjusted suicide rates per 100,000 by gender

	Age-adjusted rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Male	11.6	10.5	14.0	14.3	13.9	12.3	14.8	13.0	13.4	13.9
Female	2.5	3.6	5.3	6.1	5.9	4.5	4.0	5.2	6.0	6.2
Monterey County	**7.1**	**7.2**	**9.6**	**10.0**	**9.7**	**8.4**	**8.5**	**10.0**	**9.8**	**10.1**

(nH) = non-Hispanic
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

- Suicide rates for both males and females increased, though not significantly, from 1999-2001 to 2008-2010.
- The suicide rates for females more than doubled in that time.

Exhibit 173. Suicide disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
15 to 24 years	Not significantly different	Not statistically significant
25 to 44 years	Referent group	Not statistically significant
45 to 64 years	**Significantly higher**	Not statistically significant
65+ years	Not significantly different	Not statistically significant
Asian/Pacific Islander (nH)	Not significantly different	**Significantly decreased**
Black (nH)	**Significantly lower**	Not statistically significant
Hispanic/Latino, any race	**Significantly lower**	Not statistically significant
Multiple/Other races (nH)	Not significantly different	Not statistically significant
White (nH)	Referent group	Not statistically significant
Male	**Significantly higher**	Not statistically significant
Female	Referent group	Not statistically significant

(nH) = non-Hispanic

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.

Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

Health Behaviors – Protective and Risk Factors

Chronic health conditions and diseases are those that can have a long course of illness, rarely resolve spontaneously, and generally are not cured by medication or prevented by vaccine.[35] As a nation, 75% of our health care dollars goes to treatment of chronic diseases.

These persistent conditions—the nation's leading causes of death and disability—leave in their wake deaths that could have been prevented, lifelong disability, compromised quality of life, and burgeoning health care costs.[36]

More than 30 years ago, the Surgeon General's Report on Health Promotion and Disease Prevention stated that an individual's health can be significantly improved through personal actions, and through public and private sector policies that promote a safer and healthier environment, as illustrated below.[37] Much of the illness, suffering, and early death related to chronic diseases can be attributed to four modifiable health behaviors:

- Lack of physical activity
- Poor nutrition
- Tobacco use
- Excessive alcohol consumption

Circles of Influence in Self-Management of Chronic Disease

Source: The Center for Managing Chronic Disease

As seen in the previous section of this report, health disparities are evident in chronic disease incidence and mortality as they are not uniformly shared among members of racial and ethnic minority populations. For example, heart disease death rates are higher among Blacks than Whites,[38] and diabetes rates are substantially higher among Native American and Alaska Natives than White, non-Hispanics.[39]

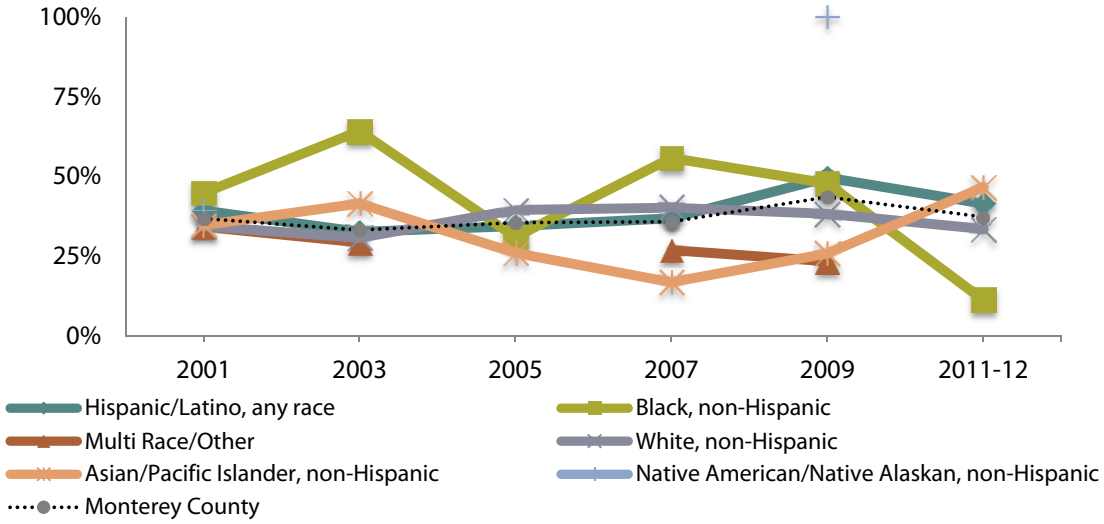
The scope and severity of the chronic disease problem has not escaped the public's attention. More than two-thirds of all adults believe that the U.S. health care system should place more emphasis on chronic disease preventive care, and more than 4 in 5 Americans (84%) favor public funding for such prevention programs.[40] This is especially relevant in that 36% of the nation's population belongs to a racial or ethnic minority group that may experience a disproportionate burden of preventable disease, death, and disability.[41] "The future health of the nation," according to the Centers for Disease Control and Prevention's Office of Minority Health and Health Equity, "will be determined to a large extent by how effectively we work with communities to eliminate health disparities among those populations experiencing a disproportionate burden of disease, disability, and death."

This section of the CHA reports data that pertain to behaviors and lifestyle choices that may contribute to being a protective or risk factor for chronic diseases. These include overweight and obesity, nutrition behaviors, physical activity and smoking.

Weight and Nutrition

Overweight and obesity are major contributors to many preventable causes of death, and on average, higher body weights are associated with higher death rates. Regular physical activity is associated with lower death rates for adults of any age, even when only moderate levels of physical activity are performed. Regular physical activity decreases the risk of death from heart disease, lowers the risk of developing diabetes, and is associated with a decreased risk of colon cancer. Regular physical activity helps prevent high blood pressure and helps reduce blood pressure in persons with elevated levels. Good nutrition contributes substantially to the burden of preventable illnesses and premature death. Of primary concern is the over-consumption of saturated fat and the under-consumption of vegetables, fruits, and grain products that are high in vitamins and minerals, carbohydrates, and other substances that are important to good health.

Exhibit 174. Overweight/obese adults (measured by body mass index) by race/ethnicity



	Percent											
	2001		2003		2005		2007		2009		2011-12	
	OW	OB	OW	OB	OW	OB	OW	OB	OW	OB	OW	OB
Asian/Pacific Islander (nH)	34.6	6.3*	41.4	18.2*	25.9*	3.4*	16.7*	26.8*	25.7*	–	46.5	13.4*
Black (nH)	44.7*	46.8*	64.1*	25.7*	30.9*	49.9*	55.7*	–	47.7*	38.3*	11.2*	21.4*
Hispanic/Latino, any race	39.2	33.4	32.5	32.4	34.3	30.8	36.8	31.1	49.5	24.7	41.4	26.7
Multiple/Other races (nH)	34.1*	20.0*	29.2*	12.8*	–	55.0*	26.8*		23.3*	12.6*	–	50.8*
Native American/ Native Alaskan (nH)	39.3*	60.7*	–	–	–	–	–	–	100.0*	–	–	–
White (nH)	34.3	19.9	30.6	18.4	39.4	20.4	40.1	20.5	38.2	17.1	33.4	24.3
Monterey County	**36.7**	**25.3**	**33.1**	**24.7**	**35.4**	**25.6**	**35.7**	**26.6**	**43.4**	**20.4**	**37.2**	**25.1**

(nH)=non-Hispanic, OW=overweight, OB=obese, - (hyphen) = Estimate is less than 500 people

* Statistically unstable; interpret with caution.

Source: California Health Interview Survey, 2013.

- While most of these data are statistically unstable, it appears that overweight and obese conditions for all race/ethnic groups have fluctuated since 2001.

Exhibit 175. Overweight/obese adults by gender

											2011-12	
	OW	OB	OW	OB	OW	OB	OW	OB	OW	OB	OW	OB
Male	47.4	23.8	36.8	28.8	40.2	29.2	41.7	24.7	50.6	19.1	45.9	23.6

Note: OW=overweight, OB=obese
Source: California Health Interview Survey, 2013.

- From 2001 to 2011-12, males were consistently more likely to be overweight than females.

Exhibit 176. Overweight/obese teens by gender

	Percent									
	2003		2005		2007		2009		2011-12	
	At Risk	OW/OB	At Risk	OW/OB	At Risk	OW/OB	At Risk	OW/OB	At Risk	OW/OB
Male	19.7*	16.3*	21.0*	18.1*	21.5*	33.2*	3.1*	8.8*	49.6*	17.3*
Female	18.0*	8.9*	20.3*	21.9*	20.3*	10.1*	19.1*	–	6.6*	5.4*

* Statistically unstable; interpret with caution.
OW/OB= Overweight/Obese
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- While these data are statistically unstable, it appears the percentage of overweight/obese teens has been high from 2003 to 2011-2012.

Exhibit 177. Five or more servings of fruits and vegetables consumed daily by age group

	Percent				
	2003	2005	2007	2009	2010-12
Children (ages 2 - 11)	na	na	46.6	51.4	55.5
Teens (ages 12 - 17)	25.0	21.0	13.2	10.6	7.6*

na=data not available
* Statistically unstable; interpret with caution.
Source: California Health Interview Survey, 2013.

- Fifty-six percent (56%) of parents reported their children ages 2 to 11 consumed 5 servings of fruit and vegetables daily; this rate is about six times greater than the teen self-reported percentage (8%).
- The percentage of teens who reported eating five or more servings of vegetables appears to have decreased by more than half from 2003 to 2010-2012.

Exhibit 178. Five or more servings of fruits and vegetables consumed daily by gender and age group

	Percent				
	2003	2005	2007	2009	2010-12
Male Children (ages 2 - 11)	na	na	49.1	57.9	39.5
Male Teens (ages 12 - 17)	32.3*	26.3*	18.1*	10*	7.9*
Female Children (ages 2 - 11)	na	na	44.1	45.8	72.7*
Female Teens (ages 12 - 17)	13.9*	17.2*	8.6*	11.4*	7.3*

na=data not available

* Statistically unstable; interpret with caution.

Source: California Health Interview Survey, 2013.

- The percentage of both female and male teens who reported eating five or more servings of vegetables daily appears to have decreased from 2003 to 2010-2012.

Exhibit 179. Two or more sugary drinks consumed daily by race/ethnicity for ages 2-17

	Percent				
	2003	2005	2007	2009	2011-12
Asian/Pacific Islander (nH)	43.2*	–	–	–	–
Black (nH)	–	–	–	–	–
Hispanic/Latino, any race	25.1	20.8	11.1*	8.1*	28.1
Multiple/Other races (nH)	–	–	–	–	–
Native American/ Native Alaskan(nH)	–	–	–	–	–
White (nH)	14.4*	6.5*	5.4*	17.1*	26.3*
Monterey County	**21.4**	**15.6**	**9.1***	**8.8***	**25.8**

Note: Sugary drinks consist of soda (such as Coke) or other sweetened drinks (such as fruit punch or Sunny Delight), does not include diet or sugar free drinks

* Statistically unstable; interpret with caution.

(nH)=non-Hispanic

- (hyphen) = Estimate is less than 500 people

Source: California Health Interview Survey, 2013.

- While some of these data are statistically unstable, it appears that the percentage of 2 to 17 year olds who drank two or more sugary drinks daily generally remained high from 2003 to 2011-2012.

Exhibit 180. Two or more sugary drinks consumed daily by gender for ages 2-17

	Percent				
	2003	2005	2007	2009	2011-12
Male	25.0	13.6*	13.5*	6.7*	32.4
Female	17.7*	17.6	4.9*	10.9*	18.2*

* Statistically unstable; interpret with caution.

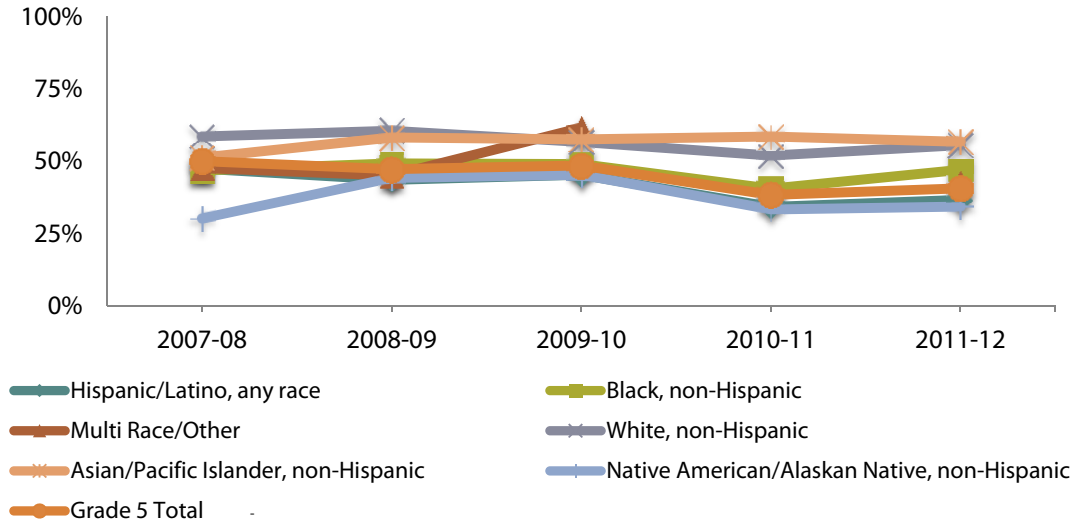
Note: Sugary drinks consist of soda (such as Coke) or other sweetened drinks (such as fruit punch or Sunny Delight), does not include diet or sugar free drinks

Source: California Health Interview Survey, 2013.

- The percentages of children and teens who report consuming two or more sugary drinks daily appears to have fluctuated, but remained high, among males and females.

Physical activity

Exhibit 181. Grade 5 students in the Healthy Fitness Zone by race/ethnicity

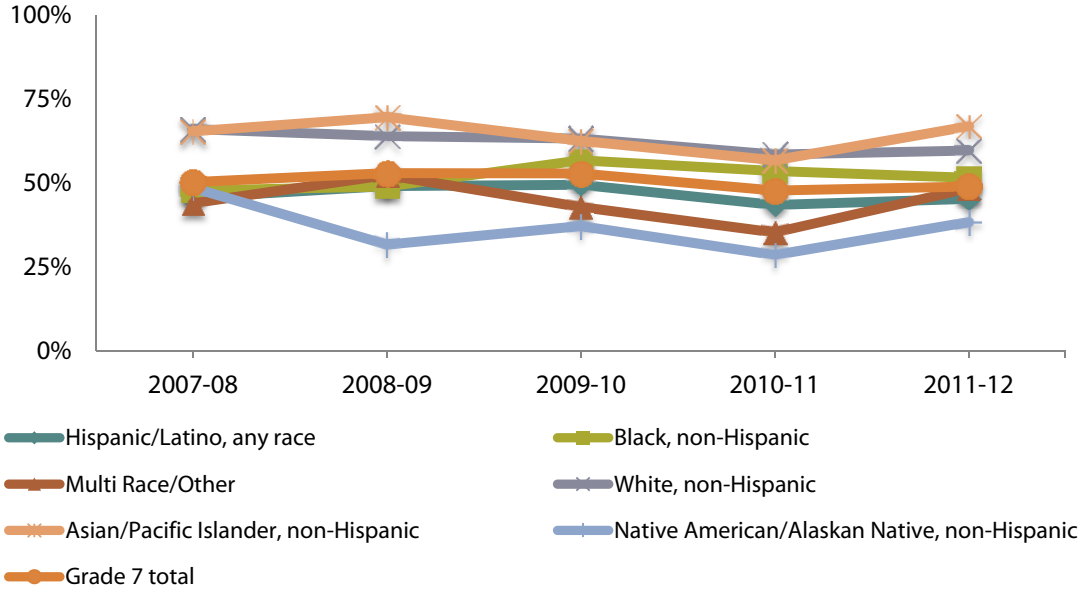


	Percent				
	2007-08	2008-09	2009-10	2010-11	2011-12
Hispanic/Latino, any race	47.4	43.5	45.3	34.2	36.6
Multiple/Other races (nH)	47.6	45.0	61.5	--	42.8
Native American/ Native Alaskan(nH)	30.2	44.2	45.3	33.3	34.3
White (nH)	58.5	60.5	56.6	51.9	55.5
Grade 5 Total	**50.0**	**47.2**	**48.5**	**38.3**	**40.6**

Note: Healthy Fitness Zone is the minimum levels of fitness that offer protection against the diseases that result from sedentary living.
(nH)=non-Hispanic
Source: Fitness Gram Performance Standards, California Department of Education, 2013.

- The percentage of fifth graders in the Healthy Fitness Zone declined nine percentage points from 2007-2008 compared to 2011-2012.
- Percentages of fifth graders in the Healthy Fitness Zone from 2007-2008 to 2011-2012 were generally higher for Asian and White non-Hispanic students compared to other race/ethnic groups.

Exhibit 182. Grade 7 students in the Healthy Fitness Zone by race/ethnicity



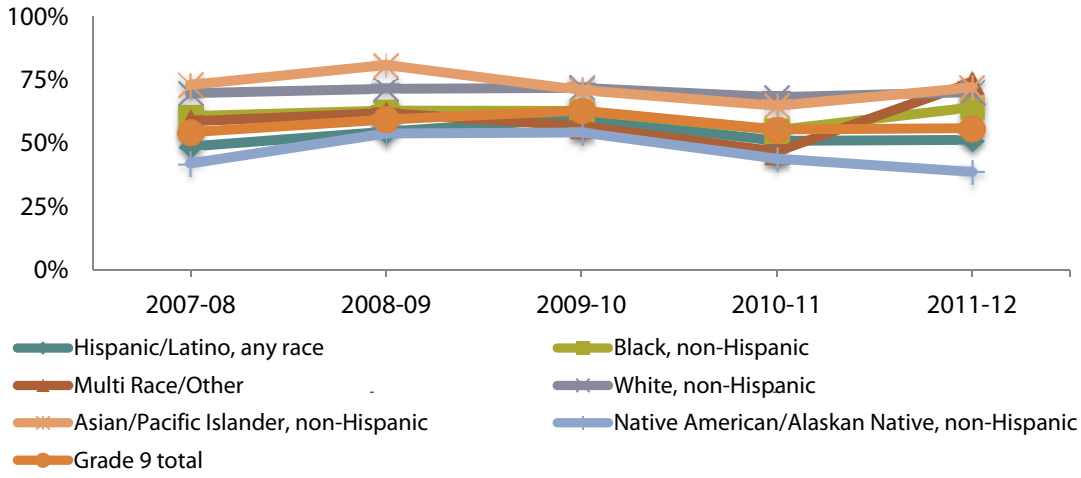
	Percent				
	2007-08	2008-09	2009-10	2010-11	2011-12
Asian/Pacific Islander (nH)	65.4	69.6	62.6	56.8	66.9
Black (nH)	47.8	49.0	56.8	53.6	51.6
Hispanic/Latino, any race	45.7	49.1	49.5	43.5	45.3
Multiple/Other races (nH)	44.0	52.4	42.9	35.3	48.4
Native American/ Native Alaskan(nH)	48.6	31.7	37.2	28.6	38.4
White (nH)	66.1	64.0	63.3	58.5	59.7
Grade 7 Total	**50.3**	**53.0**	**52.9**	**47.8**	**49.0**

(nH)=non-Hispanic

Source: Fitness Gram Performance Standards, California Department of Education, 2013.

- Percentages of seventh graders in the Healthy Fitness Zone from 2007-2008 to 2011-2012 were higher for Asian and White non-Hispanic students compared to other race/ethnic groups.

Exhibit 183. Grade 9 students in the Healthy Fitness Zone by race/ethnicity



	Percent				
	2007-08	2008-09	2009-10	2010-11	2011-12
Hispanic/Latino, any race	48.7	54.5	59.8	50.9	51.3
Native American/ Native Alaskan(nH)	42.0	53.8	54.2	43.9	38.7
White (nH)	69.7	71.4	71.8	68.1	70.1
Grade 9 Total	**54.3**	**59.3**	**62.8**	**55.4**	**55.9**

(nH)=non-Hispanic

Source: Fitness Gram Performance Standards, California Department of Education, 2013.

- Percentages of ninth graders in the Healthy Fitness Zone from 2007-2008 to 2011-2012 were generally higher for Asian and White non-Hispanic students compared to other race/ethnic groups.

Smoking and Alcohol Use

Tobacco use is detrimental to health in any amount. Tobacco use can take the form of smoking cigarettes, e-cigarettes, pipes, cigars, and chewing tobacco. Moderate use of alcohol is considered to be the consumption of two or fewer alcoholic beverages per day. Moderate use may have beneficial effects on the heart, particularly among those at greatest risk for heart attacks such as men over age 45 years and women after menopause. Unhealthy alcohol consumption and binge drinking, however, can affect health, safety, and quality of life.

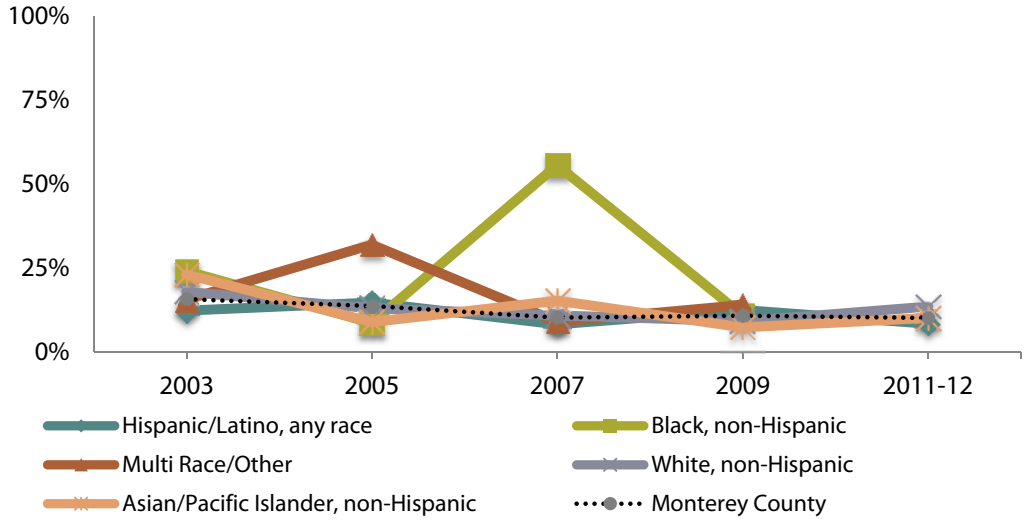
Exhibit 184. Current smoker by age group

	Percent				
	2003	2005	2007	2009	2011-12
Ages 12 – 17					
Ages 18+	16.8	15.2	11.5	11.6	10.8
Monterey County	**15.7**	**13.7**	**10.2**	**10.8**	**10.1**

* Statistically unstable; interpret with caution.
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- Percentages of adults who reported themselves as a current smoker decreased from 2003 to 2010-2012.

Exhibit 185. Current smoker by race/ethnicity



	Percent				
	2003	2005	2007	2009	2011-12
Asian/Pacific Islander (nH)	23.1*	8.9*	15.3*	7.3*	10.1*
Black (nH)	24.1*	8.6*	55.7*	11.0*	–
Hispanic/Latino, any race	12.3	14.7	8.2*	12.5	8.4
Multiple/Other races (nH)	15.6*	32.0*	9.0*	14.0*	–
Native American/ Native Alaskan(nH)	–	–	–	–	–
White (nH)	17.9	13.0	10.9*	9.1	13.5
Monterey County	**15.7**	**13.7**	**10.2**	**10.8**	**10.1**

* Statistically unstable; interpret with caution.
(nH)=non-Hispanic; - (hyphen) = Estimate is less than 500 people
Note: Native American/Alaskan Native excluded from graph due to lack of data
Source: California Health Interview Survey, 2013.

- Although much of these data are statistically unstable, the percentage of current smokers appeared to generally decrease for all race/ethnic groups from 2003 to 2011-2012.

Exhibit 186. Current smoker by gender

	Percent				
	2003	2005	2007	2009	2011-12
Male	21.9	19.1	11.1	17.4	14.6
Female	9.4	8.4	9.4*	4.0*	5.4
Monterey County	**15.7**	**13.7**	**10.2**	**10.8**	**10.1**

* Statistically unstable; interpret with caution.
Source: California Health Interview Survey, 2013.

- From 2003 to 2011-2012, consistently greater percentages of males reported themselves to be current smokers compared to women, although percentages declined for both over the years.

Exhibit 187. Teens who reported not binge drinking in the past month by gender

	Percent			
	2005	2007	2009	2011-12
Male	92.5*	98.1*	98.3*	100.0*
Female	97.4*	100.0*	98.3*	90.0*
Monterey County	**95.3***	**99.1***	**98.3***	**95.6***

* Statistically unstable; interpret with caution.
- (hyphen) = Estimate is less than 500 people
Note: Binge drinking is defined as drinking 5 or more drinks on one occasion for men and 4 or more drinks for women
Source: California Health Interview Survey, 2013.

- Although data are statistically unstable, it appears that most county teen males and females generally reported not binge drinking from 2005 to 2011-2012.

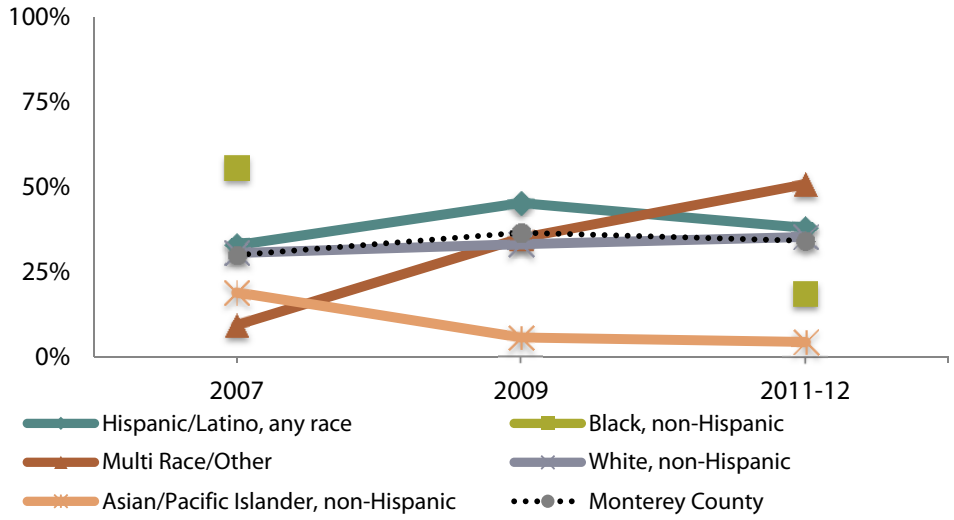
Exhibit 188. Adults who reported binge drinking in the past year by gender

	Percent		
	2007	2009	2011-12
Male	45.1	49.1	43.3
Female	14.7	23.9	24.9
Monterey County	**29.9**	**36.5**	**34.1**

* Statistically unstable; interpret with caution.
- (hyphen) = Estimate is less than 500 people
Note: Binge drinking is defined as drinking 5 or more drinks on one occasion for men and 4 or more drinks for women
Source: California Health Interview Survey, 2013.

- In 2009 and 2011-2012, the percentages of men who reported binge drinking were nearly twice that of women.

Exhibit 189. Adults who reported binge drinking in the past year by race/ethnicity



	Percent		
	2007	2009	2011-12
Asian/Pacific Islander (nH)	18.9*	5.6*	4.3*
Black (nH)	55.7*	–	18.5*
Hispanic/Latino, any race	32.8	45.2	37.9
Multiple/Other races (nH)	9.3*	34.9*	50.8*
Native American/ Native Alaskan(nH)	–	–	–
White (nH)	30.5	33.1	35.2
Monterey County	**29.9**	**36.5**	**34.1**

* Statistically unstable; interpret with caution.
(nH)=non-Hispanic
- (hyphen) = Estimate is less than 500 people
Note: Native American/Alaskan Native excluded from graph due to lack of data. Binge drinking is defined as drinking 5 or more drinks on one occasion for men and 4 or more drinks for women
Source: California Health Interview Survey, 2013.

- From 2007 through 2011-2012, the percentages of residents who reported they engaged in binge drinking appeared to increase for all race/ethnic groups other than Asian/Pacific Islander and Black.

Injury Prevention and Safety

Injuries are the leading cause of death for Americans ages 1 to 44,[42] and a leading cause of disability for all ages, regardless of sex, race/ethnicity, or socioeconomic status. Nationally, more than 180,000 people die from injuries each year, and approximately 1 in 10 sustains a nonfatal injury serious enough to be treated in a hospital emergency department.[43]

Beyond their immediate health consequences, injuries and violence have a significant impact on the well-being of Americans by contributing to:

- Premature death and disability
- Poor mental health
- High medical costs
- Lost productivity[44]

The effects of injuries and violence extend beyond the injured person or victim of violence to family members, friends, coworkers, employers, and communities. The Centers for Disease Control and Prevention state that, "Although the greatest impact of injury is in human suffering and loss of life, the financial cost can be staggering." Included in the costs associated with injuries are the costs of direct medical care and rehabilitation, and lost income and productivity. As with other health problems, it costs far less to prevent injuries than to treat them. For example:

- Every child safety seat saves $85 in direct medical costs and $1,275 in other costs.
- Every bicycle helmet saves $395 in direct medical costs and other costs.
- Every smoke detector saves $35 in direct medical costs and $865 in other costs.
- Every dollar spent on poison control centers saves $6.50 in medical costs.[45]

The social environment has a notable influence on the risk for injury and violence through:

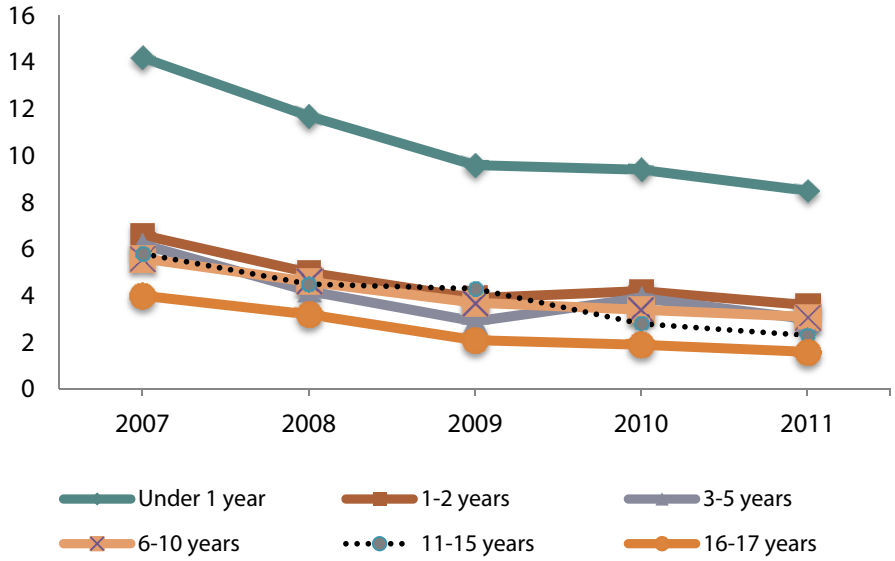
- Individual social experiences (for example, social norms, education, victimization history)
- Social relationships (for example, peer group associations, family interactions)
- Community environment (for example, cohesion in schools, neighborhoods, and communities)
- Societal-level factors (for example, cultural beliefs, incentives and disincentives, laws and regulations)[46]

Interventions that address these social and physical factors have the potential to prevent unintentional injuries and violence. Efforts to prevent unintentional injury may focus on:

- Modifications of the environment
- Improvements in product safety
- Legislation and enforcement
- Education and behavior change

Child and Elder Abuse

Exhibit 190. Substantiated child maltreatment reports by age group



	Rate per 1,000				
	2007	2008	2009	2010	2011
Under 1 year	14.2	11.7	9.6	9.4	8.5
1-2 years	6.6	5.0	3.9	4.2	3.6
3-5 years	6.2	4.2	2.9	3.9	3.0
6-10 years	5.6	4.6	3.7	3.4	3.1
11-15 years	5.8	4.5	4.3	2.8	2.3
16-17 years	4.0	3.2	2.1	1.9	1.6
Monterey County	**6.2**	**4.8**	**3.9**	**3.6**	**3.1**

Source: UC Berkeley: Child Welfare Dynamic Reporting System; Retrieved February 2013 from http://cssr.berkeley.edu/ucb_childwelfare/

- Substantiated reports of child maltreatment were consistently higher for those under one year of age compared to other age groups.
- Rates of substantiated child maltreatment were far less in 2011 compared to 2007; rates for 16 to 17 year olds decreased by more than half.

Child Entry into Foster Care

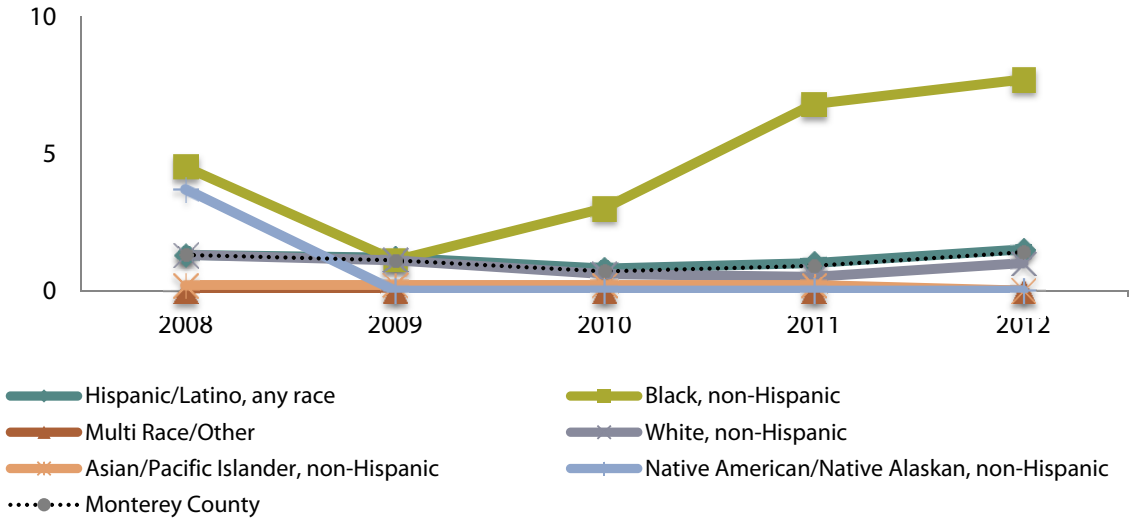
Exhibit 191. Children's first entry into foster care by gender

	Rate per 1,000				
	2008	2009	2010	2011	2012
Male	1.1	1.2	0.7	0.8	1.4
Female	1.5	1.0	0.8	1.0	1.4
Monterey County	**1.3**	**1.1**	**0.7**	**0.9**	**1.4**

Source: UC Berkeley: Child Welfare Dynamic Reporting System; Retrieved February 2013 from http://cssr.berkeley.edu/ucb_childwelfare/

- The rate of first entry into foster care fluctuated for males and females between 2008 and 2011.

Exhibit 192. Children's first entry into foster care by race/ethnicity



	Rate per 1,000				
	2008	2009	2010	2011	2012
Asian/Pacific Islander (nH)	0.2	0.2	0.2	0.2	0.0
Black (nH)	4.5	1.1	3.0	6.8	7.7
Hispanic/Latino, any race	1.3	1.2	0.8	1.0	1.5
Multiple/Other races (nH)	0.0	0.0	0.0	0.0	0.0
Native American/ Native Alaskan(nH)	3.7	0.0	0.0	0.0	0.0
White (nH)	1.3	1.1	0.6	0.5	1.0
Monterey County	**1.3**	**1.1**	**0.7**	**0.9**	**1.4**

(nH)=non-Hispanic

Source: UC Berkeley: Child Welfare Dynamic Reporting System; Retrieved Feb. 2013 http://cssr.berkeley.edu/ucb_childwelfare/

- In 2012, the rate of first entry into foster care was highest for Black children – more than five times the overall county rate.
- The rate of first entry into foster care increased for Black children while it decreased or remained stable for children of other race/ethnicities.

Exhibit 193. Timely caseworker visits

	Percent				
Timely Visit	85.1	93.5	95.8	95.3	95.3

Note: Timely caseworker visit is defined as a monthly visit.
Source: UC Berkeley: Child Welfare Dynamic Reporting System; Retrieved February 2013 from http://cssr.berkeley.edu/ucb_childwelfare/

- From 2010 through 2012, the percentages of caseworkers who completed child welfare visits in a timely manner were above 95%.

Exhibit 194. Substantiated reports of elder abuse

	Number				
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Substantiated reports	174	163	172	176	183

Source: Monterey County Department of Social Services, Adult Protective Services, 2013

- More substantiated reports of elder abuse were reported in 2011-2012 than in the prior time periods.

Safety Behaviors

Exhibit 195. Teens who report they always wear a seatbelt, by gender

	Percent	
	2003	2005
Male	46.4	59.9*
Female	57.1	90.8*
Monterey County	**50.6**	**77.9**

* Statistically unstable; interpret with caution.
Source: California Health Interview Survey, 2013.

- Female teens appeared more likely than male teens to wear their seatbelts in 2003 and 2005.
- Although 2005 data are statistically unstable, it appears teen seatbelt use was higher for both males and females in 2005 compared to 2003.

Exhibit 196. Children and teens who report they always wear a bike helmet, by age group

	Percent	
	2001	2003
6-11 Years	57.2	49.5
12-17 Years	33.7	15.6
Monterey County	**45.7**	**33.5**

Source: California Health Interview Survey, 2013.

- Reported bike helmet use for both children and teens decreased from 2001 to 2003; bike helmet use decreased by half for teens.
- In 2003, children ages 6 to 11 were more than three times more likely than teens ages 12 to 17 to use a bike helmet.

Exhibit 197. Children and teens who report they always wear a bike helmet, by race/ethnicity

	Percent	
	2001	2003
Asian/Pacific Islander (nH)	61.4*	56.8*
Black (nH)	73.1*	100.0*
Hispanic/Latino, any race	38.7	27.7
Multiple/Other races (nH)	26.5*	63.0*
Native American/ Native Alaskan(nH)	–	–
White (nH)	60.5	33.8

(nH)=non-Hispanic
* Statistically unstable; interpret with caution.
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- Bike helmet use by White, non-Hispanic and Hispanic/Latino children and teens were lower in 2003 compared to 2001; data for other race/ethnic groups were statistically unstable.

Exhibit 198. Persons killed and injured in alcohol-related collisions

	Number				
	2006	2007	2008	2009	2010
Injured	312	301	272	241	237
Killed	16	15	29	8	15

Source: Statewide Integrated Traffic Records System, 2013.

- The number of persons injured in alcohol-related collisions gradually decreased from 2006 to 2010.
- The number of persons killed in alcohol-related collisions was very high in 2008.

Guns and gang membership

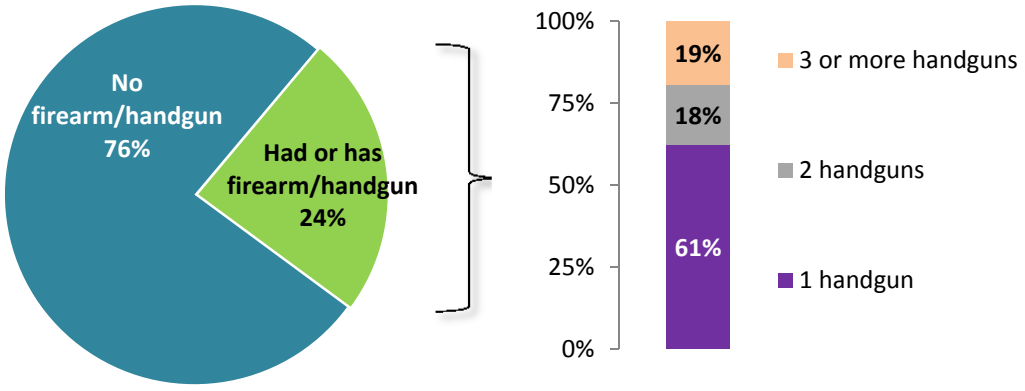
Exhibit 199. Carrying a gun at school by grade level

	Percent							
11th Grade	95.6	2.1	0.9	1.5	96.0	2.0	2.0	na
School Students								

Na= data not available
Source: California Healthy Kids Survey, 2013.

- Seventh graders were more likely to report carrying a gun to school, and do so multiple times, compared to ninth and eleventh graders.

Exhibit 200. Firearms/handguns in or around the home, 2001



Gang membership

As documented in the City of Salinas 2013-2018 Comprehensive Plan for Community-wide Violence Reduction (Salinas Violence Reduction Plan), local law enforcement estimate that Monterey County has approximately 5,000 certified and affiliated gang members, with approximately 3,000 of these living in the City of Salinas. There are approximately 71 gangs countywide, with 16 street gangs and two prison gangs in Salinas. Monterey County has two California State Prisons, the Salinas Valley State Prison and the Correctional Training Facility. Both are approximately 30 miles south of Salinas, which contributes to local gang problems.

The Salinas Violence Reduction Plan further states that "Gang associates and family members often to move to cities like Salinas to be close to incarcerated gang members. This has led to multigenerational and intergenerational sibling gang members in communities such as East Salinas. It should be further noted that gang recruitment begins with elementary school children. Gangs in Salinas align and identify with either "Norteño" (Northerners, who identify with the color red) or "Sureño" (Southerners, who identify with the color blue), both of which are predominantly Hispanic gangs. Norteños and Sureños are rival gangs. The Nuestra Familia (NF), a notorious prison gang formed in the Correctional Training Facility in Monterey County in the mid-60's, controls Norteño gang activity. For many years, Salinas has been headquarters to the NF, which still has a strong influence on the criminal activities committed by gang members in the community. La Eme, or the Mexican Mafia, is the Southern prison gang and, similarly to the NF, dictates and directs the activity or Sureño street gang activity. Recent intelligence reports indicate an increase in Sureño gang members coming to Salinas from Southern California."

Exhibit 201. Gang membership by grade

11th Grade	8.5	7.0

Source: California Healthy Kids Survey, 2013.

- Students who attended non-traditional schools were more likely to have reported gang membership than students in traditional 7th, 9th and 11th grades.

For more information about efforts to address gang-related violence, see The Community Alliance for Safety and Peace at http://www.future-futuro.org/en/about-casp and STRYVE - Youth Violence Prevention Program at http://www.mtyhd.org/index.php/departments-all/item/stryve-youth-violence-prevention-program

Environmental Health

The relationship between environmental health and public health is directly proportional to the efforts, interventions and laws put in practice for the various regulated activities in the County of Monterey. The goal of an effective environmental health program is prevention of injury, illness and death related to measurable risks and agents present in air, food, water, shelter and industrial practices. Environmental health permitted businesses, programs and process include, but are not limited to: restaurant and market food safety inspections, food borne illness investigations, hazardous materials business plan reviews, hazardous materials emergency incident response, beach and bay water quality monitoring, public pool safety inspections, drinking water quality monitoring, onsite waste water treatment approvals, open and closed landfill inspection programs, medical waste disposal programs, safe body art inspection program and employee housing programs.

Incorporating public health perspectives is a new and novel concept for the field of environmental health. However as this document states, good environmental health is a significant determinant of a healthy community. Poor environmental quality has its greatest impact on people whose health status is already at risk, and therefore, environmental health must address the societal and environmental factors that increase the likelihood of exposure and disease.[47] Preventing health problems caused by environmental hazards solutions that involve:

- investigating and responding to food and water borne illness outbreaks
- monitoring business practices for proper hazardous materials storage and disposal
- educating the public about the relationship between environmental health and public health
- responding to natural disasters that can affect shelter, water, food, and air quality
- empowering the community to address social factors that perpetuate environmental disparities.[48]

A regional example of the environmental justice movement that addresses environmental disparities was initiated in the early 1960s by Cesar Chavez who, with other Hispanic farmworkers, fought for workplace protection from harmful pesticides in California farm fields.[49] Today, environmental justice leaders continue calling attention to the statistical facts that people of color and people living at low socio-economic levels are more likely to live in the most polluted areas of our community.[50] Ongoing efforts are intended to close the inequity gap and raise the quality of life for those most affected.

Closed Beach Days

Monterey County has over 90 miles of coastline. Our beaches and bays are a natural resource enjoyed by all and contribute the economic and social growth of the community. Major public bathing areas that may be affected by pollutants originating from surface run-off are monitored, especially during the rainy season of the year. This beach and bay monitoring program includes an advisory system to inform the public of the water quality conditions, thereby contributing to the prevention of water borne related illnesses that may affect the very young, elderly and those with compromised immune systems.

Exhibit 202. Annual beach advisories and beach closures

	Number				
	2008	2009	2010	2011	2012

Source: Monterey County Health Department, Environmental Health Bureau, 2013

- The number of annual beach advisories steadily increased from 2008 to 2010.

Food Borne Illness

In the United States, it is estimated that 3,000 people a year have die from food borne illness[47]. Food borne illness is preventable. The Environmental Health Bureau are the food safety specialists of the county who conduct regular inspections in food facilities, with the goal reducing the incidents of food borne illness and ensuring active managerial controls are practiced by food handlers and managers. Food borne illnesses can be biological, physical or chemical in origin. One of the most common biological agents of food borne illness in the County of Monterey is Campylobacter spp.

Campylobacteriosis is a bacterial infection that is generally due to fecal-oral transmission through the ingestion of contaminated food. Typical symptoms from this disease include diarrhea, cramping, and abdominal pain and fever that can manifest two to five days after ingestion of the agent. The illness may last a week, and in cases where the patient has a compromised immune system, can be fatal[48].

Common foods associated with Campylobacteriosis are improperly handled poultry, produce, contaminated water and unpasteurized milk. Environmental Health control measures include adequate cooking and holding temperatures, hand washing and education. Through inspection and outreach efforts, the Environmental Health Bureau aims to reduce the prevalence of Campylobacteriosis in the County of Monterey.

Exhibit 203. Campylobacteriosis rates by age group

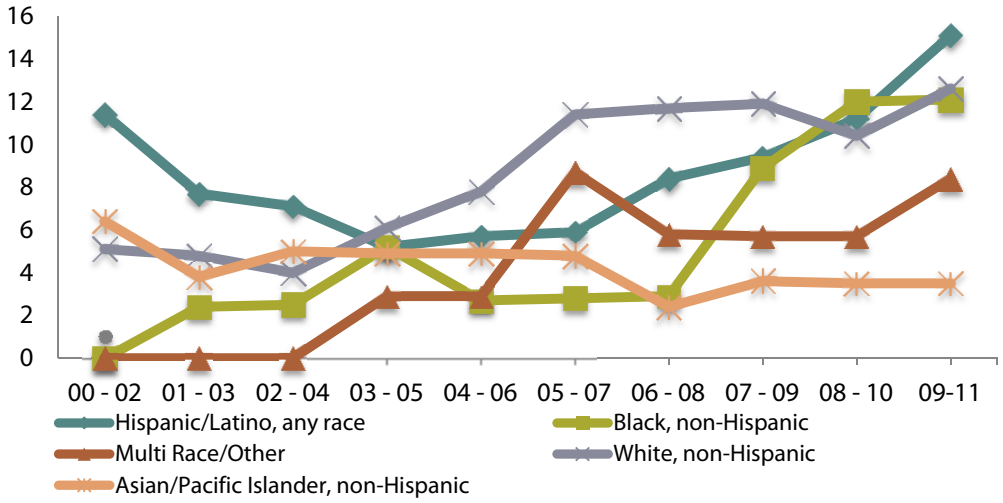
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	
0 to 14 Years	16.9	12.5	13.3	10.4	11.1	10.2	15.8	17.1	18.0	
15 to 24 Years	9.0*	9.4*	7.8*	8.8*	7.2*	8.2*	7.7*	9.7	10.2	12.2
25 to 44 Years	6.9	6.4	5.9	6.6	6.7	8.2	8.5	8.2	9.7	11.1

	Rate per 100,000									
45 to 64 Years	11.5	10.3	9.6	7.8	5.8*	5.0*	8.4	9.6	11.1	11.3
65+ Years	9.7*	12.7*	14.8	16.9	16.0	15.0*	11.8*	11.6*	12.8	20.0
Monterey County	**12.3**	**10.7**	**10.6**	**9.7**	**9.2**	**9.3**	**11.1**	**11.8**	**12.9**	**15.2**

* Statistically unstable; interpret with caution.
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Rates of campylobacteriosis in 2000-2002 to 2009-2011 were generally highest among individuals 0 – 14 years and 65+ years.

Exhibit 204. Campylobacteriosis rates by race/ethnicity



	Rate per 100,000									
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
Asian/Pacific Islander (nH)	6.4*	3.8*	5.0*	4.9*	4.9*	4.8*	2.4*	3.6*	3.5*	3.5*
Black (nH)	0.0*	2.4*	2.5*	5.2*	2.7*	2.8*	2.9*	8.9*	12.0*	12.1*
Hispanic/Latino, any race	11.4	7.7	7.1	5.2	5.7	5.9	8.4	9.4	11.2	15.1
Multi-Race/Other (nH)	0.0	0.0	0.0	2.9	2.9	8.7	5.8	5.7	5.7	8.4*
White (nH)	5.1	4.8	4.0	6.1	7.8	11.4	11.7	11.9	10.4	12.6

* Statistically unstable; interpret with caution
Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- There were increases in campylobacteriosis rates for all race/ethnic groups from 2000-2002 to 2009-2011, although some data are statistically unstable.

- While some of these data are statistically unstable, it appears that campylobacteriosis rates were generally highest among Hispanic/Latino and White, non-Hispanic residents in 2000-2002 to 2009-2011.

Exhibit 205. Campylobacteriosis rates by gender

										17.3
Female	9.4	8.1	8.5	7.6	7.0	7.1	10.6	10.8	10.9	13.0
Monterey County	**12.3**	**10.7**	**10.6**	**9.7**	**9.2**	**9.3**	**11.1**	**11.8**	**12.9**	**15.2**

Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Rates of campylobacteriosis in 2000-2002 to 2009-2011 were consistently higher for males compared to females.

Exhibit 206. Campylobacteriosis rate disparity and trend analysis

Population Groups	Disparity, 2009-2011	Time Trend, 2009-2011
25 to 44 years	Not significantly different	Not statistically significant
65+ years	Not significantly different	Not statistically significant
Asian/Pacific Islander (nH)	Not significantly different	Not statistically significant
Black (nH)	Not significantly different	**Significantly increased**
Multiple/Other races (nH)	Not significantly different	**Significantly increased**
Male	Referent group	**Significantly increased**

(nH) = non-Hispanic

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.

Source: Monterey County Health Department, Communicable Disease Unit; June 15, 2012 (these data are provisional); statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Animal Control

Exhibit 207. County-wide animal control outcomes

	2011	2012
Dogs licenses issued	23,522	14,673
Citations issued for rabies vaccination and licensing violations	437	292
Reported dog, cat, and wild animal bites reported	420	413

Source: Monterey County Health Department, Environmental Health Unit.

Mortality

Nationally, mortality trends continue to decline among most population groups defined by sex and race and Hispanic origin.[49] Although continuing declines in mortality have slowly reduced longstanding gaps in life expectancy, disparities continue to persist in mortality across ethnic and racial groups.[50]

Mortality rate is the number of deaths over a specified period of time divided by the total mid-time frame for the population at risk (reported per 100,000 individuals). When compared with mortality rates for the year 2000, the rates for 2011 show decreases in mortality across every population group defined by sex and race and Hispanic origin. The largest reductions in mortality between 2000 and 2011 occurred among males, with non-Hispanic black males experiencing the largest decrease during this period (22.6%).

Much of the recent improvement in death rates and life expectancy for all population groups can be attributed to continuing reductions in mortality rates from major causes of death, such as heart disease, cancer, stroke, and chronic lower respiratory diseases.[51]

U.S. life expectancy at birth for all races and both sexes has increased steadily to a record high of 78.7 years in 2010 and 2011. Hispanic females have the longest life expectancy (83.7 years), followed by non-Hispanic white females, Hispanic males, non-Hispanic black females, non-Hispanic white males , and non-Hispanic black males. The greatest difference was 6.6 years, which was found between the Hispanic population and the non-Hispanic black population.[52]

By gender, recent increases in male life expectancy in the U.S. are occurring more rapidly than increases in female life expectancy (male life expectancy is beginning to catch up to female life expectancy). The gap between male and female life expectancy was 7.0 years in 1985 and 4.6 years in 2010.[53]

Mortality Rates

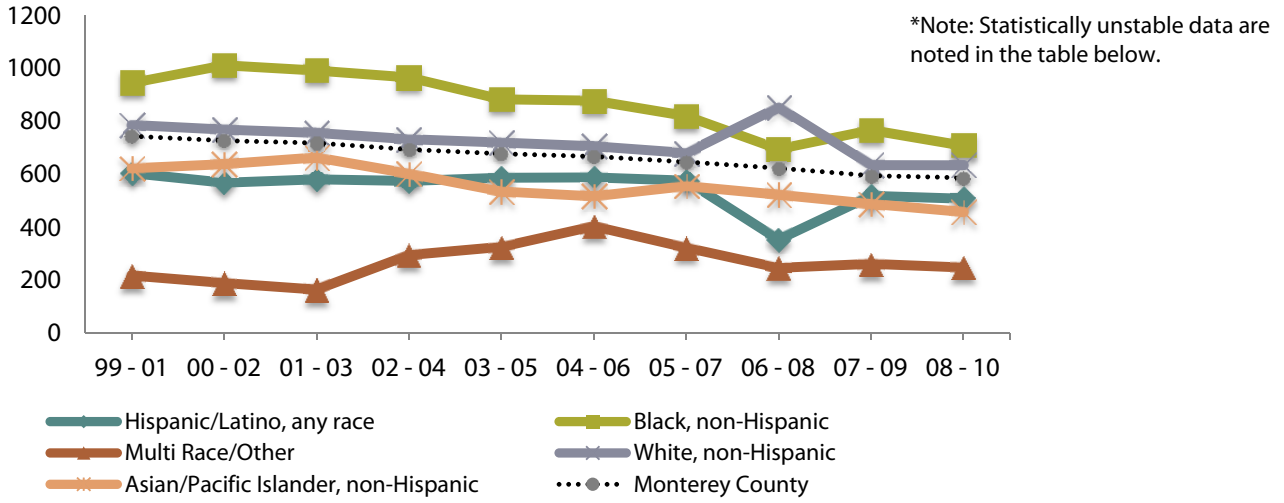
Exhibit 208. Mortality rates per 100,000 by age group

	Age-specific rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
<1 year										
1 to 14 years	18.6	19.7	20.7	21.0	20.7	17.6	14.5	15.0	15.9	17.2
15 to 24 years	70.4	68.2	70.0	74.9	72.2	72.3	60.2	66.6	71.4	78.4
25 to 44 years	99.4	106.3	111.8	109.3	110.8	112.6	107.0	97.6	96.1	90.5
45 to 64 years	490.9	480.7	484.8	485.5	469.4	469.4	457.2	463.0	454.1	456.2
65+ years	4,517.4	4,414.9	4,373.9	4,246.5	4,199.4	4,176.1	4,110.1	3,959.7	3,757.7	3,710.7
Monterey County	**743.9**	**727.0**	**717.7**	**693.8**	**677.1**	**667.0**	**646.7**	**622.8**	**594.9**	**586.7**

Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Mortality rates for the county overall decreased over the last decade for all age groups except for 15-24 year old residents, although this trend was not statistically significant.

Exhibit 209. Age-adjusted mortality rates per 100,000 by race/ethnicity



*Note: Statistically unstable data are noted in the table below.

Hispanic/Latino, any race	604.3*	568.1*	580.8*	574.5*	587.1*	588.0*	576.0*	540.8*	518.6*	507.8*

	Age-adjusted rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Multiple/Other races (nH)	217.8*	189.4*	164.6*	295.3*	325.9*	404.1*	322.9*	313.0*	261.7*	248.3*
White (nH)	785.8	768.3	755.7	732.6	719.5	705.6	680.3	656.3	634.8	634.2
Monterey County	**743.9**	**727.0**	**717.7**	**693.8**	**677.1**	**667.0**	**646.7**	**622.8**	**594.9**	**586.7**

(nH) = non-Hispanic

*Statistically unstable; interpret with caution.

Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Mortality rates were consistently higher for Black residents than other race/ethnic groups, and were consistently higher than the county overall.
- Mortality rates decreased significantly from 1999-2001 to 2008-2010 for all race/ethnic groups except Multi-Race/Other which significantly increased.

Exhibit 210. Age-adjusted mortality rates per 100,000 by gender

	Age-adjusted rates per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Male	861.4*	826.1*	834.6*	810.1*	793.9*	792.6*	773.4	736.8	698.5	684.8
Female	646.2	643.3	620.3	598.5	580.1	563.4	542.5	528.8	509.0	504.3
Monterey County	**743.9**	**727.0**	**717.7**	**693.8**	**677.1**	**667.0**	**646.7**	**622.8**	**594.9**	**586.7**

* Statistic instability, interpret with caution

Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010, Fetal Death Statistical Master File 1999-2010, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Mortality rates were notably higher for males compared to females, but this difference is not statistically significant.
- Mortality rates significantly decreased over time for both males and females.

Exhibit 211. Mortality rate disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
15 to 24 years	Not significantly different	Not statistically significant
25 to 44 years	Referent group	Not statistically significant
45 to 64 years	**Significantly higher**	Not statistically significant
65+ years	**Significantly higher**	Not statistically significant
Asian/Pacific Islander (nH)	Not significantly different	**Significantly decreased**

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
Black (nH)	Not significantly different	**Significantly decreased**
Hispanic/Latino, any race	Not significantly different	**Significantly decreased**
Multiple/Other races (nH)	**Significantly lower**	**Significantly increased**
White (nH)	Referent group	**Significantly decreased**
Male	Not significantly different	**Significantly decreased**
Female	Referent group	**Significantly decreased**

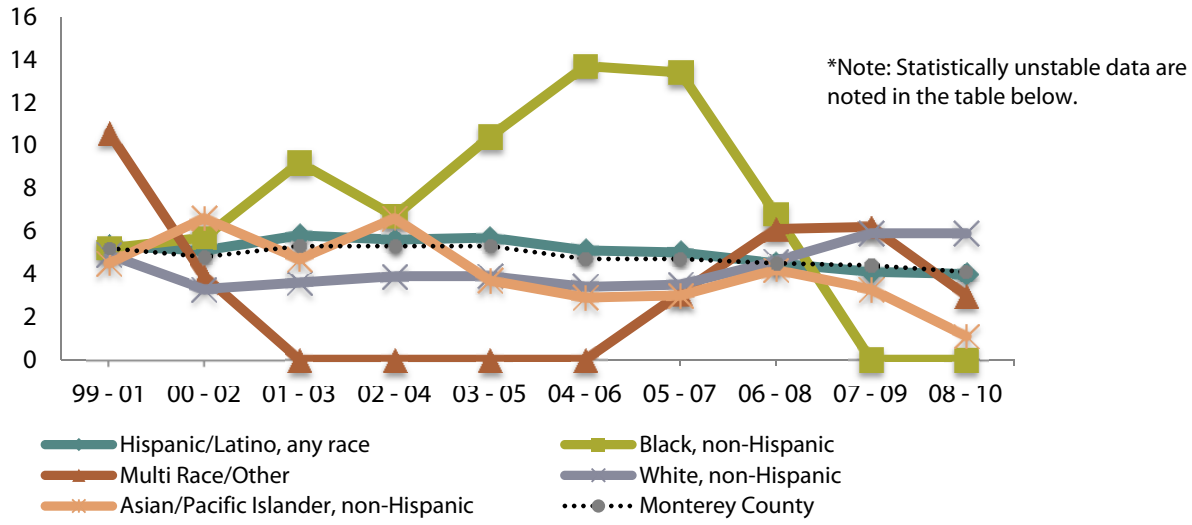
(nH) = non-Hispanic

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.

Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

Fetal and infant deaths

Exhibit 212. Fetal mortality rates per 1,000 by race/ethnicity



	Rate per 1,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Asian/Pacific Islander (nH)	4.5*	6.6*	4.7*	6.6*	S	S	S	S	S	S
Black (nH)	S	S	S	S	S	S	S	S	S	S
Hispanic/Latino, any race	5.3	5.1	5.8	5.6	5.7	5.1	5.0	4.5	4.1	4.0
Multiple/Other races (nH)	S	S	S	S	S	S	S	S	S	S
White (nH)	4.9	3.3*	3.6*	3.9*	3.9*	3.4*	3.5*	4.6*	5.9	5.9
Monterey County	**5.2**	**4.8**	**5.3**	**5.3**	**5.3**	**4.7**	**4.7**	**4.5**	**4.4**	**4.1**

*Statistic instability, interpret with caution
(nH) = non-Hispanic
S=data are suppressed to preserve confidentiality.
Sources: California Department of Public Health, Health Information and Research Section, Fetal Death Statistical Master File 1999-2010, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

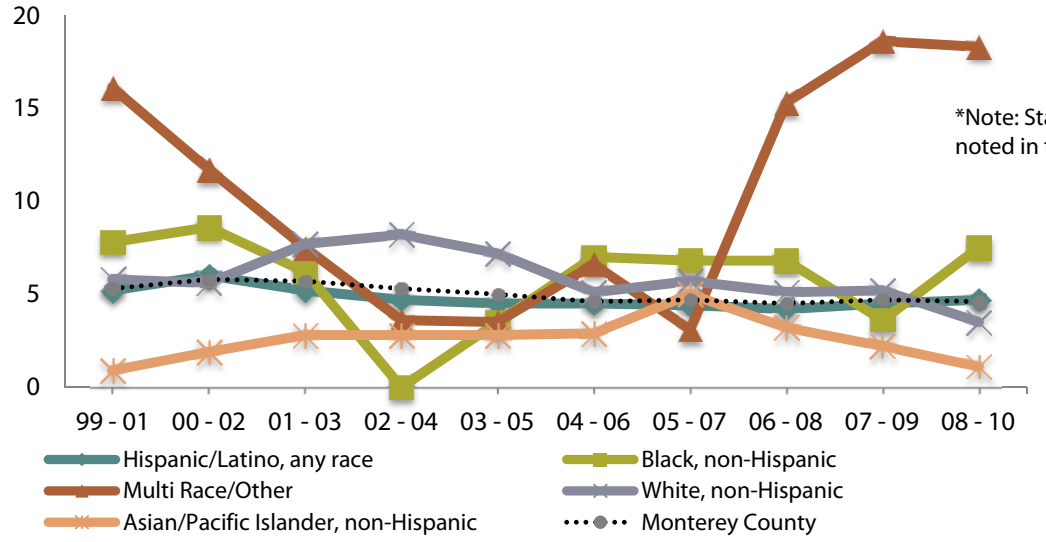
- The rate of fetal mortality appears to have decreased for Hispanics but not for the White, non-Hispanic group.

Exhibit 213. Fetal mortality rate disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
Hispanic/Latino, any race	Not significantly different	Not statistically significant
White (nH)	Referent group	Not statistically significant

(nH) = non-Hispanic
S=numbers are too small to calculate
Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

Exhibit 214. Infant mortality rates per 1,000 by race/ethnicity



*Note: Statistically unstable data are noted in the table below.

Hispanic/Latino, any race	5.2	6.0	5.2	4.7	4.5	4.5	4.4	4.2	4.5	4.7
Multiple/Other races (nH)	16.1	11.7	7.5	3.6	3.5	6.6	3.1	15.3*	18.6*	18.3*
White (nH)	5.8	5.6	7.7	8.2	7.2	5.1	5.7	5.1	5.2	3.5*

*Statistic instability, interpret with caution
(nH) = non-Hispanic
S=data are suppressed to preserve confidentiality.
Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Multi-racial infant mortality rates were greater in 2006-2008 through 2008-2010 than in the county overall, and this difference was significant in 2008-2010.

Exhibit 215. Infant mortality rate disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
Hispanic/Latino, any race	Not significantly different	Not statistically significant

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
White (nH)	Referent group	Not statistically significant

(nH) = non-Hispanic
S=numbers are too small to calculate
Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

Unintentional Injury Deaths

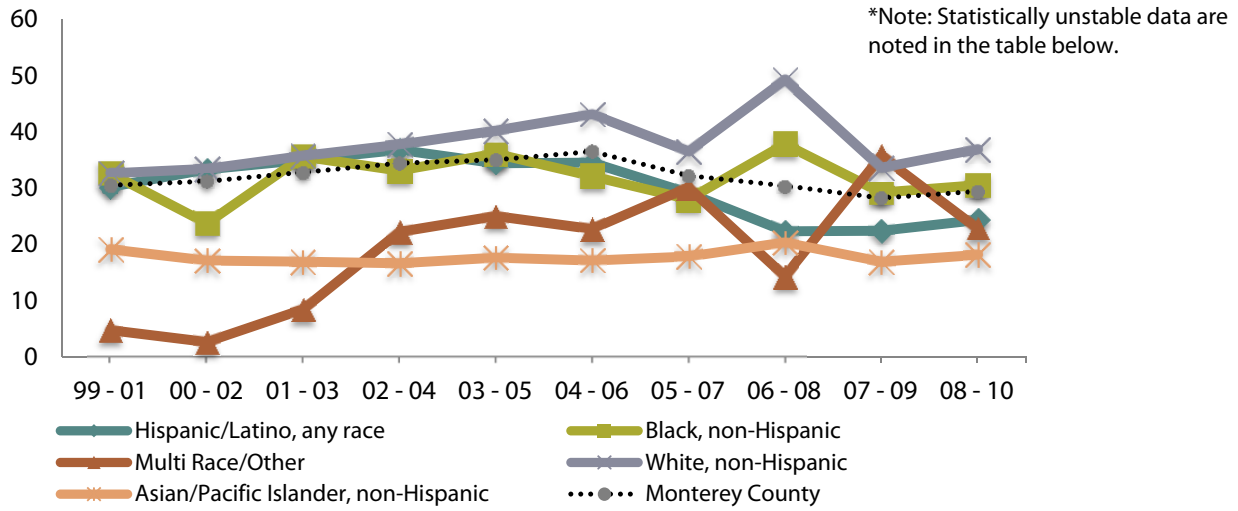
Exhibit 216. Unintentional mortality rates per 100,000 by age group

	Age-specific rate per 100,000									
15 to 24 years	27.2	25.4	26.8	31.4	32.9	32.0	26.2	24.4	23.8	20.0
25 to 44 years	26.0	30.7	31.5	32.4	32.3	36.6	28.9	25.6	24.5	26.7
45 to 64 years	29.7	28.3	39.9	43.1	46.7	47.7	46.5	44.9	36.8	40.5
Monterey County	**30.5**	**31.2**	**32.8**	**34.4**	**35.0**	**36.5**	**32.2**	**30.4**	**28.2**	**29.4**

*Statistic instability, interpret with caution
(nH) = non-Hispanic
S=data are suppressed to preserve confidentiality.
Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010, Fetal Death Statistical Master File 1999-2010, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Unintentional mortality rates were consistently higher for residents ages 65 and older compared to other age groups.
- For the time span shown, unintentional mortality rates for 15 to 24 year olds decreased to its lowest level in 2008-2010 (20.0).
- Unintentional mortality rates significantly decreased for 25-44 year olds.
- Unintentional mortality rates were significantly lower for 1-14 year olds and significantly higher for age groups 25-44 and 65+.

Exhibit 217. Age-adjusted unintentional mortality rates per 100,000 by race/ethnicity



	Age-adjustedrRate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Asian/Pacific Islander (nH)										
Black (nH)	32.6*	23.7*	35.6*	33.1*	36.1	32.1*	28.0*	29.5*	29.2*	30.5*
Hispanic/Latino, any race	30.2*	33.3*	35.0*	36.8*	34.4*	34.5*	29.1*	26.0*	22.4*	24.3*
Multiple/Other races (nH)	4.7*	2.6*	8.4*	22.2*	25.0*	22.7*	30.1*	27.2*	35.7*	22.8*
White (nH)	32.6	33.4	35.7	37.7	40.2	43.1	36.5	34.8*	33.6	36.9*
Monterey County	**30.5**	**31.2**	**32.8**	**34.4**	**35.0**	**36.5**	**32.2**	**30.4**	**28.2**	**29.4**

*Statistic instability, interpret with caution
(nH) = non-Hispanic
Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010,; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- While these data are statistically unstable and not statistically different, the unintentional mortality rate appears generally lower for Asian/Pacific Islander residents than for other race/ethnic groups.

Exhibit 218. Age-adjusted unintentional mortality rates per 100,000 by gender

	Age-adjusted rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Male	44.6	43.8	44.0	45.9	44.9	48.1	42.2	40.2	35.8	38.4
Female	17.5	19.4	21.3	22.7	24.2	24.1	21.5	20.3	20.4	20.1
Monterey County	**30.5**	**31.2**	**32.8**	**34.4**	**35.0**	**36.5**	**32.2**	**30.4**	**28.2**	**29.4**

Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010, statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- The age-adjusted unintentional mortality rate from 1999-2001 to 2008-2010 was consistently higher for males than for females, but this was not statistically significant.

Exhibit 219. Unintentional mortality rate disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
<1 year	Not significantly different	Not statistically significant
1 to 14 years	**Significantly lower**	**Significantly decreased**
15 to 24 years	Not significantly different	Not statistically significant
25 to 44 years	Referent group	Not statistically significant
45 to 64 years	**Significantly higher**	Not statistically significant
65+ years	**Significantly higher**	Not statistically significant
Asian/Pacific Islander (nH)	Not significantly different	Not statistically significant
Black (nH)	Not significantly different	Not statistically significant
Hispanic/Latino, any race	Not significantly different	**Significantly decreased**
Multiple/Other races (nH)	Not significantly different	**Significantly increased**
White (nH)	Referent group	Not significantly different
Male	Not significantly different	Not significantly different
Female	Referent group	Not significantly different

(nH) = non-Hispanic

Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.

Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

Motor vehicle related deaths

Exhibit 220. Motor vehicle-related mortality rates per 100,000 by age group

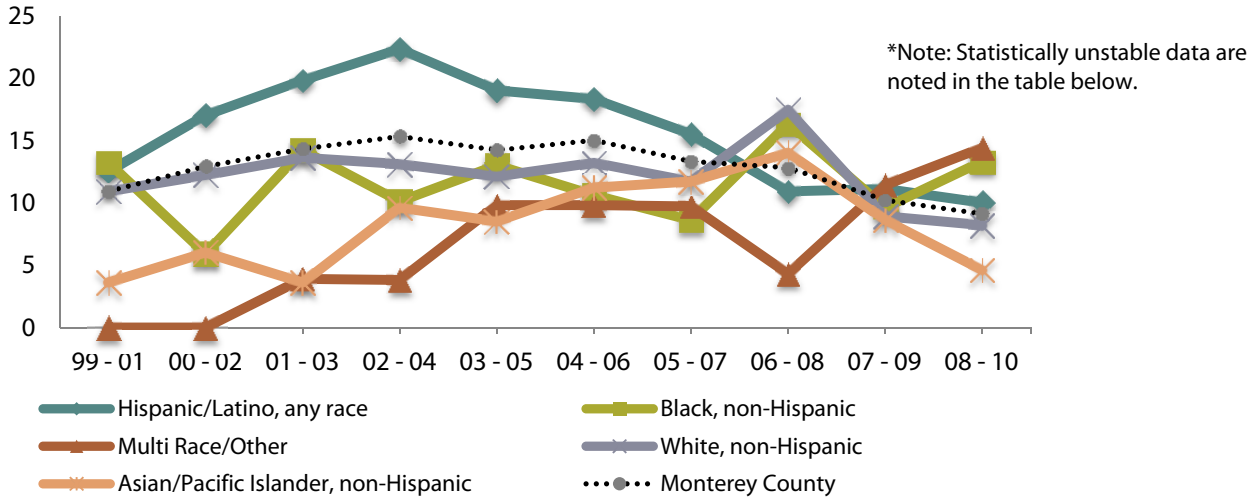
	Age-specific rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
<1 year	S	S	S	S	S	S	S	S	S	S
1 to 14 years	3.4*	4.1*	4.8*	6.3*	5.2*	4.5*	2.7*	3.1*	3.5*	2.3*
15 to 24 years	18.7	19.6	22.1	24.1	25.6	24.6	19.9	18.7	17.1	13.3
25 to 44 years	10.3	15.1	16.5	15.7	14.3	15.4	12.5	10.8	9.1	10.2
45 to 64 years	8.2*	7.9*	12.5	13.7	13.8	14.3	17.4	17.8	13.8	10.5
65+ years	20.1	23.2	19.7	23.7	17.9	22.8	18.7	17.7	10.2*	10.8*

Monterey County	**10.9**	**12.9**	**14.3**	**15.3**	**14.2**	**15.0**	**13.3**	**12.8**	**10.2**	**9.1**

* Statistic instability, interpret with caution
S=data are suppressed to preserve confidentiality.
Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- The rate of motor vehicle-related mortality over time was generally higher for teens ages 15 to 24, compared to other age groups.
- The rate of motor vehicle-related mortality for 15 to 24 year olds consistently decreased from 2003-2005 through 2008-2010.
- Motor vehicle-related mortality rates significantly decreased for the age group 65+ from 1999-2001 to 2008-2010.

Exhibit 221. Age-adjusted motor vehicle-related mortality rates per 100,000 by race/ethnicity



	Age-adjusted rate per 100,000									
	99-01	**00-02**	**01-03**	**02-04**	**03-05**	**04-06**	**05-07**	**06-08**	**07-09**	**08-10**
Asian/Pacific Islander (nH)	13.2*	5.9*	14.2*	10.1*	13.0*	10.6*	8.6*	13.3*	9.6*	13.3*
Black (nH)	13.2*	5.9*	14.2*	10.1*	13.0*	10.6*	8.6*	13.3*	9.6*	13.3*
Hispanic/Latino, any race	12.5*	17.0*	19.8*	22.3*	19.0*	18.3*	15.5*	13.1*	11.1*	10.0*
Multiple/Other races (nH)	0.0*	0.0*	3.9*	3.8*	9.8*	9.8*	9.7*	7.1	11.4	14.4
White (nH)	10.9	12.2	13.6	13.1	12.1*	13.2*	11.7	12.2	8.9*	8.2*
Monterey County	**10.9**	**12.9**	**14.3**	**15.3**	**14.2**	**15.0**	**13.3**	**12.8**	**10.2**	**9.1**

*Statistic instability, interpret with caution
(nH) = non-Hispanic

Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Motor vehicle-related mortality rates significantly increased for multiple/other races from 1999-2001 to 2008-2010.

Exhibit 222. Age-adjusted motor vehicle-related mortality rates per 100,000 by gender

										12.9
Female	6.1	7.5	9.1	10.0	10.0	9.9	8.7	8.1	6.9	4.9
Monterey County	**10.9**	**12.9**	**14.3**	**15.3**	**14.2**	**15.0**	**13.3**	**12.8**	**10.2**	**9.1**

Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- The rates of motor vehicle-related mortality for males were consistently higher than for females; during many time periods, males had more than twice the rates of females and this was a significant difference for 2008-2010.

Exhibit 223. Motor vehicle-related mortality rate disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
15 to 24 years	Not significantly different	Not statistically significant
45 to 64 years	Not significantly different	Not statistically significant
65+ years	Not significantly different	**Significantly decreased**
Asian/Pacific Islander (nH)	Not significantly different	Not statistically significant
Hispanic/Latino, any race	Not significantly different	Not statistically significant
White (nH)	Referent group	Not statistically significant
Female	Referent group	Not statistically significant

(nH) = non-Hispanic
S=numbers are too small to calculate
Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.

Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

Homicides

Exhibit 224. Homicide rates per 100,000 by age group

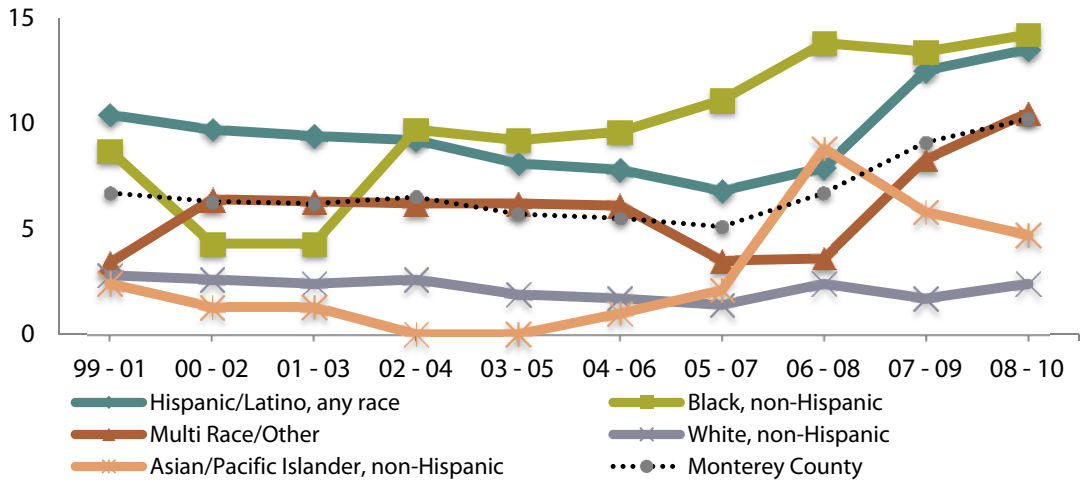
	Age-specific rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
<1 year	S	S	S	S	S	S	S	S	S	S
1 to 14 years	S	S	S	S	S	S	S	S	1.9*	2.7*
15 to 24 years	22.4	23.8	23.2	25.1	19.3	16.8	12.0	18.2	26.4	31.8
25 to 44 years	8.7	8.2	8.5	8.6	8.8	8.4	7.9	9.4	13.1	14.8
45 to 64 years	3.0*	1.7*	1.6*	2.3*	2.3*	3.4*	4.4*	6.2*	5.0*	4.2*
65+ years	S	S	S	S	S	S	S	S	S	S
Monterey County	**6.7**	**6.3**	**6.2**	**6.5**	**5.7**	**5.5**	**5.1**	**6.7**	**9.1**	**10.2**

*Statistic instability, interpret with caution
S=data are suppressed to preserve confidentiality.
Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Although some of these rates are statistically unstable, homicide rates appear to be consistently higher for residents age 15 to 24 compared to other age groups.

Exhibit 225. Age-adjusted homicide rates per 100,000 by race/ethnicity

*Note: Statistically unstable data are noted in the table below.



	Age-adjusted rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Asian/Pacific Islander (nH)	2.4*	1.3*	1.3*	0.0*	0.0*	1.0*	2.1	8.8*	5.8*	4.7*

	Age-adjusted rate per 100,000									
	99-01	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10
Black (nH)	8.7*	4.3*	4.3*	9.7*	9.2*	9.6*	11.1	13.8*	13.4*	14.2*
Hispanic/Latino, any race	10.4*	9.7*	9.4*	9.2*	8.1*	7.8*	6.8	7.9*	12.5*	13.5*
Multiple/Other races (nH)	3.4*	6.4*	6.3*	6.2*	6.2*	6.1*	3.5	3.6*	8.3*	10.5*
White (nH)	2.8*	2.6*	2.4*	2.6*	1.9*	1.7*	1.4	2.4*	1.7	2.4*
Monterey County	**6.7**	**6.3**	**6.2**	**6.5**	**5.7**	**5.5**	**5.1**	**6.7**	**9.1**	**10.2**

*Statistic instability, interpret with caution
(nH) = non-Hispanic
Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- While many of these rates are statistically unstable, beginning in 2002-2004, homicide rates for Black, non-Hispanic residents surpassed those for other race/ethnic groups.
- Black and Hispanic homicide rates were significantly higher than White, non-Hispanic rates.
- Asian and Black homicide rates significantly increased from 1999-2001 to 2008-2010.

Exhibit 226. Age-adjusted homicide rates per 100,000 by gender

										16.7
Female	2.2	1.7	1.0	0.5	0.3	0.7	1.0	1.7	2.6	2.8
Monterey County	**6.7**	**6.3**	**6.2**	**6.5**	**5.7**	**5.5**	**5.1**	**6.7**	**9.1**	**10.2**

Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Homicide rates were significantly higher for males compared to females in 2008-2010; during many time intervals shown, males had more than ten times the rates of females.

Exhibit 227. Homicide rate disparity and trend analysis

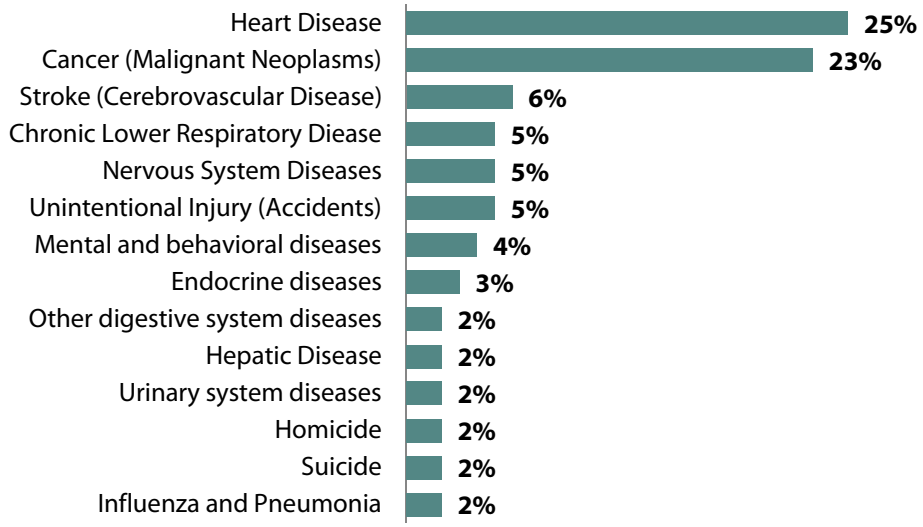
Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
15 to 24 years	**Significantly higher**	Not statistically significant
25 to 44 years	Referent group	
45 to 64 years	**Significantly lower**	Not statistically significant
65+ years	**Significantly lower**	
Asian/Pacific Islander (nH)	Not significantly different	**Significantly increased**

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
Black (nH)	**Significantly higher**	**Significantly increased**
Hispanic/Latino, any race	**Significantly higher**	Not statistically significant
Multiple/Other races (nH)	Not significantly different	Not statistically significant
White (nH)	Referent group	Not statistically significant
Male	**Significantly higher**	Not statistically significant
Female	Referent group	Not statistically significant

(nH) = non-Hispanic
Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

Leading causes of mortality

Exhibit 228. Leading Causes of Mortality in Monterey County, 2010



Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; analyses performed by Monterey County Health Department Epidemiology and Surveillance Unit.
Note: As these data represent the leading causes of death, the percentages do not add up to 100%.

- In 2010, the leading cause of death countywide was heart disease, followed closely by cancer.

Leading causes of mortality by Monterey County regions

Mortality differences between four Monterey County regions appear to correlate with the unique socio-demographic differences found in each region. The following analyses provide good reason to use a regional approach to plan and deliver public health education and services.

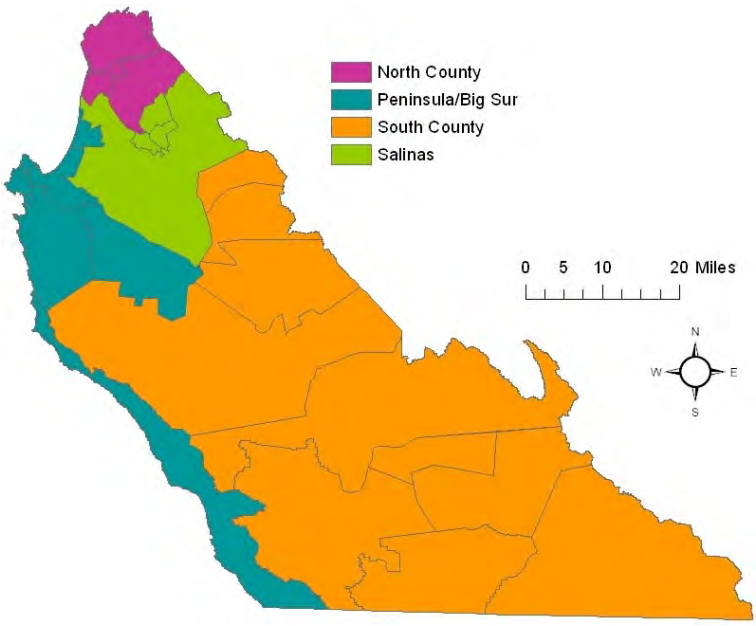
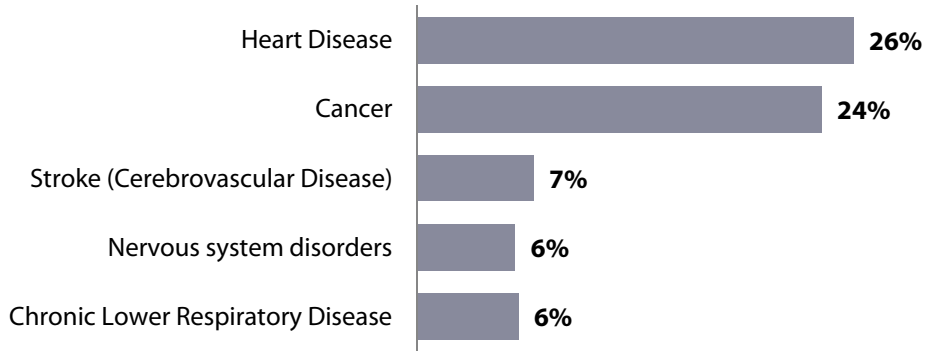


Exhibit 229. Five leading causes of mortality in Coastal region, 2010

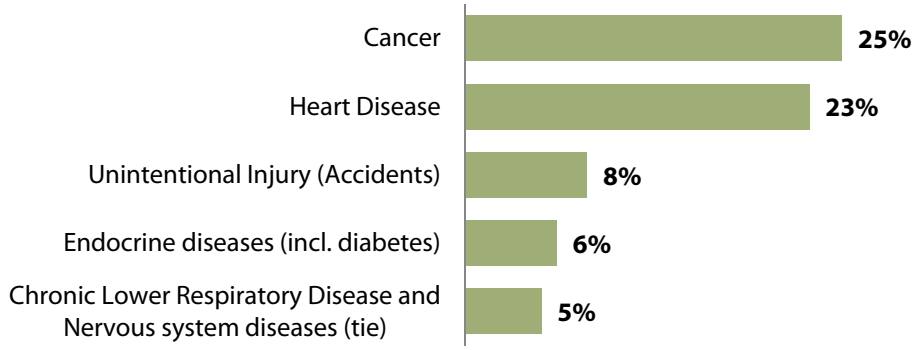


Note: As these data represent the five leading causes of death, the percentages do not total 100%.

Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- In 2010, the leading causes of death in the coastal region closely mirrored countywide causes.
- In the coastal region in2010, the proportion of cancer deaths exceeded that of the countywide overall, though this difference may not be statistically significant.

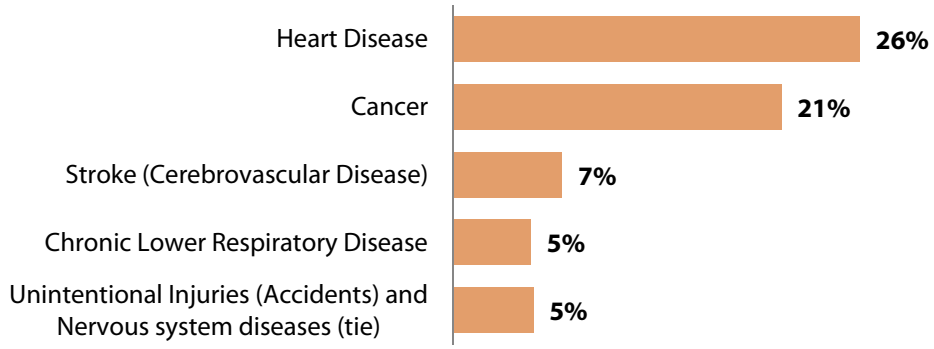
Exhibit 230. Five leading causes of mortality in North County region, 2010



Note: As these data represent the five leading causes of death, the percentages do not total 100%.
Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- In 2010, the leading causes of death in north county region was cancer followed by heart disease.
- The 2010 percentage of north county deaths due to unintentional injury was higher than the countywide aggregate.

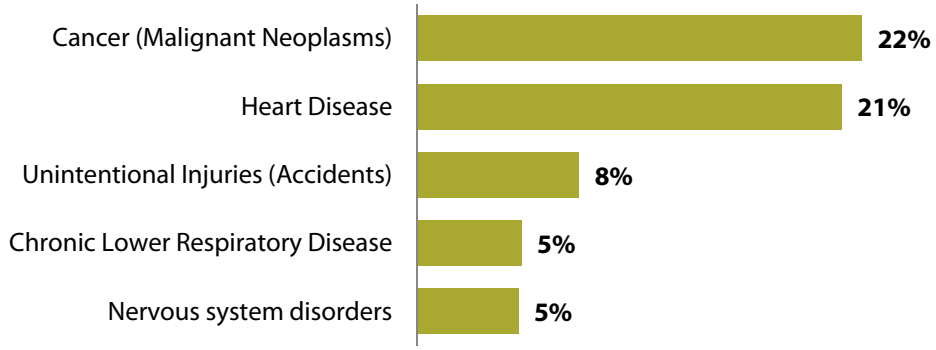
Exhibit 231. Five leading causes of mortality in Salinas region, 2010



Note: As these data represent the five leading causes of death, the percentages do not total 100%.
Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- In 2010, the leading cause of death in the Salinas Valley area was heart disease, followed closely by cancer.

Exhibit 232. Five leading causes of mortality in the South County region, 2010



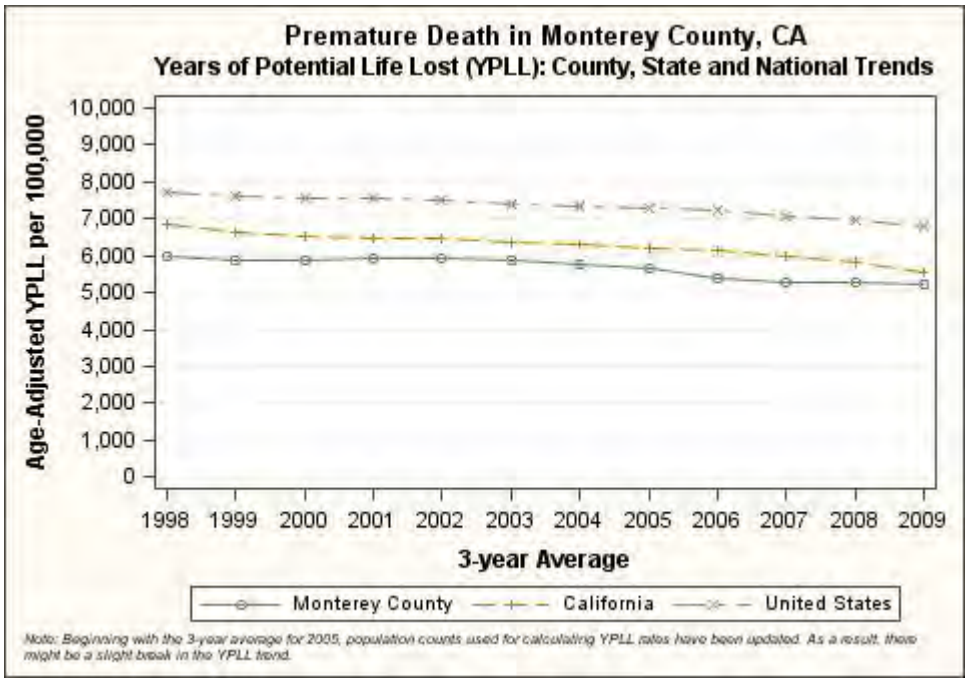
Note: As these data represent the five leading causes of death, the percentages do not total 100%.
Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- In 2010, the leading causes of death in the South County area closely mirrored countywide causes.
- In the South County area, 2010 the proportion of unintentional injury deaths slightly exceeded that of the countywide overall.

Leading Causes of Premature Death (Years of Potential Life Lost)

Years of Potential Life Lost (YPLL) is an important measure of premature death. YPLL is calculated by subtracting the age at which death occurs from a predetermined given age end point (usually the average life expectancy, often age 75 is used). The total years of potential life lost are summed to represent the total YPLL.

Exhibit 233. Premature Death in Monterey County, 1998 - 2009

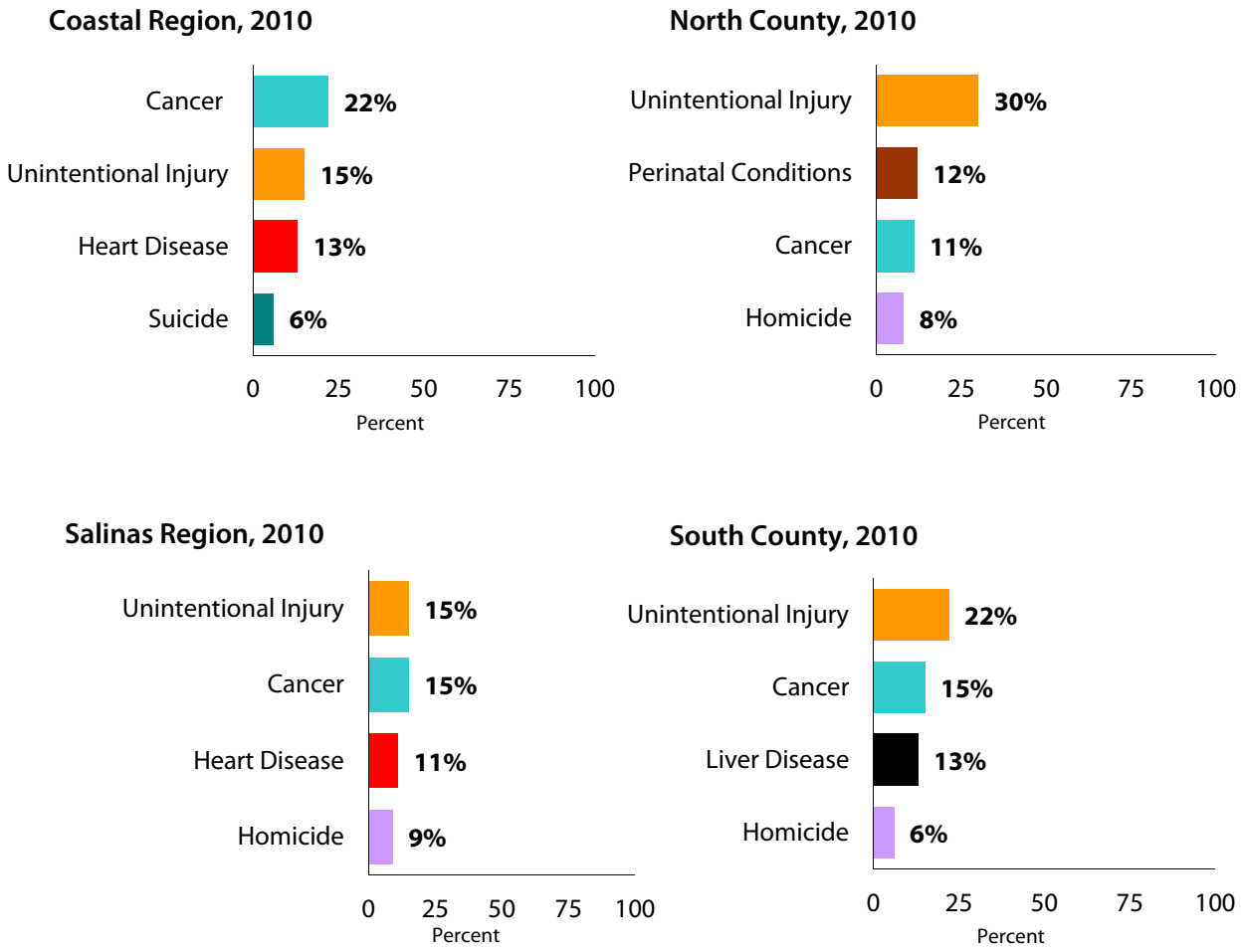


Source: California Department of Public Health, Health Information and Research Section, Death Statistical Master Files, 2005-2008, US Census Bureau, and ESRI. Analyses performed by the Monterey County Health Department, Planning, Evaluation, and Policy Unit, 2013.

- From 1998 through 2009, age-adjusted rates for Monterey County's YPLL were consistently less than for California and national rates.

YPLL is often presented by geographic region, as regional differences in YPLL causes are likely related to socio-demographic differences. These analyses provide an opportunity for incorporating a regional approach to our public health strategic planning.

Exhibit 234. Leading causes of premature death as a percentage of years of potential life lost prior to age 75, 2010



Sources: California Department of Public Health, Health Information and Research Section, Death Statistical Master File 1999-2010, Fetal Death Statistical Master File 1999-2010, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Planning, Evaluation, and Policy Unit.

- In 2010, unintentional injury was the foremost cause of premature death in the greater Salinas, north county, and south county regions.
- Suicide (coastal region), perinatal conditions (north county), and liver disease (south county) were leading causes of death in 2010 that appeared in only one of the county's four regions.

Access to Health Care

The ability to access quality and affordable health care services is a key component in a person's overall health. According to Healthy People 2020, health care access is defined as "…timely use of personal health services to achieve the best health outcomes."[54]

Health care access impacts a person's quality and quantity of life, as it dictates when and how often a person can use the health care system to obtain preventive, diagnostic, and treatment services. Poverty and the cost of living are intertwined with other factors that can also put people at risk for poor health care and poor health outcomes.

According to the Agency for Healthcare Research and Quality, there are three prerequisites[55] to accessing healthcare services:

- the ability to enter and navigate the healthcare system;
- the ability to identify and use convenient healthcare locations; and,
- the ability to establish a good working relationship with a medical provider where communication is easy.

These three steps require skills and resources that may present difficulties for some residents. First, navigating the healthcare system is easier to do when a person has adequate financial resources or health insurance to pay for services. Having medical insurance can ease a person's financial burden. [56] Access to health care as related to health insurance coverage may change dramatically for Monterey County residents with the full implementation of the national Affordable Care Act in 2014.

Second, gaining access to healthcare sites often requires the ability to travel within or outside the community, and generally requires a degree of health literacy to communicate symptoms, diagnoses, treatment, and care management. [57]

Last, to form a trusting relationship with medical providers, a person must feel comfortable with communicating and asking questions, which is generally the result of having a consistent provider or medical home. Lack of cultural understanding can hinder a person's ability to seek treatment and a medical professional's ability to provide treatment.[58]

Not having these essential resources may lead to barriers that can keep a person from truly capitalizing on or benefiting from the preventive care and/or treatment plans available for maintaining health.

Health Coverage and Insurance

Exhibit 235. Not currently insured by age group

	Percent					
	2001	2003	2005	2007	2009	2011-12
Children 0-11 years	10.8	7.5*	8.5*	3.7*	4.9*	4.2*
Adolescent 12-17 years	14.5	2.5*	6.6*	10.4*	9.9*	4.0*
Adult 18-64 years	20.4	21.7	20.2	30.4	24.0	28.5
Senior 65+ years	–	–	–	–	–	–

* Statistically unstable; interpret with caution.
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- In 2011-2012, over one-quarter of every adult age 18 to 64 years old lacked health care insurance

Exhibit 236. Not currently insured by gender

	Percent					
	2001	2003	2005	2007	2009	2011-12
Male	16.3	17.4	17.0	24.1	15.6	22.2
Female	15.7	12.6	12.5	15.8	17.0	14.2

* Statistically unstable; interpret with caution.
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- From 2001 to 2011-2012, males were more likely to lack health care insurance than females.

Exhibit 237. Not currently insured by race/ethnicity

	Percent					
	2001	2003	2005	2007	2009	2011-12
Asian/Pacific Islander (nH)	20.5*	–	–	3.5*	7.6*	12.7*
Black (nH)	9.2*	20.8*	5.3*	–	9.7*	–
Hispanic/Latino, any race	22.8	23.0	22.5	28.5	20.8	25.1
Multiple/Other races (nH)	18.8*	–	–	–	14.1*	23.4*
Native American/Alaskan Native (nH)	–	–	–	–	39.8*	–
White (nH)	7.4	7.4	7.0	11.7	10.3	8.3

* Statistically unstable; interpret with caution.
(nH) = non-Hispanic
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- In 2011-2012, Hispanic residents were more than three times as likely as White, non-Hispanic residents to lack health care insurance.

Exhibit 238. Medi-Cal beneficiaries, 2011

	Number	Percent
Medi-Cal Beneficiaries	94,574	22.5

Source: California Department of Health Care Services, 2011

- In 2011, nearly one quarter of all Monterey County residents receive Medi-Cal health care benefits.

Payment Sources for Deliveries

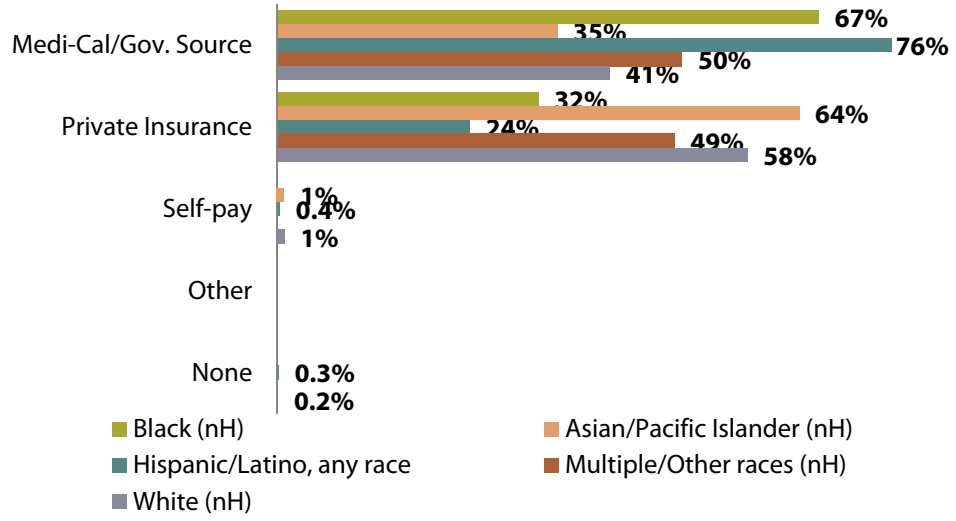
Exhibit 239. Delivery payment source by age of mother, 2008-2010

	Percent				
	Medi-Cal/ Gov.	Private Insurance	Self-Pay	Other	None
17 years and less	88.3	10.3	1.3	S	S
18 to 24 years	82.3	16.8	0.6	S	0.2
25 to 34 years	60.4	38.9	0.5	S	0.2
35+ years	49.4	50.0	0.3	S	0.3

S=suppressed to preserve confidentiality
Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Nearly 9 out of 10 mothers age 17 years or less used Medi-Cal or another government funded program as a source of birth payment in 2008-2010, compared to nearly 5 out of 10 mothers age 35 years or more.

Exhibit 240. Delivery payment source by race/ethnicity, 2008-2010



	Percent				
	Medi-Cal/ Gov.	Private Insurance	Self-Pay	Other	None
Asian/Pacific Islander (nH)	34.5	64.2	0.9	S	S
Black (nH)	66.7	32.2	S	S	S
Hispanic/Latino, any race	75.6	23.8	0.4	S	0.3
Multiple/Other races (nH)	49.8	48.9	S	S	S
White (nH)	41.0	57.9	1.0	S	0.2

S=Suppressed to preserve confidentiality
(nH) = non-Hispanic
Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Hispanic (76%) and Black (67%) mothers were more likely to utilize Medi-Cal or another government funded program to pay for deliveries in 2008-2010 compared to other race/ethnic groups.

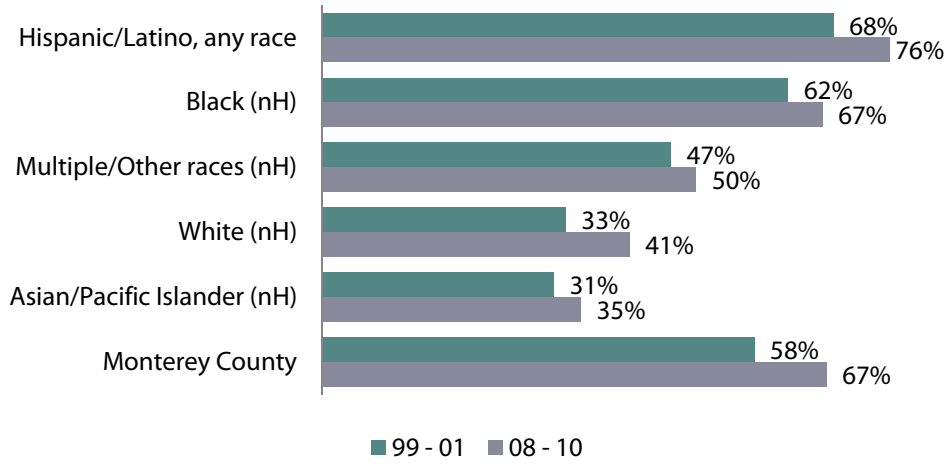
Exhibit 241. Medi-Cal/other government payment for delivery by age group over two time periods

	Percent	
	1999-01	2008-10
17 years and less	88.4	88.3
18 to 24 years	74.4	82.3
25 to 34 years	47.4	60.4
35+ years	36.0	49.4
Monterey County	**57.6**	**67.2**

Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Use of Medi-Cal or other government payment for delivery increased for all groups over age 18 in 2008-2010 compared to 1999-2001.
- Use of Medi-Cal or other government payment for delivery was significantly higher for the age groups 17 years and less, 18 to 24, and 35+ from 2008-2010.

Exhibit 242. Medi-Cal/other government payment for delivery by race/ethnicity over two time periods



	Percent	
	1999-01	2008-10
Asian/Pacific Islander (nH)	30.9	34.5
Hispanic/Latino, any race	68.1	75.6
Multiple/Other races (nH)	46.5	49.8
White (nH)	32.5	41.0

(nH) = non-Hispanic
Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit.

- Use of Medi-Cal or other government payment for delivery increased, but not significantly, for all race/ethnic groups in 2008-2010 compared to 1999-2001.
- Use of Medi-Cal or other government payment for delivery was significantly higher for Black and Hispanic residents, and significantly lower for Asians from 2008-2010.

Exhibit 243. Medi-Cal/other government payment for delivery disparity and trend analysis

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
17 years and less	**Significantly higher**	Not statistically significant
18 to 24 years	**Significantly higher**	Not statistically significant

Population Groups	Disparity, 2008-2010	Time Trend, 1999-2010
25 to 34 years	Referent group	Not statistically significant
35+ years	**Significantly lower**	Not statistically significant
Asian/Pacific Islander (nH)	**Significantly lower**	Not statistically significant
Black (nH)	**Significantly higher**	Not statistically significant
Hispanic/Latino, any race	**Significantly higher**	Not statistically significant
Multiple/Other races (nH)	Not significantly different	Not statistically significant
White (nH)	Referent group	Not statistically significant

(nH) = non-Hispanic
Note: Statistical significance of disparity was indicated using 95% confidence intervals. Significance of time trend was determined through Poisson regression.
Source: California Department of Public Health, Health Information and Research Section, Birth Statistical Master File 1999-2010; statistical analyses performed by Monterey County Health Department, Surveillance and Epidemiology Unit

Usual Source of Health Care

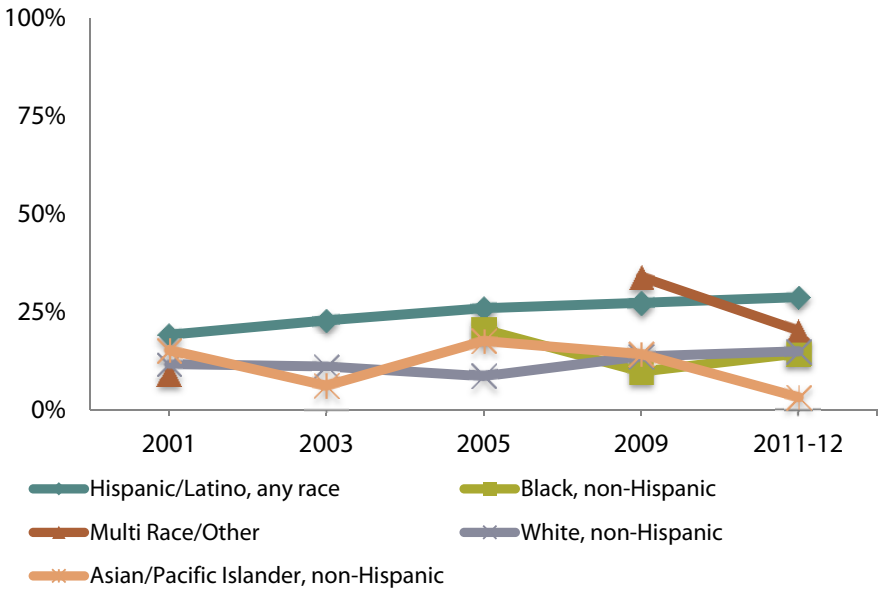
Exhibit 244. Residents without a usual source of health care by age group

	Percent				
	2001	2003	2005	2009	2011-12
Children 0-11 years	2.7*	4.5*	5.7*	5.8*	0.9*
Adolescents 12-17 years	25.3	35.2	31.7	36.7	31.3*
Adults 18-64 years	19.5	18.4	23.2	26.7	30.0
Seniors 65+ years	5.0*	7.9*	–	9.8*	10.6

* Statistically unstable; interpret with caution.
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- From 2001 to 2011-2012, over the years, adolescents were least likely to have a usual source of health care. Due mostly to the Healthy Kids and Medi-Cal programs, children and seniors were much more likely to have a usual source of care compared to other age groups.

Exhibit 245. Residents without a usual source of health care by race/ethnicity



-

	Percent				
	2001	2003	2005	2009	2011-12
Asian/Pacific Islander (nH)	15.2*	6.1*	17.5*	14.2*	3.2*
Black (nH)	–	–	20.5*	9.7*	14.3*
Hispanic/Latino, any race	19.1	22.8	25.9	27.3	28.7
Multiple/Other races (nH)	9.2*	–	–	33.9*	20.2*
Native American/Alaskan Native (nH)	32.9*		–	–	–
White (nH)	11.6	11.0	8.5	13.6	14.9

* Statistically unstable; interpret with caution.
(nH) = non-Hispanic
- (hyphen) = Estimate is less than 500 people
Note: Native American/Alaskan Native excluded from graph due to lack of data
Source: California Health Interview Survey, 2013.

- From 2001 to 2011-2012, Hispanic/Latino residents were generally twice as likely to lack a usual source of care compared to White, non-Hispanic residents.

Exhibit 246. Residents without a usual source of health care by gender

	Percent				
	2001	2003	2005	2009	2011-12
Male	17.0	21.5	21.6	27.9	23.2
Female	13.7	10.9	15.3	15.4	21.3

* Statistically unstable; interpret with caution.
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- From 2001- through 2011-2012, males were consistently more likely than females to lack a usual source of care.

Exhibit 247. Number of doctor visits in the past year by age group

		Percent				
		2003	2005	2007	2009	2011-12
Child 0-11	0 Visits	11.3*	8.9*	7.7*	11.6*	6.1*
	1-3 Visits	58.3	66.6	65.6	68.6	62.0
	4-8 Visits	24.9	21.4	16.2	15.2	28.6
	9+ Visits	5.5*	3.1*	10.5*	4.6*	3.2*
Adolescent 12-17	0 Visits	11.8*	33.5	20.9*	27.4*	9.2*
	1-3 Visits	72.9	48.2	56.3	54.3*	71.0*
	4-8 Visits	5.3*	15.8*	19.4*	13.2*	18.6*
	9+ Visits	10.0*	2.6*	3.4*	5.1*	–
Adult 18-64	0 Visits	22.7	20.6	27.3	23.0	29.0
	1-3 Visits	47.6	51.1	46.6	48.4	41.6
	4-8 Visits	21.1	16.0	16.8	15.2	20.5
	9+ Visits	8.6	12.3	9.3	13.4	8.9
Senior 65+	0 Visits	3.8*	7.8*	12.4*	4.6*	2.7*
	1-3 Visits	38.9	46.6	42.2	39.6	39.1
	4-8 Visits	41.0	25.0	25.9	42.6	42.2
	9+ Visits	16.3	20.7	19.5	13.2	15.9

* Statistically unstable; interpret with caution.
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- While some of these data are statistically unstable, it appears that more adolescents and adults ages18-64 reported in 2011-2012 they had not visited the doctor in the past year, compared to other age groups.

Exhibit 248. Number of doctor visits in the past year by gender

	0 Visits					
	1-3 Visits	47.8	52.3	45.4	53.7	47.8
	4-8 Visits	21.5	15.6	19.7	12.8	24.0
	9+ Visits	4.1*	6.1	7.4	7.6	4.9
	0 Visits	8.4	10.5	14.9	12.4	16.2
	1-3 Visits	54.7	54.1	56.3	50.1	47.7
	4-8 Visits	23.1	20.2	16.0	23.3	24.9
	9+ Visits	13.8	15.2	12.8	14.2	11.1

* Statistically unstable; interpret with caution.
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- Males were consistently almost twice or more as likely to have had no doctor visits in the past year compared to females

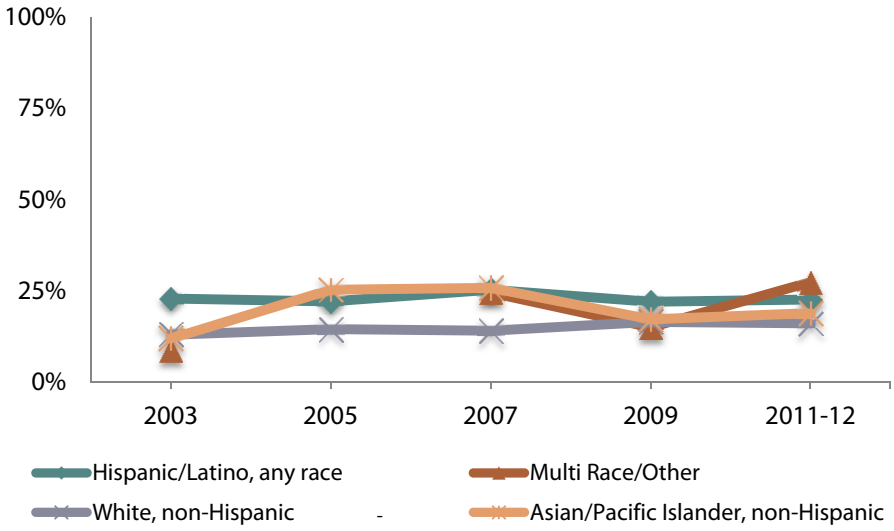
Exhibit 249. Number of doctor visits in the past year by race/ethnicity

	0 Visits					
	1-3 Visits	46.5	46.7	56.6	45.0	44.9
	4-8 Visits	38.9	17.0*	14.3*	30.1*	25.4*
	9+ Visits	2.7*	11.0*	3.3*	7.7*	10.8*
	0 Visits	–	–	–	–	–
	1-3 Visits	49.9*	76.7*	100.0*	51.1	55.7*
	4-8 Visits	37.7*	14.6*	–	31.7*	32.7*
	9+ Visits	12.4*	8.6*	–	13.1*	8.0*
	0 Visits	22.9	22.1	25.3	22.0	22.6
	1-3 Visits	54.3	51.7	49.8	54.7	52.3
	4-8 Visits	15.6	16.4	14.8	12.7	20.0
	9+ Visits	7.3	9.7	10.2	10.6	5.1
	0 Visits	8.8*	–	24.5*	15.0*	27.4*
	1-3 Visits	62.6	64.7*	57.0*	53.2	–

		Percent				
		2003	2005	2007	2009	2011-12
	4-8 Visits	23.3*	24.6*	17.3*	17.4*	60.2*
	9+ Visits	5.2*	9.3*	–	14.4*	9.0*
Native American/Alaskan Native (nH)	0 Visits	–	–	–	–	–
	1-3 Visits	–	–	–	39.8*	36.9*
	4-8 Visits	–	–	–	60.2*	43.1*
	9+ Visits	62.8*	62.8*	–	–	–
White (nH)	0 Visits	13.0	14.5	14.1	16.5	16.1
	1-3 Visits	47.2	54.1	51.4	46.9	42.8
	4-8 Visits	27.6	19.9	22.5	24.7	28.8
	9+ Visits	12.2	11.4	12.0	11.8	12.4

* Statistically unstable; interpret with caution.
(nH) = non-Hispanic
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

Exhibit 250. No doctor visits in the past year by race/ethnicity



Note: Black and Native American/Alaskan Native excluded from graph due to lack of data
Source: California Health Interview Survey, 2013.

- Although some of these 2011-2012 data are statistically unstable, it appears that more Hispanic and multiple race/other residents reported they had not visited a doctor in the past year compared to other race/ethnic groups.

Exhibit 251. Visited a dentist within past two years for children ages 2-11

* Statistically unstable; interpret with caution.
(nH) = non-Hispanic
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- Although some of these data are statistically unstable, it appears that in the past decade, the percentage of children ages 2 to 11 who visited the dentist in the prior two years steadily increased.

Exhibit 252. Visited a dentist within past two years for adolescents ages 12-17

Percent				
2001	2003	2007	2009	2011-12
90.9*	94.0*	91.2*	96.8*	100.0*

* Statistically unstable; interpret with caution.
(nH) = non-Hispanic
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- Although some of these data are statistically unstable, it appears that in the past decade, the percentage of adolescents ages 12 to 17 who visited the dentist in the prior two years remained above 90%.

Flu Shots and Preventive Screenings

Exhibit 253. Received flu shot by age group

	Percent			
	2005	2007	2009	2011-12
Children 0-11 years	16.1	34.4	46.2	66.7
Adults 18-64 years	17.7	23.3	32.4	34.6
Seniors 65+ years	78.2	71.2	62.8	76.0

Source: California Health Interview Survey, 2013.

- The percentages of children receiving a flu shot increased dramatically from 2005 to 2011-12.

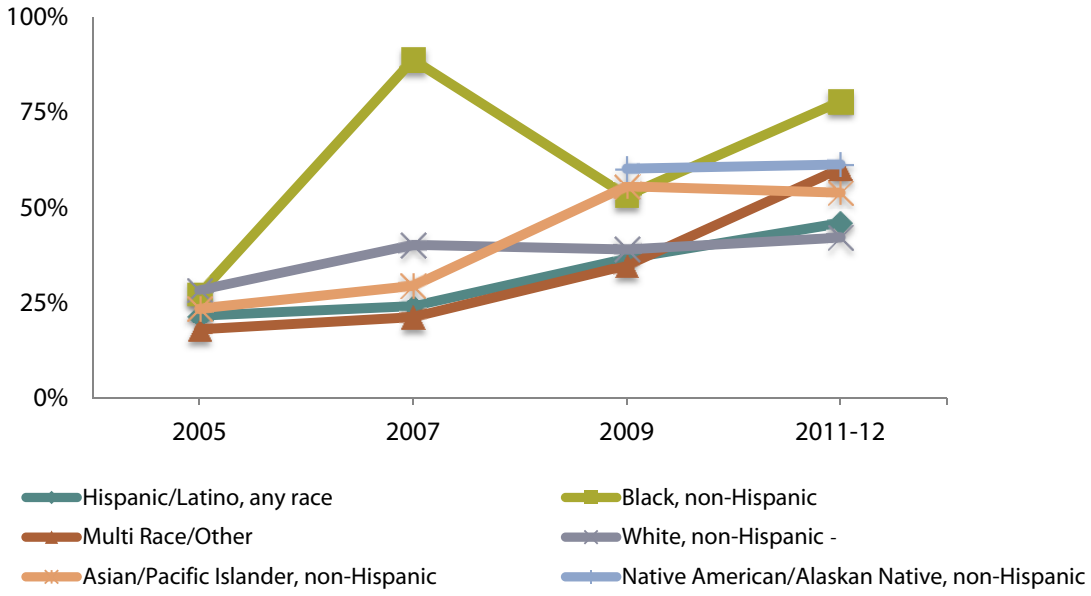
Exhibit 254. Received flu shot by gender

	Percent			
	2005	2007	2009	2011-12
Male	24.4	25.6	33.6	41.8
Female	24.1	37.1	44.2	51.4

Source: California Health Interview Survey, 2013.

- The percentages of males and females receiving flu shots increased dramatically from 2005 to 2011-12; females were generally more likely to receive a flu shot than males.

Exhibit 255. Received flu shot by race/ethnicity



	Percent			
	2005	2007	2009	2011-12
Asian/Pacific Islander (nH)	23.5*	29.4*	55.6	53.9
Black (nH)	27.3*	88.8*	53.1*	77.8*
Hispanic/Latino, any race	21.6	24.1	36.6	45.9
Multiple/Other races (nH)	18.0*	21.2*	34.8*	60.2*
Native American/Alaskan Native (nH)	–	–	60.2*	61.3*
White (nH)	28.3	40.2	39.0	42.1

* Statistically unstable; interpret with caution.
(nH) = non-Hispanic
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013

- In 2011-2012, a greater percentage of Hispanic residents, for the first time, received a flu shot than White, non-Hispanic residents.

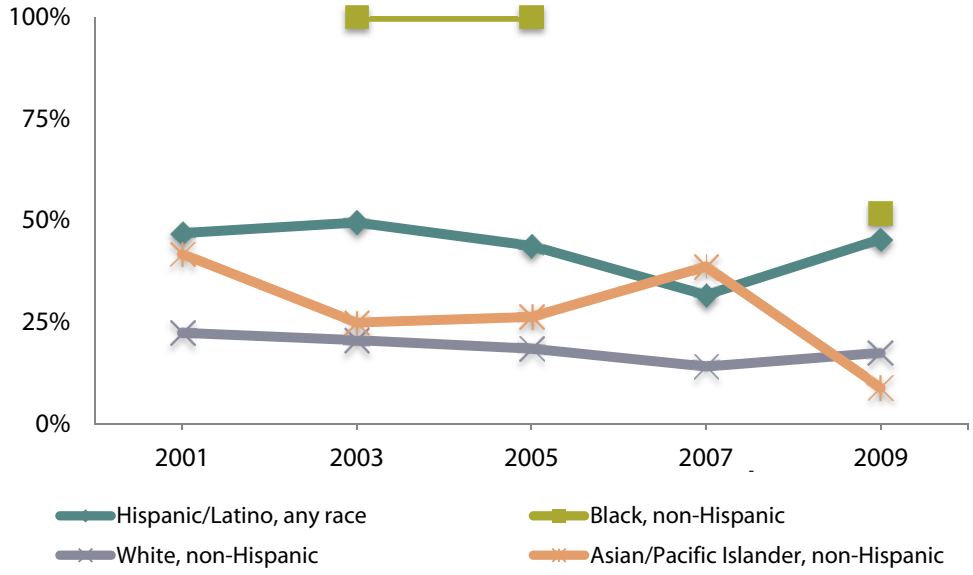
Exhibit 256. Mammogram screening for breast cancer by occurrence and age group

		Percent				
		2001	2003	2005	2007	2009
Two years or less	30-64 years	52.7	53.6	54.5	57.9	57.6
	65+ years	71.6	69.9	82.7*	83.3	74.0
More than 2 years ago	30-64 years	9.6	10.0	9.5	10.7	9.6
	65+ years	14.8	18.2	7.1*	16.3	19.7
Never had a mammogram	30-64 years	37.7	36.4	36.0	31.4	32.9
	65+ years	13.6	11.9*	10.2*	–	6.3*

* Statistically unstable; interpret with caution.
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- One-third of women age 30-64 reported in 2009 that they had never received a mammogram.
- In 2009, women age 65+ were more likely to have received a mammogram compared to women age 30-64.

Exhibit 257. Never had a mammogram by race/ethnicity



		Percent				
		2001	2003	2005	2007	2009
Never had a mammogram	Asian/Pacific Islander (nH)	41.7*	24.8*	26.2*	38.6*	8.9*
	Black (nH)	–	100.0*	100.0*	–	51.7*

		Percent				
		2001	2003	2005	2007	2009
	Hispanic/Latino, any race	46.8	49.4	43.7	31.6	45.3
	Multiple/Other races (nH)	–	–	–	56.5*	–
	Native American/ Native Alaskan(nH)	–	–	–	–	–
	White (nH)	22.3	20.5	18.4	14.0	17.4

Note: Multiple/Other races and Native American/Alaskan Native excluded from graph due to lack of data
* Statistically unstable; interpret with caution.
(nH)=non-Hispanic
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- While some of these data are statistically unstable, it appears that Black women, followed by Hispanic women, were more likely in the past decade to not ever have had a mammogram.

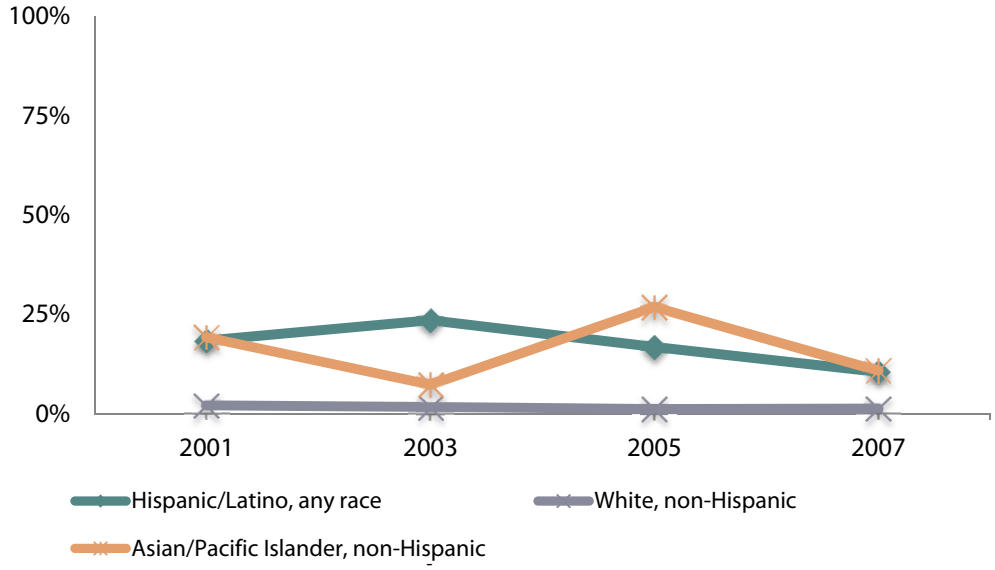
Exhibit 258. Pap test for cervical cancer by occurrence and age

		Percent			
		2001	2003	2005	2007
3 years or less	18-64 years	81.8	85.3	80.9	89.9*
	65+ years	65.7	78.0	89.8*	73.2
More than 3 years ago	18-64 years	6.3*	1.7*	6.5*	3.4*
	65+ years	30.1*	18.8*	7.3*	22.2*
Never	18-64 years	11.9	13.0	12.6	6.7
	65+ years	4.2*	3.1*	–	4.6*

* Statistically unstable; interpret with caution.
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- While some data are statistically unstable, it appears a greater percentage of women had a recent pap test in 2007 compared to 2001.

Exhibit 259. Never had a Pap test for cervical cancer by race/ethnicity



	Percent			
	2001	2003	2005	2007
Asian/Pacific Islander (nH)	19.2*	7.3*	26.8*	10.8*
Black (nH)	–	–	–	–
Hispanic/Latino, any race	18.4	23.5	16.8*	10.5*
Multiple/Other races (nH)	–	–	28.3*	–
Native American/Alaskan Native (nH)	–		–	–
White (nH)	2.1*	1.7*	1.2*	1.3*

Note: Black, Multiple/Other races, and Native American/Alaskan Native are excluded from graph due to lack of data
* Statistically unstable; interpret with caution.
(nH)=non-Hispanic
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- While some of these 2001-2007 data are statistically unstable, it appears that Asian/Pacific Islander and Hispanic women were more likely in the past decade to not ever have had a Pap test.

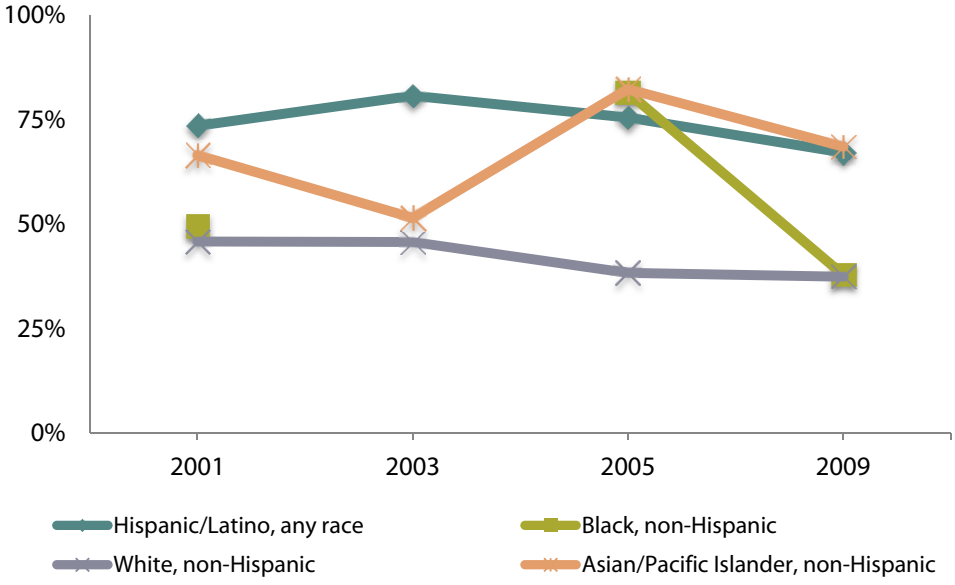
Exhibit 260. PSA test for prostate cancer by occurrence and age group

		Percent			
		2001	2003	2005	2009
1 year or less	18-64 years	29.1	23.7	27.4	24.3
	65+ years	55.4	37.1	62.8	57.0
More than one year ago	18-64 years	10.2	18.6	7.6*	14.2*
	65+ years	12.0*	27.0*	18.6*	11.3*
Never	18-64 years	60.7	57.7	65.0	61.5
	65+ years	32.6	36.0	18.6*	31.7

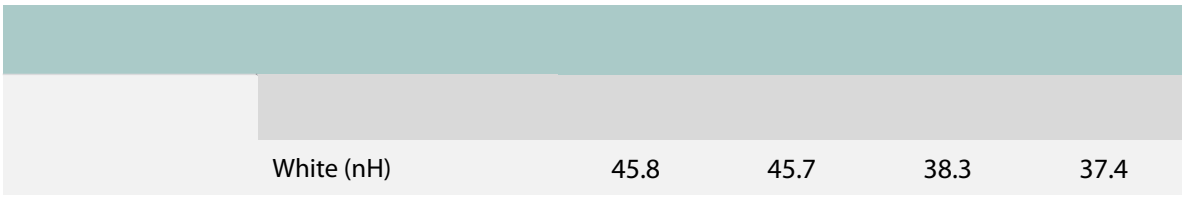
* Statistically unstable; interpret with caution.
Source: California Health Interview Survey, 2013.

- In 2009, more than 50% of men age 65+ years, and about 25% of men age 18-64 years, reported they had received a PSA test in the past year.

Exhibit 261. Never had a PSA test for prostate cancer by occurrence and race/ethnicity



		Percent			
		2001	2003	2005	2009
Never	Asian/Pacific Islander (nH)	66.5*	51.5*	82.3*	68.5*
	Black (nH)	49.5*	–	81.5*	37.9*
	Hispanic/Latino, any race	73.5*	80.7*	75.5*	67.1*
	Multiple/Other races (nH)	–	–	–	71.2*
	Native	–	–	–	–



Note: Multiple/Other races and Native American/Alaskan Native excluded from graph due to lack of data
* Statistically unstable; interpret with caution.
(nH)=non-Hispanic
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- Although much of these data are statistically unstable, Hispanic males were consistently more likely to never have had a PSA test for prostate cancer compared to other race/ethnic groups.

Exhibit 262. Never had a sigmoidoscopy screening for colorectal cancer by age group

		Percent	
		2007	2009
Never	18-64 years	29.7	25.1
	65+ years	20.6	19.6

Source: California Health Interview Survey, 2013.

- In 2009, 25% of adult residents under age 64 and nearly 20% of residents 65 and older reported never having had a sigmoidoscopy.

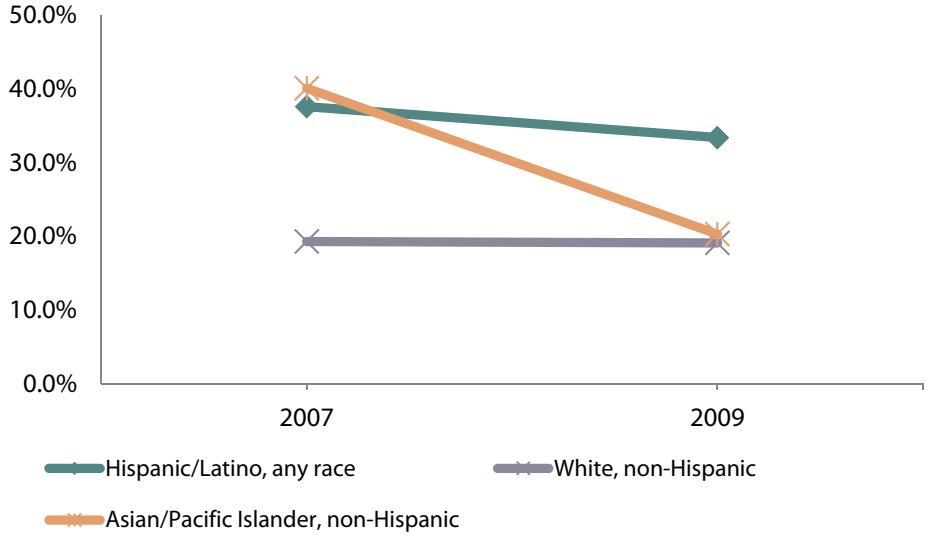
Exhibit 263. Never had a sigmoidoscopy for colorectal cancer by gender

		Percent	
		2007	2009
Never	Male	33.4	22.2
	Female	20.1	23.6

Source: California Health Interview Survey, 2013.

- In 2009, 22% of males and 24% of females reported never having had a sigmoidoscopy.

Exhibit 264. Never had a sigmoidoscopy screening for colorectal cancer by race/ethnicity



		Percent	
		2007	2009
Never	Asian/Pacific Islander (nH)	40.1*	20.3*
	Black (nH)	-	20.5
	Hispanic/Latino, any race	37.6*	33.4
	Multiple/Other races (nH)	-	-
	Native American/Alaskan Native (nH)	-	-
	White (nH)	19.3	19.1

Note: Multiple/Other races and Native American/Alaskan Native excluded from graph due to lack of data
* Statistically unstable; interpret with caution.
(nH)=non-Hispanic
- (hyphen) = Estimate is less than 500 people
Source: California Health Interview Survey, 2013.

- While some of these 2009 data are statistically unstable, it appears that Hispanic adults were more likely to have never had a sigmoidoscopy screening compared to other race/ethnic groups.

Health Care Resources

People use health care services for many reasons: to cure illnesses and health conditions, to repair injuries, to prevent or delay future health care problems, to reduce pain and increase quality of life, and to obtain information about their health status and prognosis.[59]

Health care resource utilization is a factor that may be used to determine if an area (or a specific population within an area) is underserved, or if community medical services should be realigned with community needs. Health care resource utilization also refers to consumer use of health care resources and services, and reflects the way patients interact with health care providers. Patterns of utilization tell a story about the health status of the population and availability of resources.[60] The most available and reliable utilization data are available from acute care hospitals and long-term care facilities.

Multiple forces determine how much health care people use, the types of health care they use, and the timing of that care. Some forces encourage more utilization while others can deter it.[61] For example, antibiotics and public health initiatives have dramatically reduced the need for people to receive health care for many infectious diseases, even though overuse can also increase antibiotic-resistant strains.[62] However, other factors, such as increases in the prevalence of chronic disease, may have contributed to increases in overall utilization.

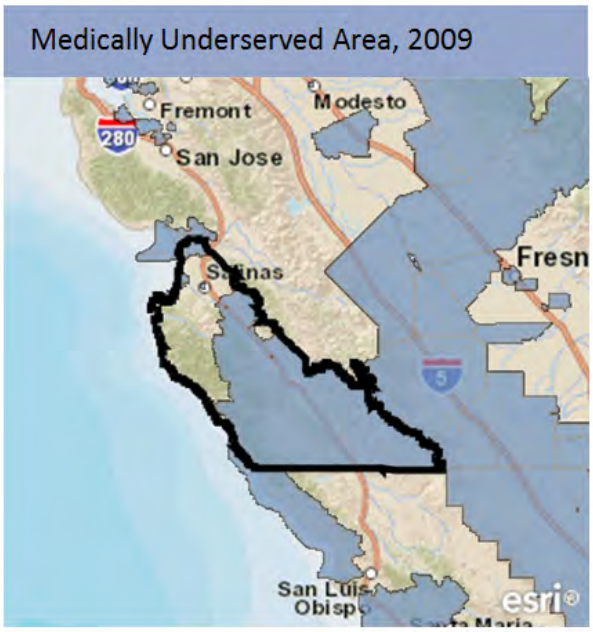
Importantly, health care resource utilization is not a mere matter of supply and demand. Health equity issues such as ability to pay, lack of access to facilities, cultural or language barriers, and discrimination all have an impact on overall and regional utilization.[63]

The following inventory of health facilities includes hospitals, primary care facilities and long term care facilities. Facility utilization, health care workforce, and basic characteristics of primary care and long term care patients are also presented.

Medically Underserved and Health Professional Shortage Areas

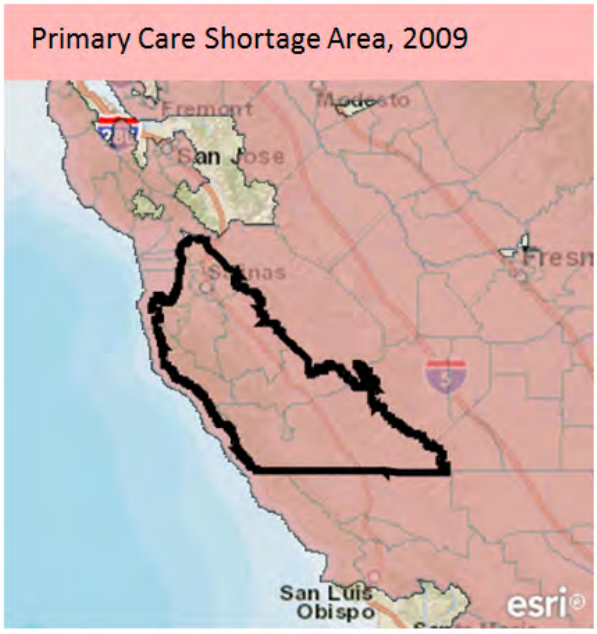
Medically Underserved Areas and Populations are designated by the Health Resources and Services Administration (HRSA) based on four criteria: the ratio of primary medical care physicians per 1,000 population; infant mortality rate; percentage of the population with incomes below the poverty level; and percentage of the population age 65 or over.[64]

Medically Underserved Areas (MUAs) may be a whole county or a group of contiguous counties, a group of county or civil divisions or a group of urban census tracts in which residents have a shortage of personal health services. Approximately two thirds of Monterey County is medically underserved, and this condition is concentrated in the south county region.



Health Professional Shortage Areas (HPSAs) are designated by HRSA as having shortages of primary medical care, dental or mental health providers and may be geographic (a county or service area), demographic (low income population) or institutional (comprehensive health center, federally qualified health center or other public facility).

Primary Care shortage Areas are based on a physician to population ratio of 1:3,500. In other words, when there are 3,500 or more people per primary care physician, an area is eligible to be designated as a primary care health professional shortage area. The entirety of Monterey County is designated by HRSA as being a primary care health professional shortage area, although HRSA does not take into account the availability of additional primary care services provided by Nurse Practitioners and Physician Assistants in an area.



Dental Health Professional Shortage Areas (HPSA) are based on a dentist to population ratio of 1:5,000. In other words, when there are 5,000 or more people per dentist, an area is eligible to be designated as a dental HPSA. Two distinct Monterey County areas comprise dental health professional shortage areas.

Dental Health Shortage Area, 2009

Mental Health Professional Shortage Areas (HPSA) are based on a psychiatrist to population ratio of 1:30,000. In other words, when there are 30,000 or more people per psychiatrist, an area is eligible to be designated as a mental health HPSA. Approximately three-quarters of Monterey County is underserved, and this condition is concentrated on the southern coast and in the south county region.

Mental Health Shortage Area, 2009

Physicians and Dentists

Exhibit 265. Ratio of physicians to population, 2011

	Number and Ratio
	870
Ratio of Physicians and Surgeons to population	1 to 477
Rate per 100,000	209.6

Source: Department of Consumer Affairs: The Medical Board of California, 2010, 2011. Retrieved April 2013

Exhibit 266. Ratio of dentists to population, 2013

Ratio of Dentist to population	1 to 1,441
Rate per 100,000	69.4

Source: Department of Consumer Affairs: The Dental Board of California, 2013. Retrieved April 2013

Hospital Beds and Utilization

Hospitals in Monterey County, 2011
Salinas Valley Memorial Healthcare System (Salinas Valley Memorial), Salinas, CA
Community Hospital of the Monterey Peninsula (CHOMP), Monterey, CA
George L. Mee Memorial Hospital (George L. Mee), King City, CA
Natividad Medical Center (Natividad), Salinas, CA

Source: OSHPD (Office of Statewide Health Planning and Development), Annual Utilization Report of Hospitals, Retrieved April 2013

Exhibit 267. Hospital bed classifications, 2011

	Number of Beds					
	Salinas Valley Memorial	CHOMP	George L. Mee	Natividad	Total Licensed Beds	Days of Average Length of Stay (est)
Medical/Surgical (include GYN)	214	200	88	66	568	4.2
Perinatal (exclude Newborn/GYN)	23	7	8	27	65	2.4
Pediatric	8	6	0	12	26	2.7
Intensive Care	6	10	4	10	30	3.2
Coronary Care	7	10	0	0	17	3
Acute Respiratory Care	0	0	0	0	0	0
Burn	0	0	0	0	0	0

Nursery						
Chemical Dependency Recovery Hospital	0	0	0	0	0	0
Acute Psychiatric	0	18	0	22	40	5.3
Skilled Nursing	0	0	16	0	16	110.6
Intermediate Care	0	0	3	0	3	-
Intermediate Care/ Developmentally Disabled	0	0	0	0	0	-

est=estimate
- (hyphen) = data not available
Source: OSHPD, Annual Utilization Report of Hospitals, Retrieved April 2013

Exhibit 268. Emergency department (ED) encounters 2011

	Salinas Valley Memorial		CHOMP		George L. Mee		Natividad		Total
	Not Admitted	Admitted from ED	Not Admitted	Admitted from ED	Not Admitted	Admitted from ED	Not Admitted	Admitted from ED	
Minor	2,061	22	2,998	14	987	nr	9,161	nr	15,243
Low/ moderate	14,478	216	8,066	51	1,896	nr	5,736	nr	30,443
Moderate	2,042	879	11,994	368	4,342	nr	17,675	nr	37,300
Severe without threat*	16,497	2,803	16,915	405	1,840	nr	7,868	nr	46,328
Severe with threat*	778	2,031	109	7,054	879	nr	5,143	nr	15,994
TOTAL	**35,856**	**5,951**	**40,082**	**7,892**	**9,944**	**794**	**45,583**	**3,637**	**149,739**

Does not include patients who register but left without being seen, employee physicals and scheduled clinic-type visits
nr= total available but details not reported
*"Threat" is defined as an immediate threat to life or a bodily organ.
Source: OSHPD, Annual Utilization Report of Hospitals, Retrieved April 2013

Exhibit 269. Operating rooms, 2011

	Salinas Valley Memorial	CHOMP	George L. Mee	Natividad	TOTAL
Inpatient Only	0	8	0	2	**10**
Outpatient Only	0	4	1	3	**8**
Inpatient and Outpatient	7	0	3	2	**12**
TOTAL	**7**	**12**	**4**	**7**	**30**

Source: OSHPD, Annual Utilization Report of Hospitals, Retrieved April 2013

Exhibit 270. Live births, 2011

	Salinas Valley Memorial	CHOMP	George L. Mee	Natividad	TOTAL
Live Births (Multiple births counted separately)	1,742	1,277	512	2,812	**6,343**
Live Births with Birth Weight Less Than 2500 grams (5lbs. 8oz.)	129	70	16	188	**403**
Live Births with Birth Weight Less Than 1500 grams (3lbs. 5oz.)	14	7	2	9	**32**
TOTAL	**1,885**	**1,354**	**530**	**3,009**	**6,778**

Source: OSHPD, Annual Utilization Report of Hospitals, Retrieved April 2013

Exhibit 271. Surgical operations, 2011

Outpatient	2,359	2,966	693	1,700	**7,718**

Source: OSHPD, Annual Utilization Report of Hospitals, Retrieved April 2013

Clinics and Utilization

The following data pertain only to those clinics that report to the state of California Automated Licensing Information and Report Tracking System (ALIRTS). Absent from these data sets are clinics operated by Monterey County Health Department and other privately operated clinics.

Clinica de Salud del Valle de Salinas – Alvin
Clinica de Salud del Valle de Salinas – Castroville
Clinica de Salud del Valle de Salinas – Greenfield
Clinica de Salud del Valle de Salinas – King City
Clinica de Salud del Valle de Salinas – Salinas
Clinica de Salud del Valle de Salinas – mobile health clinics
Clinica de Salud del Valle de Salinas – Sanborn
Clinica de Salud del Valle de Salinas – Soledad
Compassion Pregnancy Center and Clinic of Monterey Bay
Confidence Pregnancy Center
Peninsula Primary Care – Carmel
Peninsula Primary Care – Marina
Planned Parenthood – Greenfield
Planned Parenthood – Salinas
Planned Parenthood – Seaside

Note: The above is not a comprehensive list of clinics in Monterey County; it reflects only those that report to ALIRTS.
Source: OSHPD (Office of Statewide Health Planning and Development), Primary Care Clinic Profile Report, 2011

- A complete documentation of primary care and safety net clinics is available in the Safety Net Provider Studies that can be found at www.mtyhd.org/data

Exhibit 272. Utilization of ALIRTS-reporting clinics by selected encounters, 2011

Dental Encounters	30,768	15.9%
Family Planning	14,839	7.6%
Evaluation and Management (new patient)	11,244	5.8%

	Encounters	
Integumentary System	1,021	0.5%
Preventive Medicine (adults)	712	0.4%
Hospital Related Services	471	0.2%
Pathology/Laboratory	395	0.2%
Counseling	377	0.2%
All Other Services (not included in above)	29,699	15.3%
		100.0%

Note: The above is not a comprehensive list of clinics in Monterey County; it reflects only those that report to ALIRTS.
Source: OSHPD, Primary Care Clinic Profile Report, 2011

- A complete documentation of primary care and safety net clinics is available in the Safety Net Provider Studies that can be found at www.mtyhd.org/data

Exhibit 273. Selected ALIRTS-reporting clinic procedures, 2011

	Number of procedures
Pap Smear	8,279
HIV Testing	4,248
Contraceptive Management	2,387
Mammogram	2,262
Influenza Virus Vaccine	9,027
DTaP, DTP, Diphtheria and Tetanus	5,925
Pneumococcal	4,434
Hepatitis A	2,417
Measles, Mumps and Rubella and Varicella	1,973
Poliovirus	850

	Number of procedures
Hepatitis B and Hib	16

Note: The above is not a comprehensive list of clinics in Monterey County; it reflects only those that report to ALIRTS.
Source: OSHPD, Primary Care Clinic Profile Report, 2011

- A complete documentation of primary care and safety net clinics is available in the Safety Net Provider Studies that can be found at www.mtyhd.org/data

Exhibit 274. ALIRTS-reporting care providers, 2011

	Total FTEs	% of Total	Encounters	% of Total
Physicians	21.48	44.1%	75,137	38.7%
Family Nurse Practitioners	9.66	19.8%	27,417	14.1%
Dentists	7.85	16.1%	34,205	17.6%
Physician Assistants	4.87	10.0%	36,726	18.9%
Visiting Nurses	0	0.0%	0	0.0%
Certified Nurse Midwives	0	0.0%	5,863	3.0%
All Other Primary Care Providers	4.88	10.0%	14,704	7.6%
Total	**48.74**	**100.0%**	**194,052**	**100.0%**

FTE=Full Time Employee
Note: The above is not a comprehensive list of clinics in Monterey County; it reflects only those that report to ALIRTS.
Source: OSHPD, Primary Care Clinic Profile Report, 2011

- A complete documentation of primary care and safety net clinics is available in the Safety Net Provider Studies that can be found at www.mtyhd.org/data

Exhibit 275. ALIRTS-reporting clinic primary care payer sources, 2011

	Number	Percent
Medi-Cal	13,300	19.7%
Medi-Cal- Managed Care	13,151	19.4%
Self-Pay/Sliding Fee	10,591	15.7%
Private Insurance	10,189	15.1%
Medicare	5,535	8.2%
Healthy Families	2,035	3.0%
Free	358	0.5%

	Number	Percent
All Other Payer Sources	12,471	18.4%
Total Patients	**67,630**	**100.0%**

Note: The above is not a comprehensive list of clinics in Monterey County; it reflects only those that report to ALIRTS.
Source: OSHPD, Primary Care Clinic Profile Report, 2011

- A complete documentation of primary care and safety net clinics is available in the Safety Net Provider Studies that can be found at www.mtyhd.org/data

Exhibit 276. ALIRTS-reporting primary care programs, 2011

	Patients
Family Planning, Access, Care and Treatment (Family PACT)	17,534
Child Health and Disability Prevention (CDHP)	2,461
Breast and Cervical Cancer Program (BCCP)	1,847
Total Patients	**21,842**

Note: The above is not a comprehensive list of clinics in Monterey County; it reflects only those that report to ALIRTS.
Source: OSHPD, Primary Care Clinic Profile Report, 2011

- A complete documentation of primary care and safety net clinics is available in the Safety Net Provider Studies that can be found at www.mtyhd.org/data

ALIRTS – Reporting clinic patient characteristics

Exhibit 277. ALIRTS-reporting clinic patients by gender, 2011

Gender	Patients	% of All Patients
Male	22,417	33.1%
Female	45,213	66.9%
Total Patients	**67,630**	**100.0%**

Note: The above is not a comprehensive list of clinics in Monterey County; it reflects only those that report to ALIRTS.
Source: OSHPD, Primary Care Clinic Profile Report, 2011

- A complete documentation of primary care and safety net clinics is available in the Safety Net Provider Studies that can be found at www.mtyhd.org/data

Exhibit 278. ALIRTS-reporting clinic patients by race/ethnicity, 2011

	Patients	% of All Patients
Asian/Pacific Islander	1,233	1.8%
Black	699	1.0%
More than One Race	20	0.0%
Native American/Alaskan Native	233	0.3%
Other/Unknown	5,213	7.7%
White (including Hispanic)	60,232	89.1%
Total Patients	**67,630**	**100%**

Note: The above is not a comprehensive list of clinics in Monterey County; it reflects only those that report to ALIRTS.
Source: OSHPD, Primary Care Clinic Profile Report, 2011

- A complete documentation of primary care and safety net clinics is available in the Safety Net Provider Studies that can be found at www.mtyhd.org/data

Exhibit 279. ALIRTS-reporting clinic patients by ethnicity, 2011

	Patients	% of All Patients
Hispanic	49,717	73.5%
Non-Hispanic	13,016	19.2%
Unknown	4,897	7.2%
Total Patients	**67,630**	**100%**

Note: The above is not a comprehensive list of clinics in Monterey County; it reflects only those that report to ALIRTS.
Source: OSHPD, Primary Care Clinic Profile Report, 2011

- A complete documentation of primary care and safety net clinics is available in the Safety Net Provider Studies that can be found at www.mtyhd.org/data

Exhibit 280. ALIRTS-reporting clinic patients by Federal Poverty Level, 2011

	All Patients	% of Total
Under 100%	40,064	59.2%
100%-200%	10,066	14.9%
Above 200%	6,888	10.2%
Unknown	10,612	15.7%
Total Patients	**67,630**	**100%**

Note: The above is not a comprehensive list of clinics in Monterey County; it reflects only those that report to ALIRTS.
Source: OSHPD, Primary Care Clinic Profile Report, 2011

- A complete documentation of primary care and safety net clinics is available in the Safety Net Provider Studies that can be found at www.mtyhd.org/data

Long Term Care Facilities

The following data pertain only to those long term care facilities that report to the state of California Automated Licensing Information and Report Tracking System (ALIRTS).

ALIRTS-reporting Long Term Care Facilities
Ave Maria Convalescent Hospital
Canterbury Woods
Carmel Hills Care Center
Carmel Valley Manor
Cypress Ridge Care Center
Eden Valley Care Center
Forest Hill Manor Health Center
Katherine Healthcare Center
Pacific Coast Care Center
Pacific Grove Convalescent Hospital
Westland House
Windsor Gardens Rehabilitation Center Of Salinas
Windsor Monterey Care Center
Windsor Skyline Care Center
Windsor The Ridge Rehabilitation Center

Source: OSHPD Long Term Care Utilization Profile Report, 2011

- The above is not a comprehensive list of clinics in Monterey County. It reflects only those that report to ALIRTS.

Exhibit 281. Long term care patient admissions and discharges, 2011

	Admitted From		Discharged To	
	Number	Percent	Number	Percent
Home	212	6.7%	1,803	57.5%
Hospital	2,867	90.5%	599	19.1%
State Hospital	0	0.0%	0	0.0%
Other Long Term Care	52	1.6%	63	2.0%
Residential Board and Care*	35	1.1%	178	5.7%
Other/Unknown	2	0.1%	9	0.3%
AWOL/AMA**	nr	nr	28	0.9%
Death	nr	nr	454	14.5%
Total	**3,168**	**100.0%**	**3,134**	**100.0%**

*Includes Residential Care Facilities for the Elderly, Adult Residential Facility, Other Assisted Living Facilities, or a secured facility such as an Alzheimer's unit, jail or prison.
** Against medical advice (AMA) or absent without leave (AWOL).
nr=data not reported
Source: OSHPD Long Term Care Utilization Profile Report, 2011

- The above is not a comprehensive list of clinics in Monterey County. It reflects only those that report to ALIRTS.

Exhibit 282. Long term care by type of licensed beds, 2011

	Number
Skilled Nursing	1,013
Skilled Nursing Mentally Disordered	0
Intermediate Care (IC)	0
IC Developmentally Disabled	0
Congregate Living Health Facility	0
Total	**1,013**

Source: OSHPD Long Term Care Utilization Profile Report, 2011

- The above is not a comprehensive list of clinics in Monterey County. It reflects only those that report to ALIRTS.

Long term care patient characteristics

Exhibit 283. Long term care patients by age group and gender, 2011

	Number of Patients	Percent
Male		
Under 45 years	5	1.7%
From 45-54 years	16	5.5%
From 55-64 years	20	6.9%
From 65-74 years	49	16.8%
From 75-84 years	102	35.1%
From 85-94 years	89	30.6%
95 years and older	10	3.4%
Total Male Patients	**291**	**100.0%**
Females		
Under 45 years	4	0.7%
From 45-54 years	0	0.0%
From 55-64 years	28	4.8%
From 65-74 years	127	21.7%
From 75-84 years	267	45.6%
From 85-94 years	101	17.2%
95 years and older	59	10.1%
Total Female Patients	**586**	**100.0%**

Source: OSHPD Long Term Care Utilization Profile Report, 2011

- The above is not a comprehensive list of clinics in Monterey County. It reflects only those that report to ALIRTS.

Exhibit 284. Long term care patients by race, 2011

	Patients	% of All Patients
Asian/Pacific Islander	54	6.1%
Black	38	4.3%
Native American/Alaskan Native	3	0.3%
Other/Unknown	163	18.4%
White (including Hispanic)	630	70.9%

	Patients	% of All Patients
Total Patients	**888**	**100.0%**

Source: OSHPD Long Term Care Utilization Profile Report, 2011

- The above is not a comprehensive list of clinics in Monterey County. It reflects only those that report to ALIRTS.

Exhibit 285. Long term care patients by ethnicity, 2011

		% of All Patients
Non-Hispanic	715	80.5%
Hispanic	170	19.1%
Unknown	3	0.3%
Total Patients	**888**	**100.0%**

Source: OSHPD Long Term Care Utilization Profile Report, 2011

- The above is not a comprehensive list of clinics in Monterey County. It reflects only those that report to ALIRTS.

Exhibit 286. Long term care patients by payment source, 2011

	Patients	% of All Patients
Medicare	164	18.5
Medi-Cal	507	57.1
Managed Care**	10	1.1
Private Insurance	32	3.6
Self-Pay	140	15.8
All Other	35	3.9
Total Patients	**888**	**100.0%**

** Includes patients enrolled in Medicare and Medi-Cal manage care health plans.
Source: OSHPD Long Term Care Utilization Profile Report, 2011

- The above is not a comprehensive list of clinics in Monterey County. It reflects only those that report to ALIRTS.

Exhibit 287. Long term care patients by special programs, 2011

	Patients
AIDS or HIV Patients	**7**
Alzheimer's Patients	**133**
Total Patients	**120**

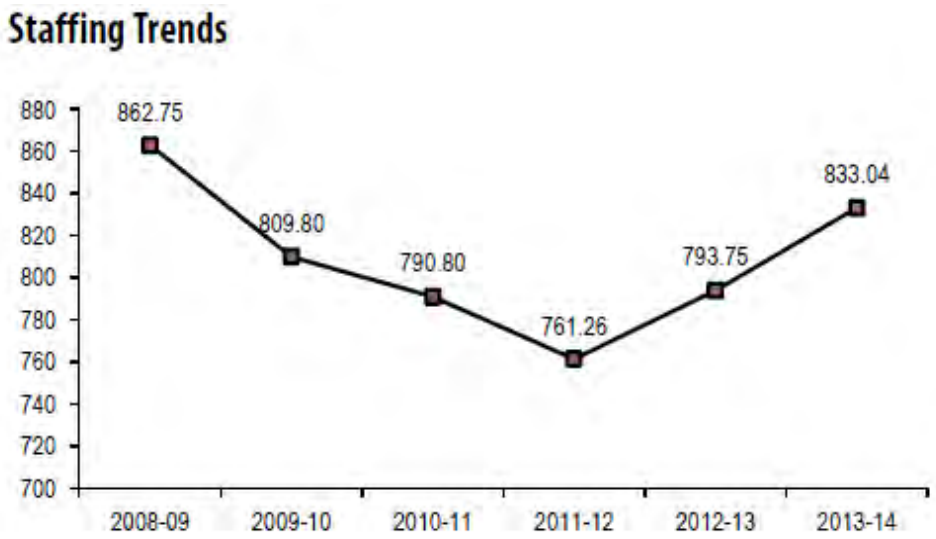
Source: OSHPD Long Term Care Utilization Profile Report, 2011

- The above is not a comprehensive list of clinics in Monterey County. It reflects only those that report to ALIRTS.

MCHD 2013-2014 Full Time Equivalent Employees (FTE) and Budget

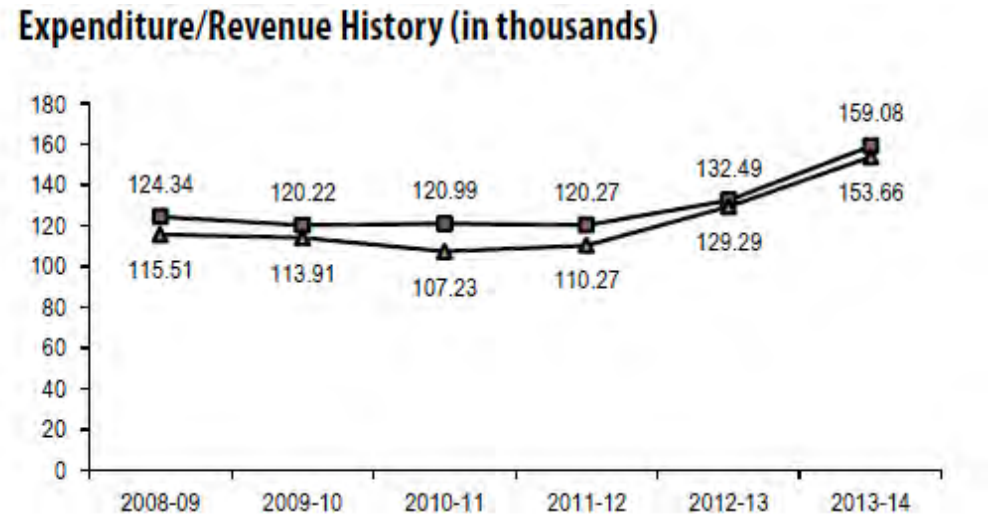
A local health department's staffing levels and annual budget is one indicator that can describe the department's ability to provide community services. MCHD's recommended FTE in the 2013-14 budget was 833, which represents an increase of 40 FTE over the prior year.

Exhibit 288. MCHD FTE staffing trend, 2008-2009 to 2013-2014



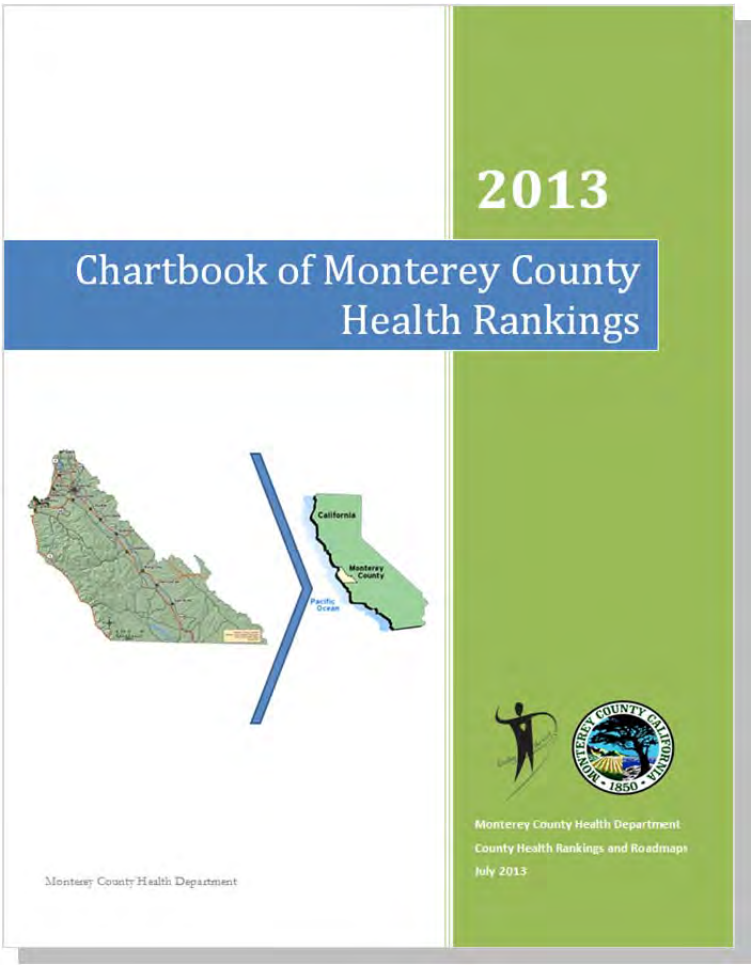
MCHD's recommended FTE in the 2013-14 budget was 833, which represents an increase of 40 FTE over the prior year.

Exhibit 289. MCHD expenditure and revenue trend, 2008-2009 to 2013-2014



Appendix A: County Health Rankings

The 2013 County Health Rankings are produced by the Robert Wood Johnson Foundation (RWJF) and the University of Wisconsin Population Health Institute (UWPHI). The Rankings data helps to lay the groundwork for health improvement efforts of governors, mayors, business leaders, and citizens across the country. Rankings are published online at www.countyhealthrankings.org.



The County Health Rankings show that how long and how well people live depends on multiple factors beyond just their access to medical care. It examines 25 factors that influence health, including rates of childhood poverty, rates of smoking, obesity levels, teen birth rates, access to physicians and dentists, rates of high school graduation and college attendance, access to healthy foods, levels of physical inactivity, and percentages of children living in single parent households.

Compared to other counties in California, Monterey County ranked 21st out of 57 (data were not available for one county). A summary of Health Outcomes are presented below. A full report is available at http://www.mtyhd.org/PEP

Notable Indicators of Improvement

The following notable indicators and factors demonstrate good outcomes over time for Monterey County, or consistently better ranking *when compared to other counties in California*. Statistically significant improvements or comparisons are noted.

Indicators/Factors	Improvements	Significant difference over time or compared to California
Mortality*	Consistently in quartile #1 from 2010-2013	n/a**
Premature Death	Consistently in quartile #1 from 2004-2006 through 2008-2010	n/a
Unemployment	Rank improved from quartile #3 in 2008 to quartile #2 in 2009-2011	n/a
Physical Inactivity	Ranked in quartile #1 in 2009	no
Excessive Drinking	Consistently in quartile #1 from 2003-2009 through 2005-2011	no
Binge Drinking	Ranked in quartile #1 in 2002-2008	no
Preventable Hospital Stays	**Outcomes demonstrated significant improvement from 2005-2006 to 2010**	**yes**
Limited Access to Healthy Foods	Rank improved from quartile #3 in 2006 to quartile #2 in 2012	n/a
Daily Fine Particulate Matter	Ranked in quartile #1 in 2008	n/a
Air Particulate Matter Days	Rank improved from quartile #2 in 2005 to quartile #1 in 2006 and 2007	n/a

Note: Quartile #1 represents the best outcome; quartile #4 represents the worst outcome.

* Mortality is a summary health outcome of several indicators.

** n/a: not available.

Notable Indicators of Concern

The following notable indicators and factors demonstrate areas for concern over time for Monterey County, or consistently worse ranking *when compared to other counties in California*. Statistically significant worse conditions or comparisons are noted.

Indicators/Factors	Concerns	Significant difference over time or compared to California
Poor or Fair Health	Consistently in quartile #4 from 2002-2008 through 2005-2011	no
Poor Mental Health Days	Consistently worsened from 2002-2008 to 2005-2011	no
Health Factors*	Rank worsened from quartile #2 to #3 from 2012-2013	n/a**
Some College Education	Consistently in quartile #4 from 2005-2009 through 2007-2011	n/a
Children in Poverty	**Worsened from 17% in 2007 to 25% in 2011**	**yes**
Inadequate Social Support	Rank worsened from quartile #3 to #4 from 2005-2008 to 2005-2010	no
Children in Single Parent Households	Rank worsened from quartile #2 to #3 from 2005-2009 to 2006-2011	no
Violent Crime Rate	Consistently in quartile #3 from 2005-2007 through 2008-2010	n/a
Sexually Transmitted Infections	Rank worsened from quartile #3 in 2007-2009 to #4 in 2010	n/a
Teen Birth Rate	Consistently in quartile #4 from 2000-2006 through 2004-2010	no
Uninsured	**Consistently in quartile #4 from 2005 through 2010, although statistical improvements were seen from 2007 to 2010.**	**yes**
Access to Recreational Facilities	Rank worsened from quartile #3 to quartile 4 in 2010, and outcomes were consistently lower than the state.	n/a

Note: Quartile #1 represents the best outcome; quartile #4 represents the worst outcome.
* Health Factors is a summary of several indicators.
** n/a: not available.

Summary Scores for Health Outcomes

- This outcome worsened from 2010 to 2013, based on California county rankings.
- Monterey County ranked 21 out of 58 counties in 2013 compared to 15 out of 58 in 2012.
- From 2010 to 2013, Monterey County was in the #2 quartile for overall health outcomes.

Years	Monterey County Ranking	
2013	21	
2012	15	
2011	15	
2010	16	

*Quartile: #1 is the best of the four quartiles; #4 is the worst of the four quartiles.
Source: Robert Wood Johnson Foundation. County Health Rankings & Roadmaps 2013.

Mortality

- This outcome was consistently in the #1 quartile from 2012 to 2013 but declined in ranking from 2012-2013.
- Monterey County ranked 14 out of 58 counties in 2013 compared with 7 out of 58 in 2012.
- From 2010 to 2013, Monterey County was in the #1 quartile for mortality.

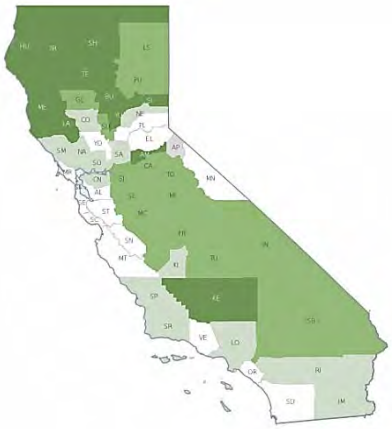
Years	Monterey County Ranking	Quartile*
2013	14	#1
2012	7	#1
2011	8	#1
2010	11	#1

*Quartile: #1 is the best of the four quartiles; #4 is the worst of the four quartiles.
Source: Robert Wood Johnson Foundation. County Health Rankings & Roadmaps 2013.

Premature Death*

- This outcome remained unchanged from 2004-2006 to 2008-2010 based on quartile ranking.
- Monterey County ranked in the #1 quartile for premature death from 2004-2006 to 2008-2010.
- From 2008-2010, the number of years of potential life lost before age 75 was 5,216 per 100,000 population in Monterey County. This was below the rates for California, 5,570, and the National Benchmark, 5,317 years of potential life lost before age 75 per 100,000 population.

Years	National Benchmark	California	Monterey County	Quartile**
2008-2010	5,317	5,570 (3782-9804)	5,216 (4972-5460)	#1
2006-2008	5,466	5,922 (3846-10546)	5,225 (4987-5463)	#1
2005-2007	5,564	6,128 (4004-12338)	5,338 (5097-5579)	#1
2004-2006	5,199	6,196 (4053-11403)	5,595 (5348-5843)	#1



*Years of potential life lost before age 75 per 100,000 population (age adjusted)
**Quartile: #1 is the best of the four quartiles; #4 is the worst of the four quartiles.
Source: Robert Wood Johnson Foundation. County Health Rankings & Roadmaps 2013.

Morbidity

- This outcome worsened from 2012 to 2013 based on California county ranking.
- Monterey County ranked 34 out of 58 counties in 2013 compared with 27 out of 58 in 2012.
- In 2013, Monterey County was in the #3 quartile for morbidity. However, from 2010 to 2012, Monterey County was in the #2 quartile.

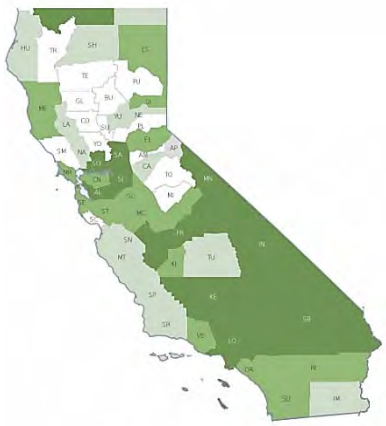
Years	Monterey County Ranking	Quartile*
2013	34	
2012	27	
2011	25	
2010	28	

*Quartile: #1 is the best of the four quartiles; #4 is the worst of the four quartiles.
Source: Robert Wood Johnson Foundation. County Health Rankings & Roadmaps 2013.

Low Birthweight*

- This outcome remained unchanged from 2002-2008 to 2004-2010 based on quartile ranking.
- Monterey County ranked in the #2 quartile for low birth weight from 2000-2006 to 2004-2010.
- From 2004-2010, 5.9% of live births in Monterey County were low birthweight. This was less than the percentage in California, 6.8%, and the National Benchmark, 6.0%.

Years	National Benchmark	California	Monterey County	Quartile**
2004-2010	6.0%	6.8% (4.7-8.8%)	5.9% (5.7-6.1%)	
2002-2008	6.0%	6.7% (4.6-9.0%)	6.0% (5.8-6.2%)	
2001-2007	6.0%	6.7% (4.2-8.8%)	5.9% (5.7-6.1%)	
2000-2006	5.3%	6.6% (4.1-7.9%)	6.0% (5.8-6.2%)	

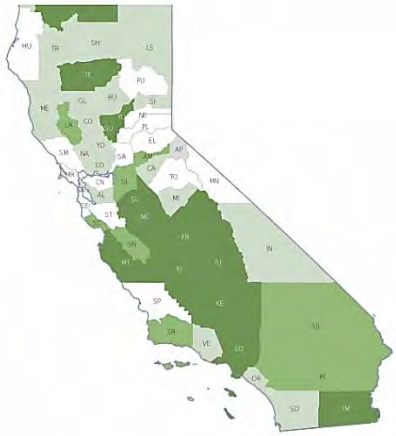


*Percent of live births with low birthweight <2500 grams
**Quartile: #1 is the best of the four quartiles; #4 is the worst of the four quartiles.
Source: Robert Wood Johnson Foundation. County Health Rankings & Roadmaps

Poor or Fair Health*

- This outcome remained unchanged from 2004-2010 to 2005-2011 based on quartile ranking.
- Monterey County was in the #4 quartile for poor or fair health from 2002-2008 to 2005-2011,
- From 2005-2011, 22% of Monterey County residents reported having poor or fair health. This was higher than the percentages in California, 19%, and the National Benchmark, 10%.

Years	National Benchmark	California	Monterey County	Quartile**
2005-2011	10%	19% (6-32%)	22% (19-26%)	#4
2004-2010	10%	19% (7-31%)	23% (19-27%)	#4
2003-2009	10%	18% (6-32%)	22% (18-26%)	#4
2002-2008	11%	18% (2-32%)	23% (19-29%)	#4

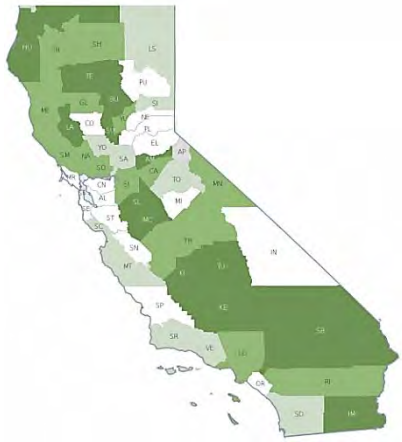


*Percent of adults reporting fair or poor health (age adjusted)
**Quartile: #1 is the best of the four quartiles; #4 is the worst of the four quartiles.
Source: Robert Wood Johnson Foundation. County Health Rankings & Roadmaps 2013.

Poor Physical Health Days*

- This outcome remained unchanged from 2004-2010 to 2005-2011 based on quartile ranking.
- Monterey County ranked in the #2 quartile for poor physical health days from 2002-2008 to 2005-2011.
- From 2005-2011, the average number of physically unhealthy days reported by Monterey County residents was 3.5. This was less than the California average, 3.7, but higher than the National Benchmark, 2.6 average number of physically unhealthy days in the past 30 days.

Years	National Benchmark	California	Monterey County	Quartile**
2005-2011	2.6	3.7 (2.5-5.9)	3.5 (2.9-4.1)	
2004-2010	2.6	3.7 (2.5-6.6)	3.3 (2.7-4.0)	
2003-2009	2.6	3.7 (2.5-6.5)	3.6 (2.8-4.3)	
2002-2008	2.7	3.6 (2.0-6.4)	3.4 (2.6-4.2)	

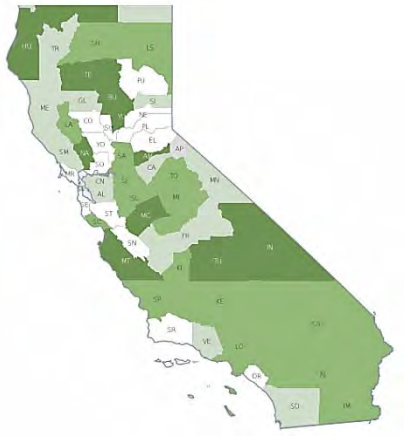


*Average number of physically unhealthy days reported in past 30 days (age adjusted)
**Quartile: #1 is the best of the four quartiles; #4 is the worst of the four quartiles.
Source: Robert Wood Johnson Foundation. County Health Rankings & Roadmaps 2013.

Poor Mental Health Days*

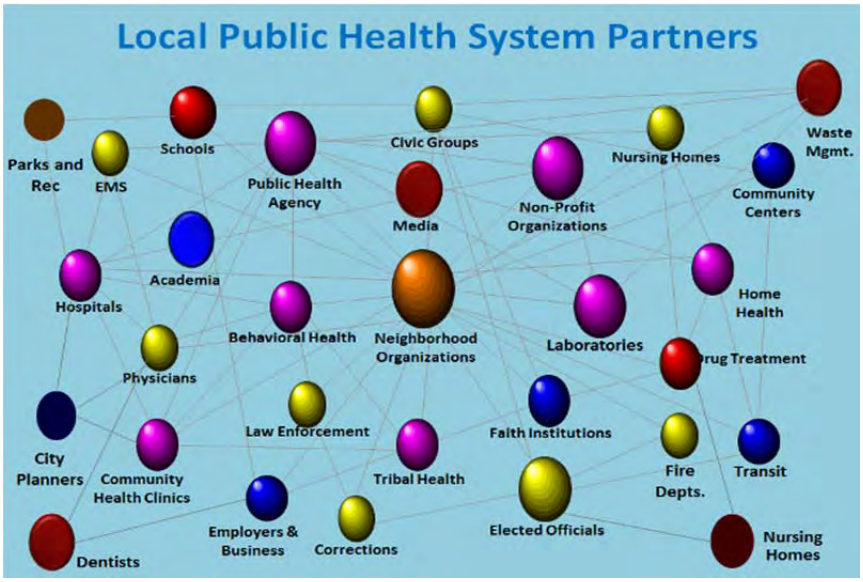
- This outcome worsened from 2004-2010 to 2005-2011 based on quartile ranking; however, it was statistically insignificant.
- From 2005-2011, Monterey County was in the #4 quartile for poor mental health days compared with the #3 quartile from 2004-2010 and the #2 quartile from 2002-2008 and 2003-2009.
- From 2005-2011, the average number of poor mental health days reported by Monterey County residents was 4.2 days. This was higher than the California average, 3.6 days, and the National Benchmark, 2.3 days.

Years	National Benchmark	California	Monterey County	Quartile**
2005-2011	2.3	3.6 (2.4-5.2)	4.2 (3.5-5.0)	
2004-2010	2.3	3.6 (1.7-9.2)	3.8 (3.1-4.5)	
2003-2009	2.3	3.6 (2.1-9.6)	3.6 (2.9-4.3)	
2002-2008	2.8	3.6 (2.0-6.4)	3.4 (2.7-4.1)	



*Average number of mentally unhealthy days reported in past 30 days (age adjusted)
**Quartile: #1 is the best of the four quartiles; #4 is the worst of the four quartiles.
Source: Robert Wood Johnson Foundation. County Health Rankings & Roadmaps 2013.

Appendix B: Local Public Health System Assessment



The local public health system (LPHS) includes many partnering public agencies and private or voluntary organizations that contribute to the public's health and well-being. These include the local public health department and health care providers (safety net clinics and hospitals), as well as government agencies not typically considered health-related such as human service organizations, schools and universities, faith institutions, youth development organizations, public safety agencies, recreation, arts, economic and philanthropic organizations, and environmental agencies among others. These partners form a network of entities serving different roles within the system, interacting throughout the community and contributing activities and services to the LPHS.

Monterey County Health Department (MCHD) contracted with California State University, Monterey Bay (CSUMB) to facilitate a day-long event to complete the Local Public Health System Assessment (LPHSA) on March 28, 2013. MCHD joined with a wide variety of representatives from public agencies and non-profit organizations that contribute activities to the Local Public Health System (LPHS) to establish baseline answers to the questions, "What are the activities contributed by our LPHS partners?" and "How well is our LPHS providing the Ten Essential Public Health Services (EPHS) to our community?"

During the event, participants learned about the LPHSA and the national Public Health Accreditation processes, discussed their agency's contributions, and voted on their perceptions of the overall performance of the local public health system.

The purpose of the event was four-fold: first, to develop an initial list of LPHS partners and their contributions to the LPHS; second, to develop a baseline assessment of LPHS partner's perceptions of "how good a job is the LPHS doing" in support of the Ten Essential Public Health Services (EPHS); third, to provide important data to meet health department requirements for national public health accreditation; and fourth, to establish baseline data for

future efforts to track progress of the LPHS' activities to improve the quality of public health practice and the performance of public health systems.

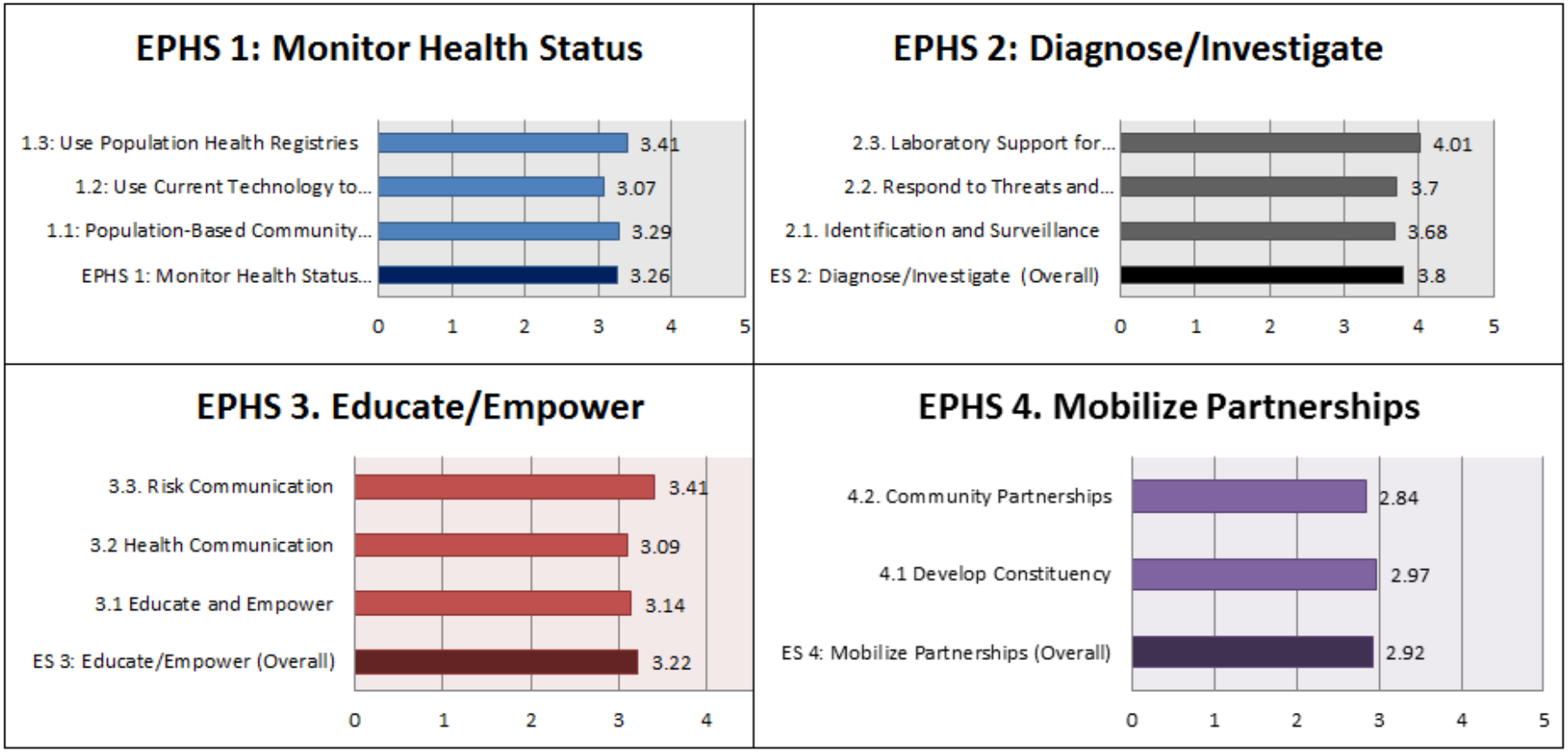
Of the total number of invitees (309), 123 (40%) registered for the event. Of those registered, 104 attended plus an additional 12 non-registered guests, for a total of 116 attendees. Of those who attended – and stayed until the end of the event – a total of 94 "voting ballots" were collected from the remaining participants (representing 81% of those in attendance during some part of the day). Below is a summary of the composite scores – on a 5-point scale – of participants' perceptions of how well the LPHS is performing for each of the Ten Essential Public Health Services in Monterey County.

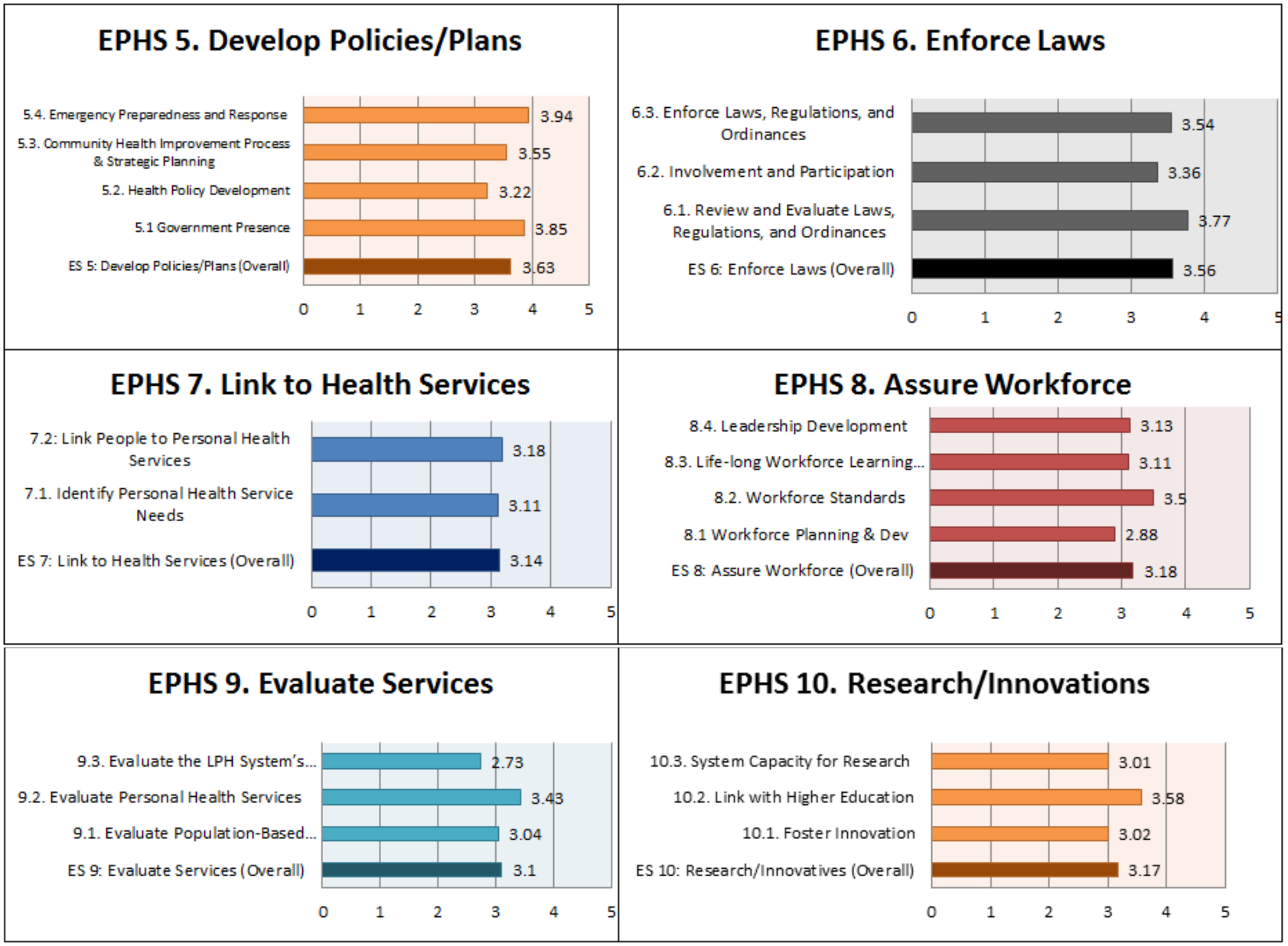
Exhibit AB1. Summary of composite scores of participants' perceptions of LPHS performance for each EPHS on a 1 – 5 scale

Essential Public Health Services		Don't Know[65]	Performance Score[66]	Activity Ranking
1	Monitor Health Status to Identify Community Health Problems	20.07%	3.26	Moderate
2	Diagnose and Investigate Health Problems and Health Hazards	23.90%	3.80	Moderate
3	Inform, Educate, and Empower Individuals and Communities	13.38%	3.22	Moderate
4	Mobilize Community Partnerships to Identify and Solve Health Problems	22.46%	2.92	Minimal
5	Develop Policies & Plans that Support Individual & Community Health Efforts	26.01%	3.63	Moderate
6	Enforce Laws and Regulations that Protect Health and Ensure Safety	24.85%	3.56	Moderate
7	Link People to Needed Personal Health Services and Assure Safety Net Services	12.35%	3.14	Moderate
8	Assure a Competent Public and Personal Health Care Workforce	32.25%	3.18	Moderate
9	Evaluate Effectiveness, Accessibility, and Quality of Personal & Population-Based Health Services	22.50%	3.10	Moderate
10	Research New Insights and Innovative Solutions	39.92%	3.17	Moderate
Overall Performance Score		**21.93%**	**3.30**	**Moderate**

- The highest overall score in the Ten EPH Services was the perception of diagnosing and investigating health problems and health hazards (voted 3.80 out of a possible score of 5.0). The lowest overall score was the perception of mobilizing community partnerships to identify and solve health problems.
- Participants ranked 9 out of 10 Essential Public Health Services in Monterey County as "moderate" and one as "minimal." No essential services were ranked as having "no activity" or as having "significant" or "optimal" activity.

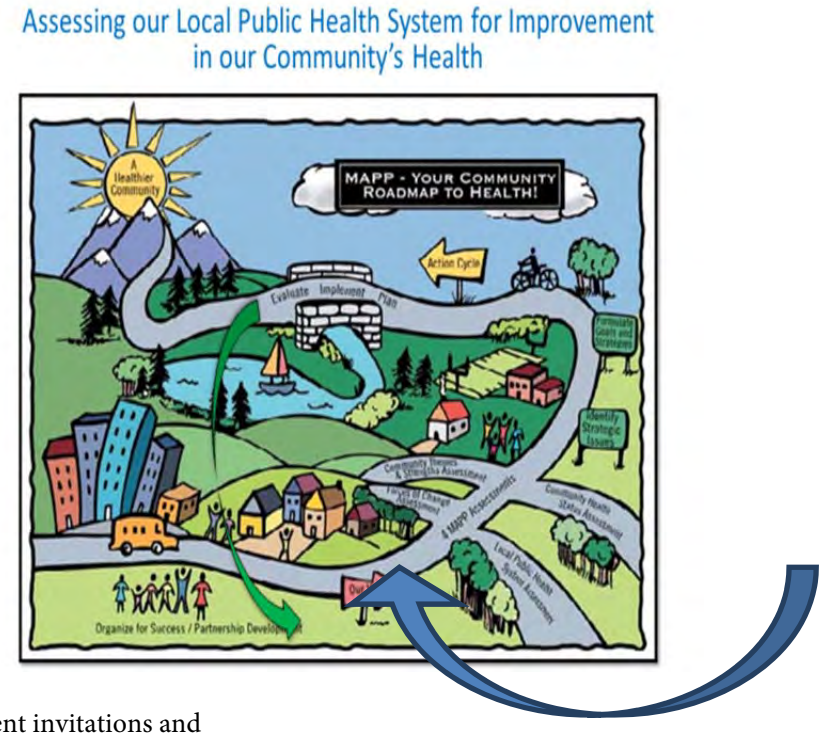
Exhibit AB2. Performance Scores for Model Standards, by Essential Public Health Service




EPHS 5. Develop Policies/Plans
5.4. Emergency Preparedness and Response
3.94
5.3. Community Health Improvement Process & Strategic Planning
3.55
5.2. Health Policy Development
3.22
5.1 Government Presence
3.85
ES 5: Develop Policies/Plans (Overall)
3.63
0 1 2 3 4 5
EPHS 6. Enforce Laws
6.3. Enforce Laws, Regulations, and Ordinances
3.54
6.2. Involvement and Participation
3.36
6.1. Review and Evaluate Laws, Regulations, and Ordinances
3.77
ES 6: Enforce Laws (Overall)
3.56
0 1 2 3 4 5
EPHS 7. Link to Health Services
7.2: Link People to Personal Health Services
3.18
7.1. Identify Personal Health Service Needs
3.11
ES 7: Link to Health Services (Overall)
3.14
0 1 2 3 4 5
EPHS 8. Assure Workforce
8.4. Leadership Development
3.13
8.3. Life-long Workforce Learning...
3.11
8.2. Workforce Standards
3.5
8.1 Workforce Planning & Dev
2.88
ES 8: Assure Workforce (Overall)
3.18
0 1 2 3 4 5
EPHS 9. Evaluate Services
9.3. Evaluate the LPH System's...
2.73
9.2. Evaluate Personal Health Services
3.43
9.1. Evaluate Population-Based...
3.04
ES 9: Evaluate Services (Overall)
3.1
0 1 2 3 4 5
EPHS 10. Research/Innovations
10.3. System Capacity for Research
3.01
10.2. Link with Higher Education
3.58
10.1. Foster Innovation
3.02
ES 10: Research/Innovatives (Overall)
3.17
0 1 2 3 4 5

Appendix C: Forces of Change Assessment

On June 6, 2013, Monterey County Health Department hosted a local health system Forces of Change (FOC) assessment with community partners, representatives of elected officials, and Health Department staff. The FOC is the fourth assessment of the Mobilizing for Action through Planning and Partnerships (MAPP) process that MCHD is using to guide the development of its strategic plan implementation and application for national accreditation.



Assessment participants met in a 2-hour brainstorming session to identify external forces (trends, events, and factors) that could impact the health and quality of life in our community, and the responsiveness of our public health system in both positive and negative ways. While these external forces, such as the price of transportation or impacts of new health care legislation, are for the most part beyond our control, being aware of their potential impacts can help a community plan and prepare for adverse events.

Prior to the FOC Assessment, MCHD staff sent invitations and assessment worksheets to the attendees of the Local Public Health System Assessment who expressed an interest in participating in the FOC process. The FOC participants were knowledgeable about and represented aspects of the Local Public Health System. We hoped to have as many as 20-30 attendees, and were pleased to have 24 enthusiastic participants at the FOC brainstorming session.

Using the assessment worksheets and taking careful notes, we recorded input from our participants directly on a master worksheet displayed in PowerPoint for all to see. The group reviewed and discussed the aggregated Forces of Change items that were suggested for each of these categories:

- social
- economic
- environmental
- scientific
- political
- technological
- legal
- ethical

MCHD staff cleaned the master worksheet of duplicate items and sent it to all participants for additional comment. The final FOC Assessment version appears on the following pages. As part of the Community Health Improvement Plan (CHIP), we will ask our partners to prioritize each Force for its degree of influence on the quality of health in Monterey County, according to the following ranking:

1 = a significant influence; a top priority	2 = an important influence; should be addressed soon	3 = somewhat influential; keep this in mind	4 = of least influence; keep this in the priority parking lot

Color coding in the following tables represent how the forces (trends, events, or factors) "boil down" into major categories.

Forces of Change - Threats and Opportunities Worksheet: 1. SOCIAL FORCES

Forces (Trends, Events, & Factors)	Threats Posed	Opportunities Created	Categories
Literacy	Barriers to services	Coalition development to promote adult literacy supports	
Dental care access	Poor health, missed school or work, poor grades or work productivity.	Integrated healthcare services with dental care at schools	
Youth depression	Higher suicide rates, more risk taking behaviors, substance (Legal/illegal) abuse	Integrated healthcare services with behavioral health supports in schools, depression identification training for teachers	
Teen pregnancy	Poor health outcomes for mom and baby	Coalition and partnership programs to provide parenting skills and teen empowerment/support/mentorships	
Health disparities	Persistent and intergenerational poor health outcomes, premature mortality, increased health care costs	Community engagement and partnerships	
Increased awareness of local food systems and choices	Greater disparity due to price of healthy food and abundance of cheap, unhealthy food.	More farmers markets with abundant and diverse local produce taking EBT	
Aging Baby-Boomers	Need more senior services, long term, and end of life care will increase costs. Systems are losing staff and institutional memory.	People work longer and pay into the system. Personal care is a growth industry that could be restructured to cope with loss of staff and provide new jobs	Persistent social injustices can negatively affect health and quality of life
Lack of family cohesiveness	More substance abuse, gang activity, crime, and school dropout. Working parents have difficulty raising kids.	Create more support systems for high-risk families; Encourage better balance of expectations at work.	Greater access to health services and education can contribute to social justice
Lack of diversity in K12 education	Greater disparities and understanding between race/ethnicities; greater friction between various cultures	More diverse hiring practices; Create more locally generated, parent-driven curriculum	Economic forces can affect health and quality of life
Social justice	Disparities – more people of color in prisons & unemployed.	Personal empowerment, greater societal awareness and willingness to change	
Racism and Sexism	Disempowering, isolation, disparities, injustice	Cross cultural learning and education	
Decreased public safety	Greater crime and reentry into the justice system; greater court system expenses	Involve faith-based communities and other cultural leaders and programs	
Violence	Crime, death, fear, victimization	Increase prevention efforts; institute more restorative justice and mediation measures	
High cost of housing	Unhealthy and dangerous homes or homelessness	Community engagement and public/private partnerships	
Use of multi languages	May cause language-based barriers; enhances cultural appreciation	Community engagement and public/private partnerships to promote and fund cultural awareness	

		and literacy	
Forces (Trends, Events, & Factors)	**Threats Posed**	**Opportunities Created**	
Increased diversity of patients/clients/constituency	Systems of all levels and all kinds cannot deliver effective services due to language and cultural miscommunications or barriers.	Develop professional career pathways for diverse youth as an employment base for governmental and non-governmental systems.	
Lack of kindergarten readiness	Future educational difficulties	Community engagement and public/private partnerships to encourage and fund more quality preschool programs.	
Limited transportation options	May cause limited access to services	Create more public options for the disabled and aging.	Persistent social injustices can negatively affect health and quality of life
Increasing gang violence	9-12 year olds involved in gang violence leading to increased H.S. dropout. Increase in victims of gang related crime/homicides. Increased of mental health needs that are often unmet	Change school response from academic failure to identifying gang involvement early to apply intervention strategies. Create more opportunities for meaningful engagement of youth in schools to keep them away from interest in gangs.	Greater access to health services and education can contribute to social justice Economic forces can affect health and quality of life
Punitive school disciplinary system	High rates of suspensions and expulsions due to willful defiance	Increase education prevention efforts; institute more restorative justice and mediation measures	
High readmission rates to hospitals	High costs, patients not self-managing care, poor limited education	Opportunity to revise health care payment system through ACA	
Persistent discrimination	Exclusion of some communities based on race, sexual orientation, age, gender, etc.	Develop cross cultural understanding and dialogues.	

Forces of Change - Threats and Opportunities Worksheet: 2. ECONOMIC FORCES

Forces (Trends, Events, & Factors)	Threats Posed	Opportunities Created	Categories
Recession	Stagnant growth, unemployment, home foreclosures	Political, governmental, nonprofit and private partnerships to revamp systems and provide local supports	
Decreasing but relatively high unemployment rate	Joblessness is associated with many health problems as well as lower utilization of health care support	Political, governmental, nonprofit and private partnerships to revamp systems and provide local supports	
Competition for resources	Loss of non-profits, silo effect	Partnerships	
Low paying agriculture industry	Low paying jobs cause stress on individuals and families	Major employer and economic driver is capable of technology developments and compensation improvements	
Low paying hospitality industry	Low paying jobs cause stress on individuals and families	Major employer and economic driver is capable of technology developments and compensation improvements	Economic forces can create greater disparities
Presence of local universities, colleges, and vocational schools	Tuition rates high for most local families. Stigma in not having a higher degree. Loan repayment burdens. Graduates with obsolete careers.	Cradle to career opportunities for local youth. More public/private partnerships such as Economic Development Committee of BOS. Restructuring of tax base and distribution of taxes. Align future career opportunities with current training/education.	Economic bright spots can improve health
Improving economy	Some people will be left behind	Fewer people living in poverty	Educational advantages that promote health
Increasing home costs and sales of single family homes to investors	Return of very high density living situations	More philanthropy with greater confidence in personal wealth among middle and upper class	Government involvement in economic forces
Lack of available childcare	Low quality care settings being utilized	Bring your child to work. Employer based childcare.	Market involvement in economic forces
Increasing cost of pre-hospital Emergency Medical Services.	Current system may be unsustainable due to increasing costs.	ACA may bring system reforms	
Medically underserved area	Fewer physicians, professors, other professionals may be unwilling to locate to the County.	Symptom of a desirable place to live. Diversifying neighborhoods with equal access to loans. Mixed use development opportunities.	
State and local budget constraints	Many social/educational program cutbacks	Partnerships and collaborations.	
Affordable Care Act	Some people still left behind. Monthly premium for covered CA insurance can be a financial burden particularly for the lower middle class.	More people access health care. Develop a county-wide safety net insurance program for those with financial hardship	
Insolvent countries	Global financial instability	Political, governmental, nonprofit and private partnerships to revamp systems and provide local supports	

Food insecurity and food deserts	Hunger and poor nutrition	More ag business involvement, community gardens, can revamp distribution system	
Reduced safety net cash aid governmental programs and cumbersome processes.	Disparities growing larger. Communities and families lacking food access. Increase unhealthy food, increased stress which may trigger other health conditions, lack of security which alters the living conditions for children in a needy household.	Make policy changes. Short Term: Simplify application process and communicate opportunities for attaining resources including vocational programs for those in need of employment. Long Term: Develop vocational and retraining opportunities for adults.	
Unjust tax system	Inequities in who pays what	Political, governmental, nonprofit and private partnerships to revamp systems and provide local supports	Economic forces can create greater disparities
Universities/vocational schools; relation to k12 education pipelines	Inadequate infrastructure	Encourage matriculation engagement	Economic bright spots can improve health
Sustainable revenue for local governance	Inequities in who pays what	Revamp supermajority votes to increase certain means-based taxes and fees	Educational advantages that promote health
PERS retirement liabilities	Retirement payouts will cause greater financial stress for governments and schools	Revamp retirement and other benefit packages	Government involvement in economic forces
Inadequate career preparation. Educational tracks and switch to testing and teaching approaches. Funding for educational arts, etc.	Low wages, unemployment, crime. Cultural disparities. Economic consequences.	Training and workforce development. Education system redesign. Create more vocational schools.	Market involvement in economic forces
Globalization of agriculture	Imbalance of development, jobs, access to local food, and agricultural protections	More ag/community/school involvement. Community gardens. Closer field-to-fork opportunities and education. Slow food.	
Restrictive bank practices, particularly around home ownership	Low income residents have limited access to home ownership and wealth development.	Creation of economically and socially diverse neighborhoods that can be sustained over time.	

Forces of Change - Threats and Opportunities Worksheet: 3. POLITICAL FORCES

Forces (Trends, Events, & Factors)	Threats Posed	Opportunities Created	Categories
Increased political partisanship & polarization	Dismantling of public service programs	Involvement of nonprofits in service delivery, nonprofit funding	Policy development for better health, greater access, less disparity Political fallout and civic disengagement can affect health policies Civic engagement opportunities can bring about greater health issue awareness, accessibility, and improvements
Turf divisions between pro and anti-development	Lack of progress on equity	Use Health in All Policies (HiAP) to create greater equity	
Affordable Care Act	Slow of implementation due to politics. If not communicated appropriately to diverse communities, people most in need will be excluded.	Increased support for health insurance coverage, increased understanding of how insurance helps reduce disparity. Develop a strong diverse coalition of organizations that are interested in developing language and common messaging to refer all people to be assessed for eligibility.	
Increased support for tax on sugary beverages	Political opponents with deep pockets	Revenue source; Decreased consumption of sugary beverages	
Increased attention on Early Childhood Development	Focus may stay on cheapest, and not necessarily most effective, approaches	Greater energy and funding for Early Childhood Development and its greatest overall impact	
Political system distrust	People feel powerless to make changes, don't vote, inaction, unrest, disinterest. Diminished social cohesion, increased risk of social chaos, and lack of access to services due to distrust.	Greater community involvement in local decisions. Develop civic academy program for the public that is focused on relationship rebuilding.	
State and national lobbying	Decisions are made with favoritism; common residents are harmed	Restrict influences of lobbyists; revisit term limits	
Civic engagement	Many residents won't engage	Grass roots involvement and action	
Society's focus on middle class at expense of poor	Greater divisions between the have and have not	Rework the whole tax system	
Lack of candidates for local office	Many residents won't engage	Grass roots involvement and action	
Federal and state funding for local initiatives	Mandated expenditures without funding are burdensome. Funds are not permanent	Direct federal funding for local initiatives is a boost to local activities and programs	
Election campaign funding	Special interest deep pockets can buy local elections and propositions	Grass roots involvement and action; redesign campaign funding laws.	

Forces of Change - Threats and Opportunities Worksheet: 4. TECHNOLOGICAL FORCES

Forces (Trends, Events, & Factors)	Threats Posed	Opportunities Created	Categories
Telehealth	May not be accessible to all	Expanded patient centered medical home; new jobs, economic savings on utilities	New technological advances can provide greater access to health education and health care New technological advances can create greater health disparities and resistance to change
Green energy / Hybrid vehicles	Health threats have to be considered	Environmental benefits; new tech jobs	
Increased adoption of internet enabled phones and tablets	Less focused attention on being present with those around	Greater broader connections and ease of access of information	
Wearable devices that enable easier self-monitoring	Potential misuse of data and expansion of disparities	Greater knowledge of self practices and feedback for making lifestyle changes	
Wind and solar powered electricity production	Human/animal welfare	Local renewable energy source	
Establishment of a Level 2 Trauma Center in Monterey County	Funding	Halo effect drawing high quality physician and other healthcare providers from other specialties.	
Social media	Some disparate access	Greater access /quicker access to information; greater ability to mobilize people	
Distance learning	May lack quality and personal interactions	Greater access to higher education, more creative learning processes	
Digital divide	Isolation. Lack of information, opportunity to apply for jobs and services.	Tech companies can be community supporting. Programs can promote computer/IT literacy; hands on approach to computer use.	
Innovations-constant change. Increased stress and decreased off time	Stress-related health issues. Obesity	Teaching mindfulness. Family time. Maintaining relationships across distances, recreate personal face to face time.	
Archaic government systems	Sustaining disparities	Revamp of systems, system overhaul, where more people interaction and making decisions	
HIE and personal information data exchange. Cloud computing.	Increased sharing between departments, agencies. Privacy/confidentiality, limited input from patients. More errors could go unnoticed	Collaboration around new system development. Better managed health for individuals	
Increased availability of health information via internet	Misinformation	Consumer empowerment and connection with appropriate services	
Electronic Medical Records	Lack of good oversight/bad reports	Patient ability to access their own records, patients must agree that all personal health information shared, need for oversight by patients in cases of misdiagnosed.	

Forces of Change - Threats and Opportunities Worksheet: 5. ENVIRONMENTAL FORCES

Forces (Trends, Events, & Factors)	Threats Posed	Opportunities Created	Categories
Global warming	Changing disease patterns; Increased variability including hotter days; Decreasing rain, increasing fires.	Technology partnerships; Increased home values in temperate climates not prone to many natural disasters	Global environmental conditions cam affect local health conditions Environmental disparities affect individual and community health Many types of environmental destruction can be controlled and mitigated, and should be done to prevent greater health inequity Threats of and opportunities for collaborative solutions are available through cross-jurisdictional actions Environmental destruction causes unpredictable affects that are exacerbated by existing health inequities
Water quality and quantity	Ag industry decline, lack of drinking water	New technology development, public allowed in decision making processes.	
Built environment and community planning	Cost to do it right; Politics. Overcrowded and condensed housing, unwalkable & car centered communities, obesity, isolation	More connected communities; Healthier communities, public health & safety programs, vocational skill training	
Earthquakes	Communities destroyed	Rebuilding, preparedness planning coalitions	
Low levels of rainfall/drought or heavy rain season	Increase food prices. Political adversity and tensions increased. Increased reliance on groundwater leading to saltwater intrusion; Economic hardship for agriculture, well failure, increased cost for water. Desalination increases, cost of water, hurts sea life, pollutes.	Greater emphasis on conservation/self -regulation; desalination (good/bad).	
Potential highly virulent strains of flu in Middle East and in Asia	Potential pandemic	Medical research funding and media attention to other vaccinations	
Environmental exposure to toxins	Health problems (some long lasting and irrecoverable). Lack of information exchange and lack of opportunity to voice concerns	Grass roots movement and development. Channels for public comment.	
Fracking	Water and air quality. Lots of unknowns. Polluted water creating greater disparities	Collaborations between environmental Justice organizations. Cheap fuel. Research, information.	
Agriculture – globalization	Local. Imbalance of development, jobs, and agricultural protections	More ag/community/school involvement. Community gardens. Field to fork opportunities and education. Slow food. More revenue.	
Protection of natural resources	Overdevelopment and/or overuse. Laws and investment in protected local systems		
Tsunamis and Wildfires	Loss of homes, costs, lives. Prescribed burns = bad health.		
Jurisdictions (operational and political)	Silos, liability, safety, conflicts	Joint use	
Disparities in environmental infrastructures in rural/impoverished	Increased obesity rates, less opportunities for physical activities. Lack of businesses and livable wage jobs. Lack of recreational access.	Invest money in changing community's environmental infrastructure, partnering with environmental organizations.	

communities	Streets not pedestrian friendly		

Forces of Change - Threats and Opportunities Worksheet: 6. SCIENTIFIC FORCES

Forces (Trends, Events, & Factors)	Threats Posed	Opportunities Created	Categories
Local universities and marine centers, military centers	No diversity at the local level, increased educational disparities at local level	Local community participation, especially people of color and low income Higher education levels attract jobs	New technologies require more research and understanding Level of comfort with science and technology advancements Local universities and marine centers, military centers Pseudoscience
Smart grid	Public concerns and perceptions	Tracking utility usage, potentially more economical, better prepared in emergencies	
Increased understanding of child brain development		Greater attention to early plasticity and early support	
HPV vaccine	Misunderstood	Decrease spread of HPV	
Recent genetic discoveries (Stem cells from skin cells; leptin may influence obesity)	Unintended side effects; ethical concerns delay decisions; litigation; regulations; wrongful use and consent issues	Reduction of chronic disease for some populations	
Personal home health testing (cholesterol, HIV, paternity, water)	False positives, false sense of security, lack of education, bad tests	Early detection. Use marketing/outreach to connect people to providers and education	
Pseudoscience	Poor health. Exacerbate problems we already have. Distrust of medical profession. Costs.	Better education.	
Use evidence-based practices	Ineffective with populations not developed with, culturally inappropriate, aren't appropriate for communities	Pilot test and seek funding to attract funding to use with different populations. Use promising practices. Can work as counterbalance to parochial culture.	
GMOs	Not enough understood about them; no consensus on effects; pseudoscience	Higher yield, increased food production	
Drug resistance in bacteria	Increases in outbreaks or disease spread	Education and new scientific discoveries	
Parochial culture	Limits willingness to change		
Prenatal care		Access to options that are best practice including home birth	

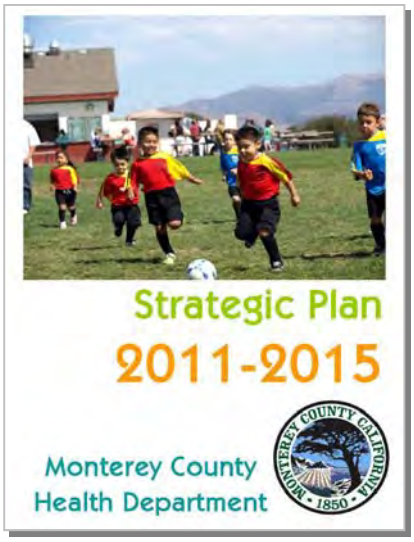
Forces of Change - Threats and Opportunities Worksheet: 7. LEGAL FORCES

Forces (Trends, Events, & Factors)	Threats Posed	Opportunities Created	Categories
ACA – insurance fines and affordability of coverage	Slow registration, large need for safety net and no funding for it. Political and economic interests divided	Businesses more involved in insurance provision such as through co-ops, community engagement. Greater coverage and access to health care with a check on costs	Inequitable application of the law and policies can affect individual and family health Legal forces are one way of addressing violence at the tertiary level; prevention is equally important Changing attitudes can bring change to health status and health regulations Immigration Reform legislation may improve health inequities
Immigration Reform Legislation	Large segments of the local population will not be included	More venues to legal status and thus greater access to services and decrease fear	
Increased law enforcement coordination and crack-downs (targeted on drugs and gangs, but can effect climate)	Distrust of authorities and systems	Hope to lower levels of violence	
Recreational marijuana use. Change of attitude toward legalization of marijuana	Increase recreational use of marijuana. Addiction changes; control success; non-medical use; lack of research on various outcomes from use	Increased tax revenue. Better pain management Decreased burden on judicial system and possible decrease in racially biased prosecution of drug crimes	
Supreme Court Prop 8 ruling	Increased community tension	Greater legal support for families. Access/involvement in health issues; committed relationships and ease of foster care/adoption; more emphasis on gay health	
Potential decrease in DUI blood alcohol level	More police resources dedicated to enforcement	Public safety increases with fewer intoxicated drivers	
Litigious culture and lack of legal representation	Ties up dissemination of justice; expensive; blocks innovation;	Nonprofit organizations engage legal representation for disenfranchised persons	
Recidivism	Cultural effects; inequitable across populations		

Forces of Change - Threats and Opportunities Worksheet: 8. ETHICAL FORCES

Forces (Trends, Events, & Factors)	Threats Posed	Opportunities Created	Categories
Continued debate regarding Roe v. Wade	Abortions may be less accessible; more unwanted children may be born.		New ethical questions arise from medical, technical, and health research advancements Ethical health practices should be institutionalized in the health care delivery system Awareness and education is a means to decrease health risks and inequities
Medical research	Manipulation; unknown consequences	Better understanding of the value of life/quality of life	
Unethical government/leadership behaviors	Loss of faith in the system/government		
Stigma	Reduces health care & education seeking behaviors	Opportunities to create greater awareness, understanding, and support	
Regional health inequities	Inadequate or disproportionate spending; lack of specialists; lack of diversity in health care providers.		
Increased access to personal information	Loss of privacy, big brother, exposure	Easier access to your own information	
Informed consent	Loss of personal information, gender disparity, race/ethnic disparity		
Economics of healthcare – increasing expense	Perceptions of rational use of and rationing of care; how and who gets care;		
Personal preparedness and Ethics education/risk perception	Don't teach it		
End of life planning	Emotional issue/avoidance	Important conversation between individuals, families and professionals. Consumer empowerment	
Quality control/medical malpractice	Professional reluctance to monitor peers	Increased quality.	

Appendix D: Strategic Plan Initiatives and Implementation



Monterey County Health Department's 2011-2015 Strategic Plan proposes a novel systems integration for Monterey County with a focus on prevention that advocates Health in All Policies, a "whole government" approach to health. Health in All Policies acknowledges that health and wellbeing are influenced by society and government sectors other than the health sector alone. By considering health impacts across all policy domains — such as agriculture, education, the environment, fiscal and planning policies, housing, and transportation — a community's health can be improved and the growing economic burden of the health care system can be reduced.

In preparing this Strategic Plan, the Strategic Planning Committee presented health assessments and disparities analysis to more than 500 residents throughout the county over six months. Extensive community input was collected and analyzed, yielding distinct regional concerns, strengths, challenges, and solutions. For that reason, the Committee determined a regional approach to service delivery will increase access to care for more residents, reduce our documented health disparities, and provide health care and prevention services that address our specific, regional needs.

Monterey County Health Department's 2011-2015 Strategic Initiatives developed by the planning committee reflect overarching community objectives that span the regionally specific needs and solutions identified in the six-month community input process. It is important to note that other recent community assessments had identified similar overarching concerns and objectives — these are:

- Public Health Regional Teams data, 2010
- MCHD annual Health Profiles, 2005-2009
- MCHD Maternal, Child, & Adolescent Health Assessment, 2011
- Women and Girls' Quality of Life Report, 2011
- Building Healthy Communities planning documents, 2010
- MoRe Health studies
- Public input at community meetings
- Federal health care reforms
- Castroville LULAC study, 2009

The full Strategic Plan is available for viewing and download at http://www.mtyhd.org/PEP

Appendix E: Community Perspectives by Region

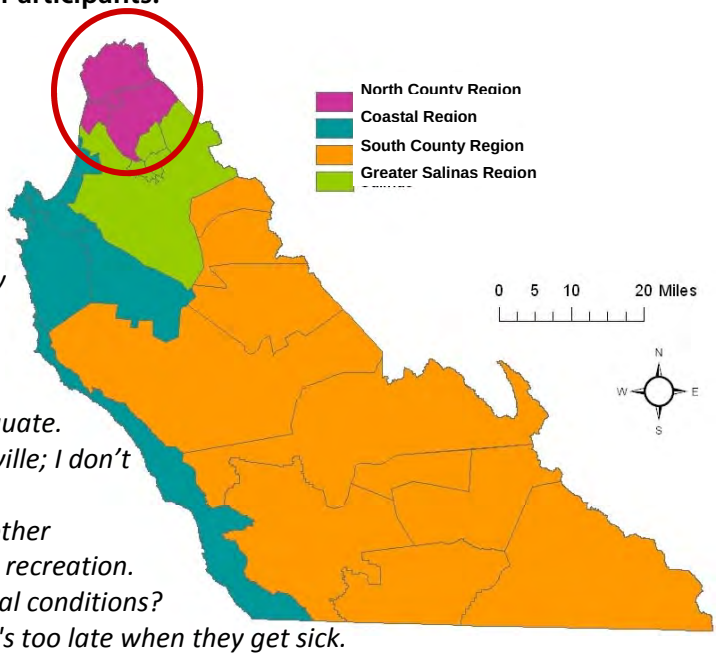
North County Region Community Input Results

Top Concerns:

Perinatal mortality	Access to health care
Limited recreation programs	Limited health services

Strengths:	Local Programs… Castroville Com. Center, Migrant parent program
	Basic healthcare… Local clinic, Natividad Medical Center
	Healthy food… free lunch at Castroville Community Center
Challenges:	Availability of healthcare services… need more appointment times
	Access to healthcare… distance to hospital, no local pharmacy
	Cost of healthcare… not qualified for Healthy Families
	Healthy food… need better school lunches
Solutions:	Affordable Healthcare… low cost clinics for pregnant women
	Outdoor Activities… more bike paths & parks
	Health Education… after school programs

Examples of Comments from Community Meeting Participants:



- *Castroville Senior Center provides food (breakfast and lunch) and has activities.*
- *We are a walking town, so many people can get walking exercise; can we create walking groups?*
- *We need more after school activities like sports, cooking, art, dancing, drill teams, field days.*
- *We also need a farmers market and cooking healthy classes.*
- *There is no pharmacy in Castroville; we need a local pharmacy.*
- *Dental services (for care and prevention) are inadequate.*
- *Lighting and sidewalk conditions are poor in Castroville; I don't feel safe walking at night.*
- *There are not enough fields, parks, bike trails, and other locations that are free and accessible for sports and recreation.*
- *What are causes of premature death due to perinatal conditions?*
- *I think we need more prevention services because it's too late when they get sick.*
- *Many people here don't qualify for Healthy Families insurance and other programs but they still need services.*
- *Castroville has no WIC center—we have to go to Salinas.*
- *Our library, community center, and Migrant Parent Program are our strengths.*

Coastal Region Community Input Results

Top Concerns:

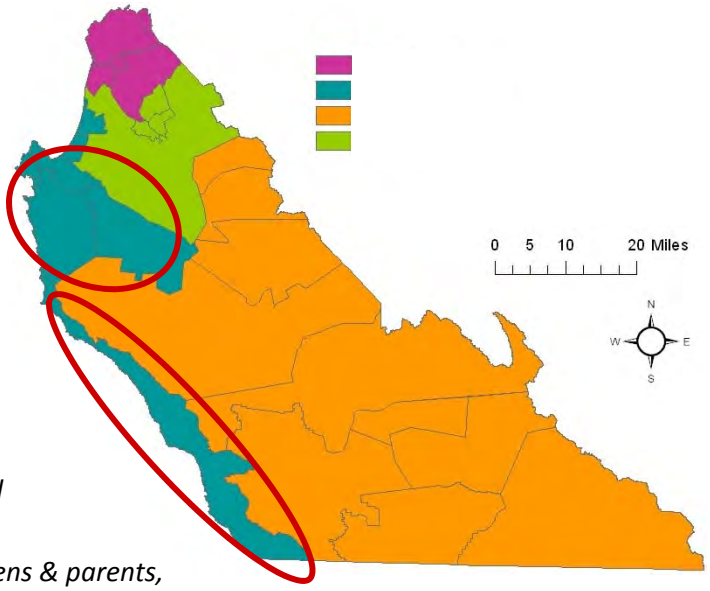
Healthcare access	Childhood asthma
Mental health	Childhood obesity
Teen births	School bullying

Strengths: Local Programs… YMCA, Grief Busters, Sticks & Stones, school nurses
Outdoor Activities… Sports Center, bike trails, parks

Challenges: Cost of healthcare… insurance programs for middle-income folks
Community safety… unsafe parks, dangerous roads, school zones
Physical Activity… funds for child/teen programs, affordable gyms

Solutions: Safety programs… Neighborhood Watch, after school programs
Empowerment programs… health & nutrition workshops for parents
Healthcare access… elder assistance, school counseling, bus vouchers, incentives for maintaining good health

Examples of Comments from Community Meeting Participants:



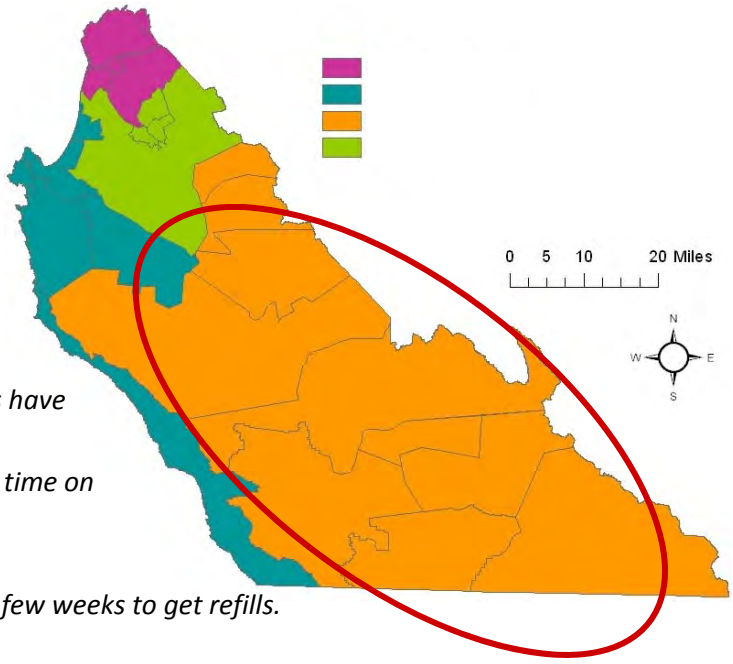
- *Our neighborhoods are pretty safe; people in Monterey know their neighbors; we have good police presence and the schools and parks are safe.*
- *We need more parks and recreation activities in Seaside; the parks we have are not safe and there's graffiti everywhere.*
- *Seniors need more access to health care and all types of living assistance.*
- *Libraries, churches, and lots of youth programs are our strengths.*
- *Fewer doctors accept Medi-Cal and Medi-Care, employers are offering less insurance coverage, and many people don't qualify for health services.*
- *Mental health services are lacking, especially for teens & parents, retired people and those who need substance abuse programs; parents and families need more education for anger management and depression.*
- *More nutrition, and exercise, and healthy living programs are needed in schools and for the public—especially for non-English speaking residents.*
- *More health education and safety programs are needed in the schools, especially about depression, alcohol & drug use, smoking, and safe driving.*
- *Teen pregnancy and access to birth control are important issues.*
- *Free or affordable after school activities of all types are needed for children & youth to keep them safe and healthy.*

South County Region Community Input Results

Top Concerns:	
Teen births	Obesity
Diabetes	Injuries
Healthcare access	Drug & alcohol use

Strengths:	Basic healthcare… clinics, hospitals
	Outdoor Activities… Little League, parks, swimming pools
	Safety Programs… crossing guards, gang task force, fire department
Challenges:	Availability of healthcare services… more options are needed
	Cost of healthcare… lack of insurance & eligibility
	Community safety… poor lighting, dangerous streets
Solutions:	Empowerment programs… youth serving programs and activities
	Safety Programs… activities that prevent and address violence
	Healthcare access… payment plans, free clinics, bus vouchers

Examples of Comments from Community Meeting Participants:



- *Our strengths include schools, youth serving organizations, local clinics and hospital.*
- *Neighbors here watch out for each other.*
- *There are no services for our youth who are struggling with emotional issues such as depression and drugs.*
- *The community has grown in numbers, but resources have not grown to match the need.*
- *Getting to health care is a challenge – it takes a long time on the bus and walking is dangerous.*
- *We need more health care options in South County.*
- *Getting medications refilled is challenging. It takes a few weeks to get refills.*
- *Need translation services in clinics or for doctors.*
- *Not feeling safe outside because of gang members, don't go outside to play.*
- *There is agricultural run-off into the town of Chualar; children play in those puddles.*
- *Families lack knowledge to help make healthy choices.*
- *Joining gangs, dropping out of school and pregnancy are youth options. Concerned about increased teen birth rate. Need educational support for better jobs and more after-school options for youth.*

Greater Salinas Region Community Input Results

Top Concerns:

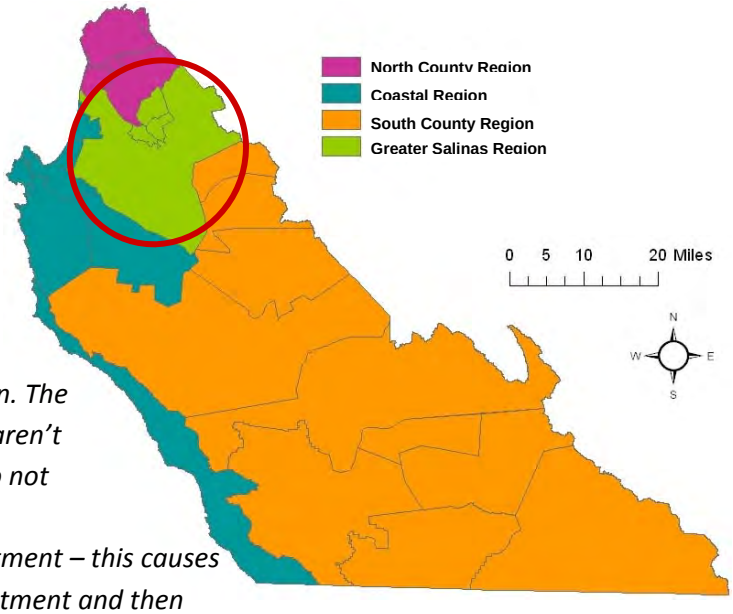
Mental health	Diabetes
Dental care	Violence
Obesity	Teen births
Access to health care	

Strengths: Basic healthcare… clinics, hospitals
Local Programs… social supports, high school clubs
Outdoor Activities… soccer fields, parks

Challenges: Cost of healthcare… medical, dental, vision
Limited health knowledge… more chronic disease education
Violence and risk behaviors… gangs, shootings, alcohol, drugs

Solutions: Universal coverage, affordable prescriptions, free health screenings
Safety… crossing guards, sobriety checks, Neighborhood Watch
Health education… after school programs, gang prevention

Examples of Comments from Community Meeting Participants:



- *We have many strengths, including hospitals, clinics, prevention programs, Healthy Families, parks, gyms, schools, no tolerance at schools for gangs, and 2-1-1.*
- *There is great need for mental health services, especially for those without Medi-Cal or other insurance and services in the schools for children. The children are eligible for these services but they aren't offered. The parents have to insist, but many do not know, or do not want to cause problems.*
- *There are long wait times for a doctor's appointment – this causes poorer health because you can't get an appointment and then the condition gets worse.*
- *Promotores can develop trust with the people. Developing a low income clinic with only $20 per visit (no matter what the visit for) would help because when Promotores send a person to a clinic and they end up being charged a lot for the visit, the person loses heart and that leads to less trust of the Promotores.*
- *As parents we need provide the education of prevention. The schools need to share the information to the parents not only to the children /girls. Education for the parents is basic – the schools need to teach to parents to share the information.*

Appendix F: Glossary and Technical Notes

Age-Adjusted Data
Age adjustment is used to compare risks of two or more populations at one point in time or one population at two or more points in time. Age-adjusted rates are computed by the direct method by applying age-specific rates in a population of interest to a standardized age distribution, in order to eliminate differences in observed rates that result from age differences in population composition. Age-adjusted rates should be viewed as relative indexes rather than actual measures of risk.

Annual Percent Change (APC) *(applies to cancer data sourced from Surveillance, Epidemiology, and End Results (SEER) Program)*
The APC is calculated by fitting a least squares regression line to the natural logarithm of the rates, using the calendar year as a regressor variable (unweighted).

Birth Rate
The birth rate is the number of live births within a specified period of time divided by the total population at mid-time period being examined (reported per 1,000 live births).

Birth Weight
Birth weight is the weight of an infant at the time of birth. The normal birth weight ranges from 6 to 10 pounds. A baby is defined as low birth weight if it weighs less than 2,500 grams (about 5.5 pounds) at birth. A baby is defined as very low birth weight if it weighs less than 1,500 grams (about 3.3 pounds) at birth. A baby is defined as high birth weight (macrosomial) if it weighs more than 4,500 grams (just over 9 pounds) at birth.

Body Mass Index
Body mass index (BMI) assesses body weight relative to body height. BMI values less than 18.5 are defined by the National Institutes of Health as underweight. BMI values from 18.5 to 24.9 are defined as normal weight. BMI values of 25.0 to less than 30.0 are defined as overweight. BMI values of 30.0 or more are defined as obese. BMI values of 40.0 or more are defined as morbidly obese.

Census Tract
Census tracts are small, relatively permanent geographic subdivisions of a county or equivalent entity. The primary purpose of census tracts is to provide geographic units that have stable boundaries. The United States Census Bureau works with local participants to delineate census tracts. Every census tract must constitute a reasonably compact, continuous land area, all parts of which are internally accessible by road.

Confidence Interval
A confidence interval (CI) indicates the degree of reliability of a measurement. If data meet certain criteria, with repeated analyses 95% of the confidence intervals produced will include the "true" parameter value.

Death Reporting

Data related to deaths in this report are based on information from death certificates filed for county residents and summarized in the Death Statistical Master and Public Use Files by the Department of Health Services. Death certificates are completed by attending physicians, medical examiners, and coroners.

Disparity
A disparity is an inequality in opportunity, treatment, or status. A health disparity is viewed as a chain of events signified by a difference in environment, socioeconomic status, access to quality health care, health status, or a particular health outcome that deserves scrutiny.

Disparity Gap
The difference between health outcomes between two groups is called the "disparity gap." To determine if a disproportionate health burden – a disparity gap – occurs among a particular population group, its health outcome is compared to that of another group, or to the population as a whole. When examined over time, change in the disparity gap between two groups is referred to as either widening or narrowing.

Fertility Rate
The fertility rate is the number of live births within a specified period of time divided by the total female population at mid-time period being examined (reported per 1,000 live births).

Healthy People 2010 Objectives
The Healthy People 2010 objectives are national health goals established by a consortium of groups in association with the U.S. Department of Health and Human Services in 1979 for 2000 and reevaluated in 2000 for 2010.

Incidence
Incidence is defined as the number of new cases of a particular disease over a specified period of time divided by the total midyear population at risk (reported per 100,000 residents).

Live Birth
A live birth is the complete expulsion or extraction from its mother of a product of conception (irrespective of the duration of the pregnancy) that, after such separation, breathes or shows any other evidence of life such as the beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached.

Median
The median is the middle score in a set of scores that have been ordered from lowest to highest.

Prevalence
Prevalence is the number of cases of a disease, infected persons, or persons with some other attribute, who are present during a particular interval of time. It is often expressed as a rate (for example, the prevalence of diabetes per 1,000 persons in the population during a year).

Rate

Rate is the proportion of affected individuals, divided by the total number of individuals at risk. Rates are often presented as part of a population of 1,000 or 100,000 people. Rates may be crude (unadjusted), adjusted to a particular age distribution, or specific to an age or race/ethnicity category (stratified).

Rates are sensitive to random variations in the size of the numerator (the number of cases that occurred) and the denominator (number of persons at risk). Events with a small frequency of occurrence are more subject to random fluctuations that can result in larger year-to-year changes. Rates calculated on a small number of observed cases may not be reliable as a measure of the true rate. As a general rule of thumb, caution should be exercised in using rates calculated from less than 20 observed cases.

Rate Ratio
A rate ratio is a relative measure of effect. Rate ratios are calculated by dividing one rate by another. In this report, rate ratios were used to evaluate changes in disparity gaps between age, gender, and racial/ethnic groups over time. Because the relative effect is dependent on the magnitude of the first-in-time event, the absolute measure of an effect (calculated by the subtraction of one rate from another), can be vastly different from its relative measure.

Statistical Significance
Statistical significance is indicated when there exists a low probability (usually less than 5 percent) that the results of a research study are due to chance, rather than to the independent variable.

Statistical Variation
All statistics contain variations that are the result of chance. This characteristic is of particular importance in classifications of cases with small numbers, where small variations are proportionately large in relation to base figures. For example, small changes in the number of deaths or births in small population areas or in the number of deaths from uncommon causes could result in large changes in the respective rates. For this reason, rates for small populations or other small bases should be used with caution.

United States Census Bureau/American Community Survey
The Census Bureau serves as the leading source of quality data about the nation's people and economy. The census is conducted for each decade. The American Community Survey annually collects information from U.S. households similar to what was collected on the Census 2000 long form, such as income, commute time to work, home value, veteran status, and other important data.

Technical notes

Age-Adjustment of Rates
Where noted, rates were age-adjusted according to the 2010 United States Standard Population Cause of Death Classification. The cause of death is coded from information recorded on the medical certification section of the death certificate. This portion of the certificate is completed by the attending physician. In the case of unattended death, the county coroner is responsible for investigation and certification.
It is important to note that death statistics presented in this report may underestimate the health disparities for some groups, due to misclassifications of race/ethnicity on death certificates.

Census Tract as a Unit of Analysis

Census tracts were chosen as the unit of analysis for mapping Monterey County health data in this report. Census tracts are large enough to have acceptable sampling error rates; are consistently defined across the Nation; are usually subdivided as population grows to maintain geographic comparability over time; and can be aggregated to form county-level statistical areas when needed.[67]

Confidence Interval

A 95% confidence interval was used for this report.

County of Residence vs. County of Occurrence

Data on vital events can be reported in two ways: by county of residence or by county of occurrence. The birth, death, and communicable disease data presented in this report are based on county of residence, and county resident populations are used to calculate rates.

Disparity Calculation

Disparity can be measured using absolute and relative methods. Because rates do not always change in a unidirectional linear fashion over time, conclusions drawn from absolute and relative measures may differ for the same data. An absolute measure of disparity was used in this report. Rate ratios and their 95% confidence intervals were calculated for the interest and index groups for the first and last timeframe of data. When comparing the rate ratio from the first timeframe to the rate ratio of the last timeframe, a decrease in disparity was indicated when the rate ratio of the last timeframe moved toward one. An increase in disparity was indicated when the rate ratio of the late timeframe moved away from one.[68]

Denominator Selection

California Department of Finance population estimates and projections were used as the denominator for many of the rates calculated in this report. The most recent update to these estimates and projections occurred in April 2006 and covered through 2004. Due to demographic changes since the 2000 Census, the original 2005 estimate may misrepresent the actual racial/ethnic distribution in Monterey County. However, its update is not scheduled for release until after the time of this report's printing. Therefore, race/ethnic-specific rates calculated for 2005 should be interpreted with caution. Five year average rates calculated for this report potentially diminish the effect of inaccuracies in the 2005 population estimates.

Formulas

$$Rate_{Crude} = (nE / Npop) * B$$

$$Rate_{Age\text{-}Adjusted} = \sum [wa (nEa / Npop_a)] * B$$

$$Rate_{Age\text{-}Specific} = (nE_a / Npop_a) * B$$

$$SE_{Crude} = RateCrude / nE^{1/2}$$

$$SE_{Adjusted} = (\sum [(wa * Rate_{Age\text{-}Specific})^2 / nE_a])^{1/2}$$

$$SE_{RR} = [([n_1 + n_0] * Npop_1 * Npop_0) / (Npop_1 + Npop_0)^2] /$$

$$[([n_1 * Npop_0] / [Npop_1 + Npop_0]) * ([n_0 * Npop_1] / [Npop_1 + Npop_0])]$$

$$RR = Rate1_i / Rate_{0i}$$

$$RSE_{Rate} = (SE_{Rate} / Rate) * 100$$

$CI_{Rate} = Rate \pm (Z_{\alpha/2} * SE_{Rate})$

$CI_{RR} = \exp [\ln (RR) \pm (Z_{\alpha/2} * SE_{RR1/2})]$

Where:

B	= Base for Which Rate is Expressed (usually 100,000)
CI_{Rate}	= Confidence Interval for Rate
CI_{RR}	= Confidence Interval for Rate Ratio
nE	= Number of Events of Interest (Deaths, Births, etc.)
nE_a	= Number of Events of Interest in an Age Group
n_1	= Number in Group 1
n_0	= Number in Group 0 (Referent Group)
Npop	= Population Size
$Npop_a$	= Population Size in Same Age Group
$Npop_1$	= Number of Population in Group 1
$Npop_0$	= Number of Population in Group 0
Rate	= Crude, Age-Adjusted, or Age-Specific Rate of Interest
$Rate_{Crude}$	= Crude Rate
$Rate_{Age\text{-}Adjusted}$	= Age-Adjusted Rate
$Rate_{Age\text{-}Specific}$	= Age-Specific Rate
$Rate_{1i}$	= Rate of Group 1 at Time of Interest
$Rate_{0i}$	= Rate of Group 0 at Time of Interest
RR	= Common Rate Ratio
RSE_{Rate}	= Relative Standard Error of Rate
SE_{Crude}	= Standard Error of Crude Rate
$SE_{Adjusted}$	= Standard Error of Adjusted Rate
SE_{RR}	= Standard Error of Natural Log of Rate Ratio
w_a	= Age-Specific Weight (Based on Standard Population Proportion)
$Z_{\alpha/2}$	= Percentile of F distribution at $\alpha/2$ (1.96 when $\alpha = 0.05$)

Formulas for the rate ratio, standard error of the rate ratio, and confidence interval of the rate ratio were taken from Rothman and Greenland.[69] All other formulas were extracted from the State of California County Health Status Profiles.[70]

Population

The rates given in this publication were calculated using the estimated population figures from the State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000–2050. Sacramento, CA, March 2013, available at http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/

Race/Ethnicity coding was established from self-reported variables. Hispanic origin was determined first and included any race. The remaining non-Hispanics were categorized as follows:

1) Asian/Pacific Islander included Guamanian, Hawaiian, Samoan, Other Pacific Islander, Asian Indian, Asian (unspecified), Cambodian, Chinese, Filipino, Hmong, Japanese, Korean, Laotian, Thai, and Vietnamese
2) Black included Blacks or African Americans
3) White included White
4) Other included Aleutian, American Indian, Eskimo, Multi-Racial, and Other
5) Unknown included those who declined to state their race or for whom data were unavailable.

Reference Group

For rate ratio calculations in this report, the reference groups were White for race/ethnicity, male for gender, and age 16 to 34 for age groups. These groups were chosen to avoid small number issues in the reference point and for clear presentation across multiple health indicators.[71]

Relative Standard Error

The relative standard error used in calculating rates in this report was >23%. This criterion is more conservative than the standard recommended by the National Center for Health Statistics (25%) to determine the reliability of rates based on small numbers.[72]

Statistical Significance

In this report, statistical significance was indicated if a simple linear or Poisson regression test produced a p-value of less than 0.05. When criteria for linear regression were not met, confidence intervals were used to approximate the underlying p-value function.[73] Statistical significance is not equivalent to biological or public health significance. Therefore, results that were not statistically significant were included in this report due to their potential importance in a public health context.

Appendix G: Endnotes

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