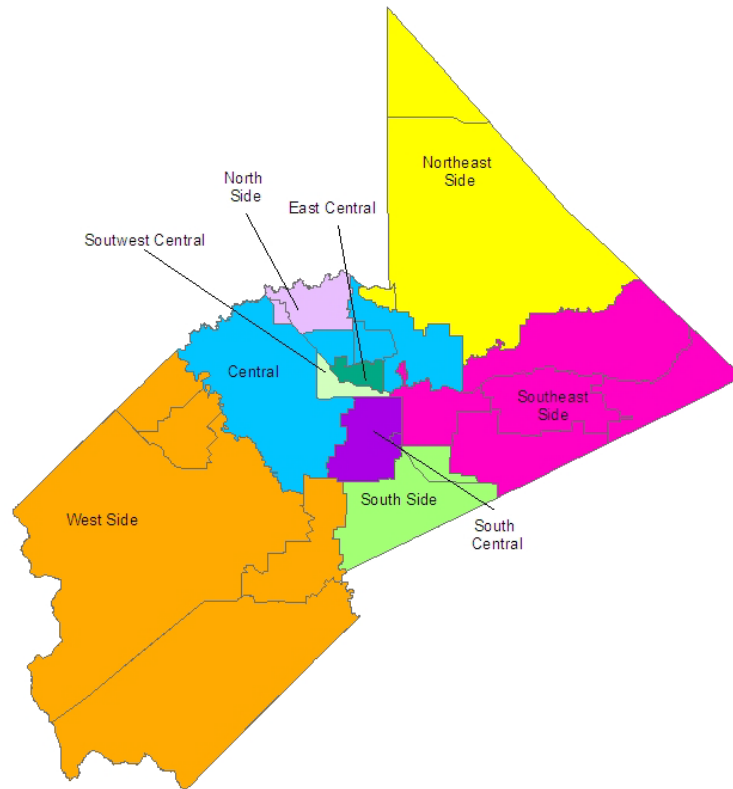


Community Health Needs Assessment of Stanislaus County, 2013



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Table of Contents

Purpose	2
Methodology	2
Procedure	2
Report Conventions.....	2
Statistical Stability.....	2
Age-Adjustment.....	3
Privacy Concerns	3
Demographic Groups	3
Geographic Regions	3
Secondary Data Review	5
Major Data Sources.....	5
Additional Data Sources.....	9
Asset Inventory.....	9
Findings	9
County Demographics	9
Location and Population Size.....	9
Gender and Age	10
Race and Ethnicity.....	10
Origins and Language	10
Disability	10
Socioeconomic Status.....	11
Impact of the Recession	13
Access to Healthcare	13
Health Insurance Coverage and Type of Coverage.....	13
Usual Source of Care and Type of Care.....	15
Provider Shortage.....	16
Prenatal and Perinatal Health in Stanislaus County.....	16
Overview	16
General Fertility	16
Teen Birth Rate.....	18
Low Birth Weight.....	19
Preterm Birth	19
Timeliness of Prenatal Care.....	20
Non-Medically Indicated Induced Deliveries <39 Weeks	22
Post-Partum Care.....	22
Chronic Disease Burden	23
Overview of Risk and Protective Factors	23

Environmental Factors.....	23
Behavioral Factors	25
Overview of Chronic Disease Burden	35
Hypertension.....	35
Heart Disease	41
Cancer	47
Diabetes.....	55
Asthma.....	62
Life Expectancy at Birth	66
Other Major Causes of Morbidity and Mortality	68
Chlamydia and Gonorrhea Infections	68
Mental Illness	70
Portrait of Stanislaus County’s Assets	85
Priority Issues	86
Geographical Areas of Concern.....	87
Recommendations.....	88
References	89
Appendix A: Agency for Healthcare Research and Quality, Prevention Quality Indicators, 2011	96
Appendix B: Asset Inventory by Geographic Region.....	97

List of Tables

- Table 1:** Stanislaus County's Nine Geographic Regions
- Table 2:** Stanislaus Residents with a Disability, 2009-2011
- Table 3:** Stanislaus Residents Living in Poverty by Demographic Factors
- Table 4:** Health Insurance Coverage and Usual Source of Care by Demographic Factors in Stanislaus County
- Table 5:** Ratio of Population to Primary Care Providers by Jurisdictions
- Table 6:** Air Quality Rankings and Grades for Modesto and Stanislaus, 2013
- Table 7:** Trends in Adult Smoking Prevalence
- Table 8:** Geographic Disparities in Hypertension Morbidity and Mortality
- Table 9:** Hospitalization Rates for Heart Disease-Relevant Prevention Quality Indicators (PQI) in Stanislaus, 2011
- Table 10:** Geographic Disparities in Heart Disease Morbidity and Mortality
- Table 11:** Geographic Disparities in Cancer Morbidity and Mortality
- Table 12:** Hospitalization Rates for Prevention Quality Indicators (PQI) in Stanislaus, 2011
- Table 13:** 2011 HEDIS Measures Related to Diabetes Care for Medi-Cal Managed Care
- Table 14:** Geographic Disparities in Diabetes Morbidity and Mortality
- Table 15:** Trends in Lifetime Prevalence of Adults Suffering from Asthma, by Gender
- Table 16:** Trends in Lifetime Prevalence of Adults Suffering from Asthma, by Ethnicity and by Poverty
- Table 17:** Geographic Disparities in Asthma Morbidity and Mortality
- Table 18:** Life Expectancy at Birth by Jurisdiction and Demographic Factors
- Table 19:** Hospitalization Rates for Mental Illness by Geographic Region, 2006-2010
- Table 20:** Burden of Chronic Conditions by Stanislaus County Regions
- Table 21:** Burden of Common Mental Conditions by Stanislaus County Regions

List of Figures

Figure 1: Map of Stanislaus County Showing the Nine Geographic Regions

Figure 2: General Fertility Rate (Ages 15 to 44), Stanislaus and California, 2000-2011

Figure 3: General Fertility Rate (Ages 15 to 44) of Stanislaus Women by Ethnicity, 2005-2011

Figure 4: Teen (Ages 15 to 19) Birth Rate, Stanislaus and California, 2000-2011

Figure 5: Percentage of Low Birth Weight Births, Stanislaus and California, 2005-2011

Figure 6: Percentage of Preterm Births, Stanislaus and California, 2005-2011

Figure 7: Prenatal Care Initiation in the 1st Trimester, Stanislaus and California, 2005-2011

Figure 8: 2011 HEDIS Measure for Medi-Cal Managed Care: Timely Prenatal Care

Figure 9: 2011 HEDIS Measure for Medi-Cal Managed Care: Timely Postpartum Care

Figure 10: Obesity Prevalence and the Retail Food Environment by Jurisdiction

Figure 11: At Least Weekly Fast Food Consumption in the Past Week, by Poverty Status

Figure 12: 2011 HEDIS Measure for Medi-Cal Managed Care: Nutrition Counseling

Figure 13: Weekly Physical Activity among Stanislaus County Residents

Figure 14: 2011 HEDIS Measure for Medi-Cal Managed Care: Physical Activity Counseling

Figure 15: Overweight and Obese Adults (Ages 18 and over), by Jurisdiction

Figure 16: Overweight and Obesity in Stanislaus Adults (Ages 18 and over), by Gender

Figure 17: Trends in Prevalence of Overweight for Age in Children (Ages 2 to 11), by Jurisdiction

Figure 18: 2011 HEDIS Measure for Medi-Cal Managed Care: BMI Assessment

Figure 19: Trends in Adult Smoking Prevalence, by Jurisdiction, 2001-2009

Figure 20: Percentage of Adults Ever Diagnosed with Hypertension, by Jurisdiction

Figure 21: Age-Adjusted ER Visit Rates for Hypertension, Stanislaus County, 2006-2010

Figure 22: Age-Adjusted Hospitalization Rates for Hypertension, Stanislaus County, 2006-2010

Figure 23: Age-Adjusted Mortality Rate for Hypertension, Stanislaus County, 2006-2010

Figure 24: Percentage of Adult Residents Ever Diagnosed with Heart Disease by Jurisdictions

Figure 25: Gender Differences in Heart Disease Prevalence, by Jurisdiction

Figure 26: Age-Adjusted ER Visit Rates for Ischemic Heart Disease, Stanislaus County, 2006-2010

Figure 27: Age-Adjusted Hospitalization Rates for Ischemic Heart Disease, Stanislaus County, 2006-2010

- Figure 28:** Age-Adjusted Mortality Rate for Diseases of the Heart, Stanislaus County, 2006-2010
- Figure 29:** Percentage of Adult Residents Ever Diagnosed with any Kind of Cancer, by Jurisdiction
- Figure 30:** Compliance with Colorectal Cancer Screening Recommendations, by Jurisdiction, 2003-2009
- Figure 31:** Compliance with Cervical Cancer Screening Recommendations, by Jurisdiction, 2003-2009
- Figure 32:** Percentage of Women Who Have Never Had a Mammogram, by Jurisdiction, 2001-2009
- Figure 33:** Percentage of Women Who Received a Physician Breast Lump Check in the Past 12 Months*, by Jurisdiction, 2003-2009
- Figure 34:** Percentage of Men Who Have Never Had a Prostate-Specific Antigen (PSA) Test, by Jurisdiction, 2001-2009
- Figure 35:** Age-Adjusted ER Visit Rates for Cancer (All Types), Stanislaus County, 2006-2010
- Figure 36:** Age-Adjusted Hospitalization Rates for Cancer (All Types), Stanislaus County, 2006-2010
- Figure 37:** Age-Adjusted Mortality Rate for Cancer (All Types), Stanislaus County, 2006-2010
- Figure 38:** Trends in Adult Diabetes Prevalence, by Jurisdiction, 2001-2009
- Figure 39:** Age-Adjusted ER Visit Rates for Diabetes, Stanislaus County, 2006-2010
- Figure 40:** Age-Adjusted Hospitalization Rates for Diabetes, Stanislaus County, 2006-2010
- Figure 41:** Age-Adjusted Mortality Rate for Diabetes, Stanislaus County, 2006-2010
- Figure 42:** Trends in Lifetime Asthma Prevalence among Adults (Ages 18+) by Jurisdiction, 2001-2009
- Figure 43:** Age-Adjusted Hospitalization Rates for Asthma – All Ages, Stanislaus County, 2006-2010
- Figure 44:** Age-Adjusted ER Visit Rates for Asthma, Stanislaus County, 2006-2010
- Figure 45:** Life Expectancy at Birth, Stanislaus County, 2006-2010
- Figure 46:** Trends in Crude Chlamydia Rate by Jurisdiction, 2006-2012
- Figure 47:** Chlamydia Rate by Gender and Jurisdiction, 2012
- Figure 48:** Trends in Crude Gonorrhea Rate, per 100,000 Residents by Jurisdiction, 2006-2012
- Figure 49:** Gonorrhea Rate by Gender and Jurisdiction, 2012
- Figure 50:** ER Visit Rates for Mental Illness by Gender, 2006-2010
- Figure 51:** Gender Differences in Hospitalization Rates for Common Mental Illnesses, 2006-2010

- Figure 52:** ER Visit Rates for Mental Illness by Ethnicity, 2006-2010
- Figure 53:** Hospitalization Rates for Mental Illness by Ethnicity, 2006-2010
- Figure 54:** ER Visit Rates for Mental Illness by Race, 2006-2010
- Figure 55:** Hospitalization Rates for Mental Illness by Race, 2006-2010
- Figure 56:** Age-Adjusted ER Visit Rates for Depression, 2006-2010
- Figure 57:** Age-Adjusted ER Visit Rates for Anxiety/Phobia, 2006-2010
- Figure 58:** Age-Adjusted ER Visit Rates for Addiction/Substance Abuse, 2006-2010
- Figure 59:** Age-Adjusted ER Visit Rates for Schizophrenia, 2006-2010
- Figure 60:** Age-Adjusted Hospitalization Rates for Depression, 2006-2010
- Figure 61:** Age-Adjusted Hospitalization Rates for Anxiety/Phobia, 2006-2010
- Figure 62:** Age-Adjusted Hospitalization Rates for Addiction/Substance Abuse, 2006-2010
- Figure 63:** Age-Adjusted Hospitalization Rates for Schizophrenia, 2006-2010
- Figure 64:** Age-Adjusted Mortality Rates for Suicide, 2006-2010

Purpose

Under the Patient Protection and Affordable Care Act, nonprofit hospitals are required to conduct a community health needs assessment at least once every three years, publicize the assessment results and adopt an implementation strategy that addresses the identified needs. For purposes of this report, the community served by Memorial Medical Center is defined as the population of Stanislaus County.

Methodology

Procedure

Following discussion of the 2011 Community Health Needs Assessment and 2012 Community Benefit Report, Memorial Medical Center Community Benefit personnel discussed the issues of interest to be included in this report with staff at the Stanislaus County Health Services Agency. Given previous findings and trends, chronic diseases and perinatal health were chosen as the key issues to examine in more detail, along with more “upstream” determinants of health such as social, economic and environmental factors and access to care. Behavioral and environmental risk factors, disease prevalence, ER visits, hospitalizations, clinical quality measures and mortality statistics were examined for the key health issues.

In compliance with Internal Revenue Service Code section 501(r)(3), data from multiple sources concerning the health and well-being of Stanislaus County residents were compiled for this report by the Stanislaus Health Services Agency/Public Health (HSA) on behalf of Memorial Medical Center. The most updated data available from each source was used, unless trending was conducted or the sample size was too small for statistical stability. In the latter case, data were aggregated across the minimum number of years needed to create statistical stability. In some cases, if two or more years of data were unavailable or could not be combined for some reason, statistically unstable data were presented and marked as such to alert the reader to be cautious in interpretation.

Once the findings were reviewed, specific priority issues and subpopulations were identified (see **Priority Issues** section in this report) and recommendations for action (see **Recommendations** section) were generated for Memorial Medical Center’s Community Benefits Program for 2013-2015.

Report Conventions

Statistical Stability

Several of the local data sources examined have small sample sizes. This fact was exacerbated when subgroup analyses were performed to examine health disparities. Due to small sample sizes, findings and data trends observed were often not statistically significant. When possible, data were aggregated across two or more years to obtain

statistical stability. However, given the importance of having some data on which the Leadership Team can base their strategic planning, statistically non-significant or unstable results were sometimes reported within this report and have been clearly marked as such. Caution is urged when interpreting these results.

Age-Adjustment

Age-adjustment is performed when different groups that one wishes to compare have different age structures because people at different ages tend to become ill and die from very different causes (e.g. people who die young are more likely to die from unintentional injuries compared to older individuals who are more likely to die from chronic diseases). The direct method of age-adjustment was performed for this report, using the 2010 US standard population for ER visit rates, hospitalization rates and mortality rates.

Privacy Concerns

In order to protect the identity of individuals, results for groups less than 10 individuals in size, in which some demographic or other potentially identifying piece of information (per HIPAA) was given, are suppressed in this report (e.g. reported as ≤ 10). In addition, data for other “cells” was also suppressed when the actual values could be used to reveal another suppressed value.

Demographic Groups

Certain practices and conventions were used for this report. Data disparities based on race, ethnicity, gender, age, geographic location of residence, educational attainment and poverty status were examined whenever sufficient information was available from the data source. Across all data sources where possible, race and ethnicity were treated as separate categories, following the current practice of the US Census Bureau (2010). Two ethnic groups were included in this report: Latinos and Non-Latinos. For race, three or four groups were compared across data sources: White, Black, Asian/Pacific Islander and Other Race(s). Due to smaller numbers, data from Asians, Native Hawaiians and other Pacific Islanders were combined into a larger Asian/Pacific Islander category. Again, due to small numbers leading to statistical instability, data for Native Americans and Alaskan Natives are included in the “Other Race(s)” category or not reported (depending on statistical significance).

Geographic Regions

To examine geographic differences, the County was divided into nine regions, each with one or more zip codes (see Figure1 on the next page). Most regions are centered around community Family Resource Centers (FRCs), and roughly align with their catchment/service areas. The regions were reviewed by approved by the FRCs in 2009-2010 and then by the Leadership Team in spring 2012. The Leadership Team also classified each region as predominately urban, mixed or rural (see Table 1 on the following page). Analyses were conducted for each of nine geographic regions whenever the data permitted.

Figure 1: Map of Stanislaus County Showing the Nine Geographic Regions

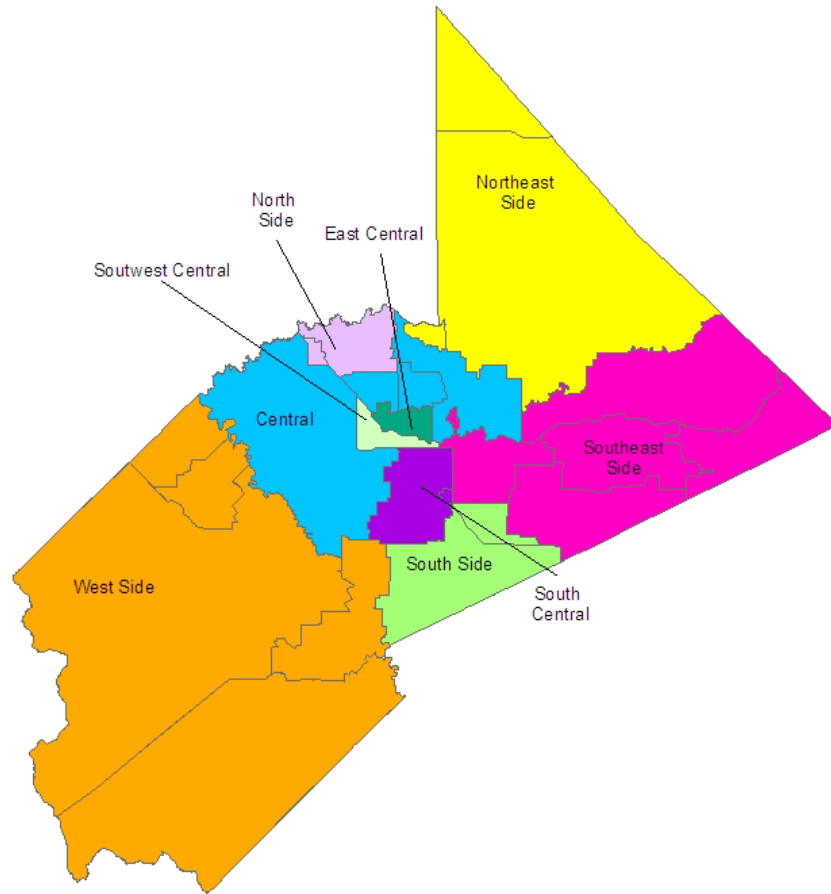


Table 1: Stanislaus County's Nine Geographic Regions

Region	Communities	Zip Codes
Central	Modesto (parts) and outlying areas	95350, 95355, 95357, 95358
East Central	Airport Neighborhood and East Modesto (parts)	95354
Southeast Side	Denair, Empire, Hughson, Hickman, La Grange, Waterford	95316, 95319, 95326, 95323, 95329, 95386
Northeast Side	Knights Ferry, Valley Home, Oakdale, Riverbank	95230, 95361, 95367
North Side	Del Rio, Salida and Modesto (parts)	95356, 95368
Southwest Central	West Modesto and South Modesto	95351
West Side	Crows Landing, Grayson, Newman, Patterson	95313, 95360, 95363, 95385, 95387
South Central	Ceres, Keyes	95307, 95328
South Side	Turlock	95380, 95382

Secondary Data Review

Secondary (pre-existing) data were used to assess the health needs of Stanislaus County. Data from various sources were used to characterize the community. Each major source of data is described below. To better examine health disparities, some data were (re-) analyzed by HSA staff using the Statistical Product and Service Solutions (SPSS) version 18.0 (SPSS Inc., 2009). Some of the data reviewed had recently also been reviewed for a community health assessment focused on chronic disease burden for a CDC Community Transformation Grant, of which Memorial Medical Center is a partner.

Major Data Sources

Census 2010 and the American Community Survey (ACS)

The US government is mandated by the Constitution to count every resident in the United States every 10 years via a census. Previous decennial census (1940 to 2000) 'long' forms were lengthy, asked 53 questions of each respondent, and collected every 10 years. In 2010, the decennial census was reduced to a single questionnaire with 10 questions given to all US households to be completed for all residents. The response rate for Census 2010 was 74%. Zip code level data is available for general demographics characteristics and housing characteristics.

Questions previously asked on the long-form decennial census are now asked by the annual *American Community Survey (ACS)*. This survey includes questions that are not asked by the census and is administered to a small sample (1%) of residents. Topics include: age, gender, race, family and relationships, income and benefits, health insurance, education, veteran status, disabilities, work location and means of transportation to work, location of residence and percentage of income spent on housing costs. ACS survey data is available at the county level as single year estimates, three-year aggregates or five-year aggregates.

California Health Interview Survey (CHIS)

CHIS is the largest state health survey in the nation. It is conducted by UCLA Center for Health Policy Research, in collaboration with the California Department of Public Health and the Department of Health Care Services. Data from CHIS provide state-wide and county-wide information on the health and healthcare needs of those who live in California. CHIS is a telephone survey administered to a random and representative sample of households; computers randomly draw telephone numbers from 44 geographic areas which represent 41 individual counties (the most populated). The remaining 17 counties are grouped into three different regions. The survey is conducted in five languages: English, Spanish, Chinese, Korean and Vietnamese. Beginning in 2007, cell phone numbers were included in the random digit dial methodology. Data are issued every two years and are available statewide, by certain regions, and for certain counties, including Stanislaus. Before 2010, data were also collected only every two years, but beginning in 2010, data collection switched to a continuous mode.

There are limitations to using CHIS data. In 2009, only 534 households (662 individuals and their children) in Stanislaus were surveyed. Prevalence percentages by county were calculated based on California Department of Finance population projections (which are

less accurate the longer in time from the decennial census) and may not be truly representative of the health and health care needs of the county. CHIS data is often statistically unreliable due to the small sample size for Stanislaus County, especially for less prevalent conditions (i.e. seizure or epilepsy) and risk factors. County data stratified by race is usually statistically unstable and CHIS strongly recommends against reporting such data. The issue of statistical instability was sometimes avoided by pooling two years of data together (larger sample size); however there were instances where pooled data were still unstable. Such unstable data was presented in several instances in this report, marked as such, and should be interpreted with caution.

County Health Status Profiles

Each year, the California Department of Public Health issues the *County Health Status Profiles*, a report which measures performance of the state and 58 counties on selected health status indicators, as recommended by the US Department of Health and Human Services. The *County Health Status Profiles* monitors state and local county progress toward achieving a small set of the goals set forth in the *Healthy People 2020* report. Select perinatal health outcomes and age-adjusted rates aggregated for three-year periods for several mortality indicators appear in this report.

Birth Statistical Master Files (BSMF)

Births in California are required to be reported via a birth certificate to the Vital Statistics Office of the county in which the birth took place. Birth certificate data that the local vital statistics registrars receive from the hospitals (or directly from parents) are then forwarded to the State for further data cleaning, validation and re-allocation. Mothers who give birth outside their official county of residence need to be re-allocated to their county of residence by the State. The final data files are called the *Birth Statistical Master Files (BSMF)* for a particular year and jurisdiction. County-specific files can then be obtained by each county health department for analysis. However, there is generally a lag of 12 months between the baby's birth and when that data becomes available to county departments for summary and further analysis.

Emergency Department Data Files (EDASF)

California hospitals with emergency departments (EDs) are required to report particular data elements concerning emergency department visits to the California Office of Statewide Health Planning and Development (OSHPD). Model data sets for Stanislaus County residents (who visited an ED within the state of California) were the basis for the ED visit data presented in this report. These data files were imported and aggregated by HSA, after which the principal diagnosis, charges and certain demographic variables were analyzed. Privacy protections put into place by OSHPD complicate the calculation of the number of unique residents who have visited EDs. Due to the difficulty of determining a unique count and the fact that the same person can have different ED visits for different reasons (e.g. broken arm, dehydration, asthma attack), the analyses presented here are based on total visits, not on counts of unique patients.

It should also be noted that variables were analyzed for this report exactly as they were found in the OSHPD *Emergency Department and Ambulatory Survey Data Files (EDASF)*. To

the extent that different procedures are used by different hospitals to classify or report variables, error may be introduced. The variables for race and ethnicity are particularly likely to have measurement error, based in part on differences in how these are obtained and then classified at each facility.

To present a comprehensive view of major causes of ED visits, the Major Diagnostic Category variable was used. To make clear that these categories of disease/conditions are precisely defined by ICD-9 codes, these category names are capitalized throughout this section of the report.

For the purposes of comparison across groups, ED visit rates were age-adjusted for this report, following the procedure outlined in the Report Conventions subsection above. To examine the differential burden of ED visits among different demographic groups, average annual age-adjusted cause-specific rates were examined for the period 2008-2010, using the 2008-2010 *American Community Survey* population estimates, except for analyses involving race. Because subdividing emergency ED by race resulted in very small numbers, at least for certain diseases, data from a five-year period, 2006-2010 were used to examine racial differences in ED visits. All rates are presented per 100,000 population.

Patient Discharge Model Data Files (PDDF)

California hospitals are required to report particular data elements concerning inpatient care to the California Office of Statewide Health Planning and Development (OSHPD). Model data sets for Stanislaus County residents (hospitalized anywhere within California between 2000 and 2010) were the basis for the hospitalization data presented in this report. These patient discharge data files were imported and aggregated by HSA, after which the principal diagnosis, charges, length of stay and certain demographic variables were analyzed.

As for emergency department visits, privacy protections put into place by OSHPD complicate the calculation of the number of unique residents hospitalized. The analyses presented here are based on total patient discharges, not on counts of unique patients.

Variables were analyzed for this report exactly as they were found in the OSHPD *Patient Discharge Data File (PDDF)*. To the extent that different procedures are used by different hospitals to classify or report variables, error may be introduced. The variables for race and ethnicity are particularly likely to have measurement error, based in part on differences in how these are obtained and then classified at each facility.

To present a comprehensive view of major causes of hospitalization, the Major Diagnostic Category variable was used. To make clear that these categories of disease/conditions are precisely defined by ICD-9 codes, these category names are capitalized throughout this section of the report.

To examine the differential burden of hospitalizations among different demographic groups, average annual age-adjusted cause-specific rates were examined for the period 2008-2010, using the 2008-2010 *American Community Survey* population estimates, except

for analyses involving race. Data from a five-year period, 2006-2010 were used to examine racial differences in hospitalizations. All rates are presented per 100,000 population.

Death Statistical Master File (DSMF)

Deaths occurring in California are required to be reported to the Vital Statistics Office of the county in which the death occurred by the coroner, the funeral home or the doctor who signed the death certificate. The signer of the death certificate must list the underlying cause of death (and may also list other contributing causes). All deaths (along with the information on the death certificate) are then reported by the county registrar to the California Department of Public Health (CDPH). CDPH has agreements with the other forty-nine states so that deaths of California residents occurring in other states are reported to California for review. CDPH then reallocates deaths to the county (or state) of residence of the decedent. The underlying cause of death listed on each death certificate is reviewed and then coded by experts at CDPH using the International Classification of Diseases, Tenth Revision (ICD-10) system from the World Health Organization. Finally, CDPH creates the *Death Statistical Master Files (DSMF)* for California and for each jurisdiction. The 2006 to 2010 versions of the *Death Statistical Master File* containing only deaths of Stanislaus County residents served as the main source of information for the Mortality section of the report. To ensure consistent grouping of causes of death, the National Center for Health Statistics' lists of 50 ranked causes of death for adults (Heron & Tejada-Vera, 2009) were used to group causes of death in this report.

This report follows the field's standard practice to present mortality rates as the number of deaths due to a particular cause per 100,000 residents. To ensure statistical stability, three-year aggregated and age-adjusted rates are presented, using the 2000 US population as the standard population.

Prevention Quality Indicators (PQI)

Prevention Quality Indicators (PQIs), one out of four types of Quality Indicators (QI), are hospitalization rate measures developed by the federal Agency for Healthcare Research and Quality (AHRQ) for ambulatory care-sensitive conditions (ACSCs). ACSCs are conditions for which early intervention and good outpatient care outside a hospital setting could have prevented hospitalizations. These PQIs can be used to assess the accessibility, effectiveness and quality of primary care. Some chronic health conditions (i.e. short-term complications of diabetes, long-term complications of diabetes, congestive heart failure, hypertension, adult asthma, chronic obstructive pulmonary disease and uncontrolled diabetes) are deemed ambulatory care-sensitive conditions. Statewide and countywide data are available from the Office of Statewide Health Planning and Development website.

Healthcare Effectiveness Data and Information Set (HEDIS) 2011 Aggregate Report for the Medi-Cal Managed Care Program in California

This publication reports on a set of performance measures developed by the National Committee for Quality Assurance (NCQA) as a tool to measure health plans' performances on various dimensions of care and service. The data in that report for the two Medi-Cal managed care plans in Stanislaus County served as the data for this section. HEDIS measures quantify effectiveness and quality of care in terms of: adolescent well-care visits,

screening for breast and cervical cancer, weight assessment and counseling for nutrition and physical activity for children and adolescents, timeliness of prenatal and postpartum care, care provided to members with chronic diseases such as diabetes, use of imaging studies for low back pain, appropriate treatment for other conditions such as upper respiratory infection (URI) in children and acute bronchitis in adults. For each performance measure, Minimum Performance Levels (MPLs) and High Performance Levels (HPLs) are established. MPLs are based on the national Medicaid 25th percentile. HPLs are based on national Medicaid 90th percentile.

Additional Data Sources

Data were gathered from additional sources. Child physical fitness data were obtained from *Physical Fitness Test* (PFT) results from the California Department of Education. Child health behaviors were obtained from the California Healthy Kids Survey (CHKS), which is developed by WestEd for the California Department of Education. Measures of adequacy of the number of health care providers were taken from research literature, RAND California and the University of Wisconsin Population Health Institute's *County Health Rankings*. Other health statistics were taken from the Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO) and the research literature. Finally, economic information was obtained from the California Employment Development Department and RealtyTrac.

Asset Inventory

HSA staff assembled data about community resources pertaining to reducing behavioral and environmental risk factors for poor perinatal health outcomes and chronic diseases, both county-wide and by each of 9 geographic regions (see *Report Conventions* section for more information on the regions) from multiple source including the internet, telephone books, various community resource guides, and direct communication with organizations and facilities. Locally, community asset mapping of organizational and community resources, partnerships and health care resources were conducted for all nine regions within Stanislaus County. Appendix A shows the community assets for each region.

Findings

County Demographics

The specific source and time period on which each reviewed finding is based are noted in parentheses in the text (e.g. 2010 US Census or 2009-2011 ACS). Unless otherwise noted, health insurance data and information about individuals' usual source of care come from the California Health Interview Survey (2001-2009) with the specific year or years of data noted (e.g. 2009 CHIS).

Location and Population Size

- Stanislaus County is located in the San Joaquin Valley (the heart of California's Central Valley), a major producer of agricultural products for the US and world.

- Over 1,500 square miles in size, Stanislaus County includes rural agricultural areas, small and medium-sized towns, and the county seat of Modesto.
- Stanislaus County is included in the Modesto Metropolitan Statistical Area, one of the nation's 100 largest metropolitan areas.
- Stanislaus County has a population of 514,453 residents (2010 US Census).

Gender and Age

- Stanislaus County has a balance between males and females (49.5% vs. 50.5%: 2010 US Census).
- Stanislaus County residents are somewhat younger, overall, than California residents (32.8 vs. 35.2; 2010 US Census).
- Like the nation as a whole, Stanislaus County is aging. The average age in Stanislaus increased from 29.2 years in 1980 to 32.8 years of age in 2010 (US Census).

Race and Ethnicity

- The population of Stanislaus is predominantly White (65.6%), while five percent of the residents are Asians (2010 US Census). African Americans, who numbered 3,035 in 1980, increased to 14,721 (or 2.9% of residents) in 2010 (US Census).
- During this time period, Stanislaus County has also become more ethnically diverse: the proportion of Latinos grew from 15% in 1980 to 41.9% in 2010. Stanislaus ("the County") has a higher percentage of Latinos than California ("the State"), for which 37.6% of the population is Latino (2010 US Census).

Origins and Language

- Twenty-one percent of the County's population is foreign-born (2009-2011 ACS).
- Of foreign born residents, 67% are from Latin America, 23% from Asia, 3% from Europe, 3% from Oceania and less than 1% each from Africa and North America (2009-2011 ACS).
- Recent wars and instability in the Middle East have led to an increasing sub-population of Assyrian refugees from Iraq and Iran, a group which is not categorized separately in US Census Bureau methodology.
- Even more recently, refugees from Burma have begun to arrive in the County.
- Stanislaus County residents are also linguistically diverse; 41.3% of residents speak a language other than English at home (2011 ACS). Of these, 31.6% speak Spanish or Spanish Creole.

Disability

- An estimated 12% of Americans have a disability related to hearing, vision, cognition, movement, self-care or independent living (2009-2011 ACS).
- An estimated, 13.0% of Stanislaus County residents self-report such a disability.
- As shown in Table 2 (on the next page), disability status and type differ greatly by age.

Table 2: Stanislaus Residents* with a Disability, 2009-2011

Disability Category	< 18 Years	18-64 Years	65+ Years	All Ages
Hearing	0.7%	2.1%	19.0%	3.5%
Vision	0.8%	2.1%	8.4%	2.4%
Cognitive	4.6%	4.5%	13.0%	5.0%
Ambulatory	0.6%	6.3%	29.7%	7.0%
Self-Care	0.8%	2.0%	12.1%	2.7%
Independent Living	NA ¹	3.9%	19.9%	2.1%
ANY	4.6%	11.5%	44.9%	13.0%

Data Source: US Census Bureau's 2011 American Community Survey (three-year estimates)

**Of civilian non-institutionalized population*

¹Not asked of this age group

Socioeconomic Status

Stanislaus County, like other semi-rural Central Valley counties, has greater socio-economic challenges than California as a whole, including lower income, higher poverty, greater use of public assistance programs, greater unemployment and less educational attainment.

Income: Poverty and Wealth

Like its Central Valley neighbors, Stanislaus County is less wealthy than coastal California counties.

- The median household income of the County is lower (by approximately 24%) than that of the State (\$48,170 vs. \$59,641, 2009-2011 ACS).
- Likewise, the per capita income is 37% lower in the County (\$20,793) than State (\$28,504; 2009-2011 ACS).

A higher percentage of Stanislaus County residents (23.8%) and families (18.5%) live below the Federal Poverty Level (FPL) than California residents (16.6%) and families (12.4%; 2011 ACS).

- Individuals living in poverty vary by age, gender, race and ethnicity, as shown in Table 3 (see next page).

Table 3: Stanislaus Residents Living in Poverty by Demographic Factors

Demographic Factor	# in Poverty	Total Population	% in Poverty*
Age			
< 18	47,779	143,931	33.2%
18 to 64	66,985	315,212	21.3%
≥ 65	7,448	54,166	13.8%
Total	122,212	513,309	23.8%
Gender			
Male	58,494	255,274	22.9%
Female	63,718	258,035	24.7%
Race (One Race)			
White	90,147	398,330	22.6%
Black	5,012	14,761	34.0%
Asian/ Native Hawaiian/Other	5,127	27,792	18.4%
American Indian/Alaskan Native	2,144	6,046	35.5%
Total	18,081	62,848	28.8%
Ethnicity			
Latino	70,504	219,641	32.1%
Non-Latino	51,708	293,668	17.6%

*Population for whom poverty status is determined

Data Source: US Census Bureau, 2011 American Community Survey (one-year estimates)

Unemployment

An agricultural base (using migrant labor) and seasonal employment (e.g. in the food processing industry) have historically caused relatively high unemployment, contributing to Stanislaus County's lower overall prosperity.

- As of April 2013, the unemployment rate for Stanislaus County was 13.4%, compared to 8.5% for California and 7.1% for the US (rates not seasonally adjusted; California Economic Development Department, Bureau of Labor Statistics, 2013).

Educational Attainment

Much research has shown that education is related to health; those with a higher degree of education are generally healthier, are less likely to self-report a chronic disease diagnosis, and are more likely to survive into old age than those with less education (e.g. Culter & Lleras-Muney, 2007).

- Stanislaus County's pattern of educational attainment shows a population at risk for poor overall health.
- In Stanislaus, only 16.5% of the population aged 25 years and older have a Bachelor's or graduate degree, compared to 30.1% in California (2007-2011 ACS).
- Almost 60% of Stanislaus residents (compared to 51% of Californians) have only a high school diploma, some college credits or an Associate's degree (2007-2011 ACS).
- Lower educational attainment is also a risk factor for poverty.
- In 2007-2011, amongst the Stanislaus residents who were 25 years of age or older and lived below the poverty level, 27.6% did not graduate from high school, 18.4%

were high school graduates, and 11.2% had some college credits (2007-2011 ACS). Only 5.0% of those living in poverty held a Bachelor's degree (compared to 16.5% of the general population).

Impact of the Recession

The economic recession has had a greater effect on Stanislaus County than on California as a whole. While there has been evidence of recovery, the County is experiencing a slower recovery than other areas in the state and nation.

- Between 2005-2007 and 2009-2011, Stanislaus' median household income decreased \$2,205 (from \$50,375 to \$48,170), while California's increased \$1,280 (from \$58,361 to \$59,641; 2005-2007 ACS and 2009-2011 ACS).
- Between 2006 and 2011, the percentage of California residents who participated in the SNAP (food stamp) program rose from 4.3% to 8.3% while participation in Stanislaus County rose from 7.1% to 14.7% (2006 & 2011 ACS).
- As of April 2013, the County's monthly unemployment rate was 13.4%, compared to 8.5% for California and 7.1% for the US.
- The median home sale price in Stanislaus decreased by 62% during the recession: \$339,000 in 2007 to \$130,000 in 2011 (RealtyTrac, 2011). As of March, 2013, the median home price has risen slightly to \$140,000 (RealtyTrac, 2013a), only 41% of the median value in 2007.
- Between 2007 and 2012, Stanislaus County had also consistently been ranked as one of the nation's leaders in foreclosures (RealtyTrac, 2011). As of 2013, Stanislaus (and the Modesto Metropolitan Statistical Area) were no longer listed among the worst 10 areas for foreclosures in the country (RealtyTrac, 2013b).

Access to Healthcare

Access to preventive care and treatment is vital to a person's well-being. A lack of health insurance coverage, having inadequate health insurance and a shortage of medical professionals are frequent barriers to accessing medical care.

Health Insurance Coverage and Type of Coverage

Overall

- Health insurance coverage does not differ between the County and the State, with 88.9% of Stanislaus and 88.5% of California residents having some type of health insurance coverage (2009 CHIS).
- The US does not have a coordinated system of health insurance, with many insured people reliant on employers for coverage, while others are eligible for public coverage with different eligibility requirements.

Disparities

- There are a number of disparities among demographic groups in both health insurance coverage and type of coverage (as shown in Table 4 on the next page).
- **Age:** Nationwide and in the County, health care coverage varies by age (National Health Interview Survey, 2012).

- Young children, seniors and adolescents have much higher rates of health insurance coverage than working age adults in the County.
- This disparity reflects the fact that special public insurance programs (e.g. Children’s Health Insurance Program [CHIP], Healthy Families and Medicare) are available for children and seniors, while fewer working age adults are eligible for public programs and thus more rely on employer-provided coverage.
- 79.1% of employed adults have health insurance in California, similar to the figure for Stanislaus County (80.3%).
- Only 49.7% of Stanislaus unemployed adults and 52.6% of California unemployed adults have health insurance (2008-2010 ACS).

Table 4: Health Insurance Coverage and Usual Source of Care by Demographic Factors in Stanislaus County

Demographic Factor	% Residents with Any Health Insurance	% Workers Offered & Eligible for Employer Insurance	% Residents with Public Insurance	% Residents with a Usual Source of Care	% Residents with ER as Usual Source of Care [^]
Gender					
Male	90.9%	72.1%	26.0%	90.1%	3.0%
Female	87.0%	60.7%	31.4%	90.6%	0.7%
Total	88.9%	73.2%	28.7%	90.3%	1.8%
Age					
0 to 11 years	96.9%	NA	34.1%	99.6%	0.5%
12 to 17 years	95.9%	NA	28.4%	69.6%	NA
18 to 64 years	83.6%	73.1%	15.8%	89.9%	3.5%
≥65 years	96.1%	77.8%	95.5%	96.7%	NA
Poverty Status*					
<100 % FPL	65.4%	21.8%	55.8%	88.8%	13.7%
100-199% FPL	87.6%	60.1%	49.3%	90.6%	1.5%
200-299% FPL	94.3%	75.5%	18.1%	94.1%	0%
≥300 FPL	96.3%	80.8%	14.1%	92.2%	0%
Ethnicity					
Latino	84.1%	56.5%	35.1%	88.3%	3.3%
Non-Latino	91.9%	77.7%	24.8%	91.6%	1.7%

Note: Bold font indicates statistical significant differences.

[^]No estimates are statistically stable due to very small sample sizes, despite aggregating 2005 & 2009 data.

*Of the population for whom poverty status is determined

Data Source: California Health Interview Survey, 2009 (and 2005 for ER usage)

- **Ethnicity:** Fewer Latinos have health insurance coverage (84.1%) than Non-Latinos (91.9%; CHIS, 2009).

- One contributing factor to this disparity may be differences in the type of health insurance coverage; a statistically significantly higher percentage of Non-Latinos have employer-based or self-pay insurance, while a marginally significantly higher percentage of Latinos have public insurance coverage with stricter income eligibility and legal status requirements (2009 CHIS).
- **Race:** Health insurance coverage rates seem to differ in the County by race, with Whites having the highest rates of coverage, although the CHIS sample sizes (2007 & 2009 CHIS pooled) were too small to make statistically reliable comparisons.
- **Poverty:** Insurance coverage increases with income as measured by FPL status.
 - Despite the existence of public health insurance programs designed to cover those with lower incomes, Stanislaus County residents living below the Federal Poverty Level (FPL) have the smallest proportion of health insurance coverage (2009 CHIS).
 - This finding appears to reflect the magnitude of reliance on employer-provided insurance versus public programs in Stanislaus County (and likely the US as a whole) as well as the fact that lower-wage jobs are less likely to come with health insurance coverage.
 - Employers offering lower wages (or part-time employment) are less likely to offer health insurance coverage to their employees. Their employees are unlikely to qualify for public programs due to their employment, a situation which leaves many lower income working adults without an affordable source of health insurance (Schoen, Collins, Kriss & Doty, 2008).

Usual Source of Care and Type of Care

Overall

Having a stable source of care to access when needed is an important contributor to health and well-being. Many factors determine what type of usual source of care a patient has, if any. Nationally, individuals with lower incomes, without insurance and without documentation of legal status are more likely to routinely obtain care at a hospital emergency room (ER) than others, who are more likely to access a private practice or clinic setting (The Henry J. Kaiser Family Foundation, 2010).

Disparities

- **Age:** Age affects whether a person has a usual source of care. The age group least likely to have a usual source of care in Stanislaus County is individuals aged 12-17 years, followed by working age adults aged 18-64 years (2009 CHIS; see Table 3).
- **Income and Poverty:** Those living in poverty are less likely to report having a usual source of care.
 - Over 90% of Stanislaus residents at 200% or higher FPL have a usual source of care, compared to 81% of those living at or below 100% FPL (2009 CHIS).
 - Income also affects the type of care that a person routinely accesses. The less income a person has, the less likely he or she will be able to use the doctor's office, the more likely he or she will utilize the emergency room (even for non-emergencies) and the more likely he or she will have no usual source of care (see Table 4 on the previous page).

Provider Shortage

In addition to a high number of uninsured individuals, access to care in Stanislaus County is reduced by the relative lack of providers per capita.

Trends

As shown in Table 5, Stanislaus County also shows a persistent relative lack of primary care providers compared with California and the US when measured by the ratio of population in a jurisdiction to primary care providers who practice there (HRSA Area Resource File data; Population Health Institute, 2011 and 2012).

Table 5: Ratio of Population to Primary Care Providers by Jurisdiction

Year	Stanislaus	California	National Benchmark
2008	916:1	847:1	631:1
2009	1,328:1	1062.1:1	631:1

Prenatal and Perinatal Health in Stanislaus County

Unless otherwise specified, the data findings cited are from the 2000-2011 Birth Statistical Master Files (BSMF). The time period is specified in parentheses for each finding, as is the data source if other than BSMF. Analyses were performed by HSA staff. Population figures for calculating rates were obtained from the US Census Bureau, either from the Census, or the American Community Survey, depending on the relevant time period and topic area.

Overview

Healthy babies generally come from healthy pregnancies and the steps a mother takes even before she is pregnant. Actions such as taking folic acid and maintaining a healthy weight prior to a pregnancy are important, as is entering prenatal care in the first trimester and receiving adequate prenatal care thereafter (March of Dimes, 2013a). Mothers who have gestational diabetes are at an increased risk of high blood pressure, preeclampsia and eclampsia during the pregnancy. Babies of mothers who developed gestational diabetes have a higher chance of developing obesity and Type II diabetes (Mayo Clinic, 2011).

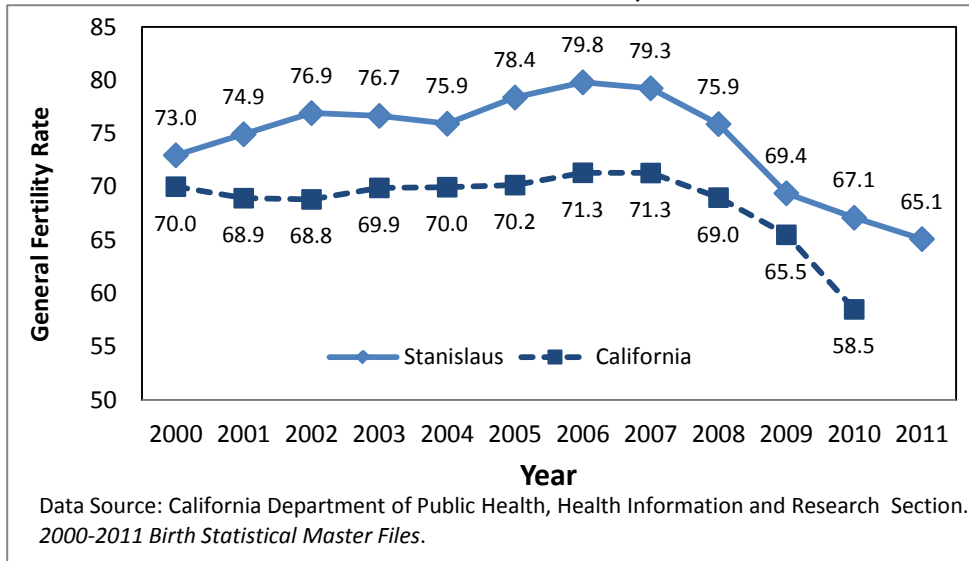
General Fertility

The general fertility rate is the total number of live births per 1,000 women aged 15 to 44 years. It is a key driver of population growth and is an indicator of reproductive behavior. In 2011, 7,737 babies were born to Stanislaus mothers, a general fertility rate of 65.1 per 1,000 women of reproductive age (ages 15 to 44; 2011).

Trends

- The annual general fertility rate in Stanislaus has grown slowly over much of the past decade until 2007, when it began to decline. A similar pattern of recent decrease in the fertility rate is seen for California as well (see Figure 2 on the next page).

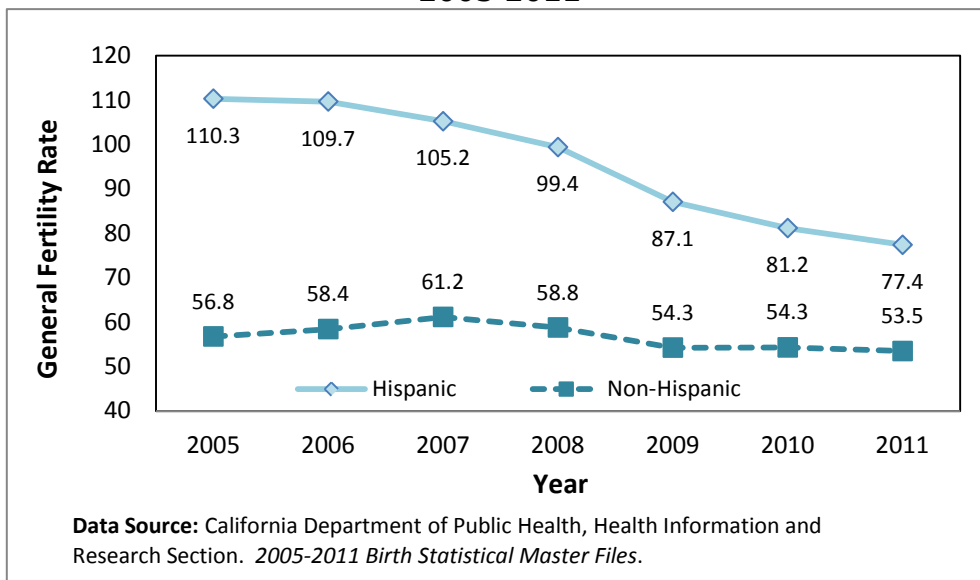
Figure 2: General Fertility Rate (Ages 15 to 44), Stanislaus and California, 2000-2011



Disparities

- **Ethnicity:** The annual general fertility rate among Latinas in Stanislaus is also consistently higher than non-Latinas between 2005 and 2009 (see Figure 3). This difference is related to the overall younger age distribution for this group.

Figure 3: General Fertility Rate (Ages 15 to 44) of Stanislaus Women by Ethnicity, 2005-2011



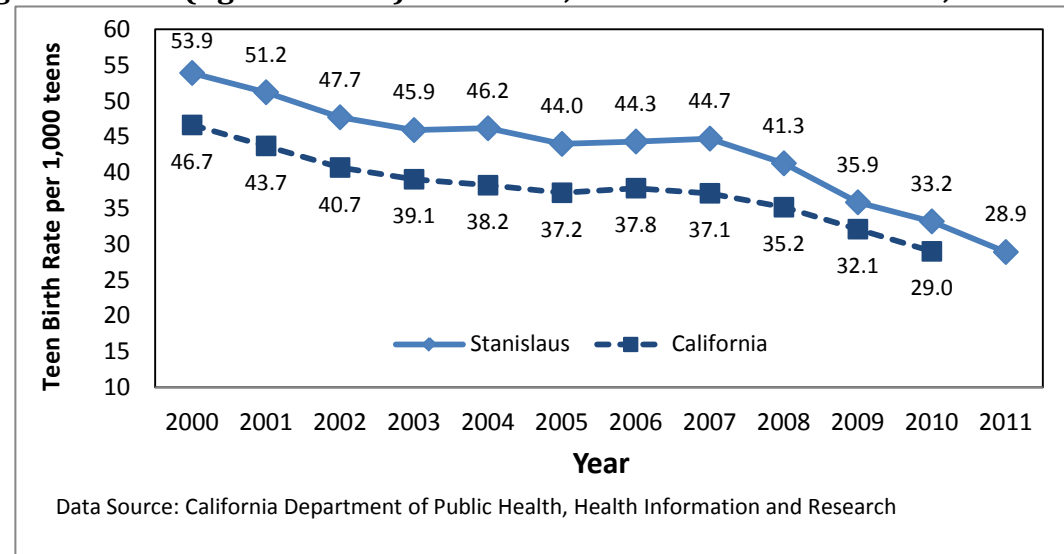
Teen Birth Rate

Teen births are births to any woman aged 15-19. The teen birth rate is the number of births to mothers 15-19 divided by the number of women aged 15-19. Teen births impose high economic and societal costs to the parents, larger family and society as a whole. Babies born to teen mothers are at higher risk for prematurity, low birth weight and other health problems (The National Campaign to Prevent Teen Pregnancy, 2013).

Trends

- Despite a steady decrease in the teen birth rate, Stanislaus continues to have a higher teen birth rate (mothers ages 15-19) than California. In 2011, the teen birth rate in Stanislaus was 28.9 per 1,000. The California teen birth rate was not available at the time of this report (California Department of Health, Office of Vital Records 2011).
- Figure 4 shows the decline in teen birth rates for both jurisdictions as well as the remaining gap between the County and State rates. In Stanislaus, the teen birth rate decreased 35.3% between 2000 and 2011.

Figure 4: Teen (Ages 15 to 19) Birth Rate, Stanislaus and California, 2000-2011



Disparities

- **Race/Ethnicity:** 69.4% of teen mothers (ages 19 and under) were Latinas, compared to 52.1% of mothers ages 20 and over
- **Birth weight:** Babies born to teen mothers are smaller. In 2011, 8% of teen mothers gave birth to low birth weight babies, compared to 5.7% of mothers ages 20 and over
- **Prenatal care initiation in 1st trimester:** Teen moms are less likely to initiate prenatal care in the first trimester. Sixty one percent of teen mothers compared to 78.1% of mothers 20 years of age or older initiated prenatal care in the first trimester in 2011.
- **Age and Income:** In 2011, 78.4% of teen mothers used WIC, a proxy for low income, compared to 55.7% of mothers 20 years of age or older.

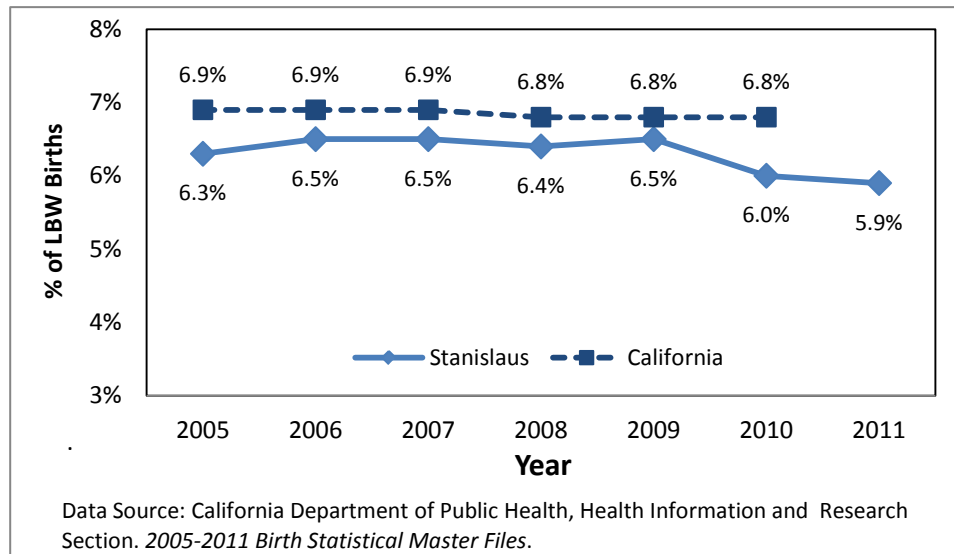
Low Birth Weight

Low birth weight (LBW) babies are born weighing less than 5 pounds 8 ounces (2,500 grams). LBW babies are more likely than those of normal birth weight to encounter health problems like respiratory distress syndrome, bleeding in the brain, heart problems, necrotizing enterocolitis and abnormal blood vessel growth in the eyes (March of Dimes, 2013b). LBW is also the primary risk factor for infant mortality (US Department of Health and Human Services, 2006).

Trend

- As shown in Figure 5, the percentage of LBW babies in Stanislaus has been consistently lower than in the State (2000-2011).
- While it is not possible to eliminate all LBW births, the Healthy People (HP 2020) 2020 target for LBW births is 7.8%. Stanislaus County has reached and maintained this target.

Figure 5: Percentage of Low Birth Weight Births, Stanislaus and California, 2005-2011



Preterm Birth

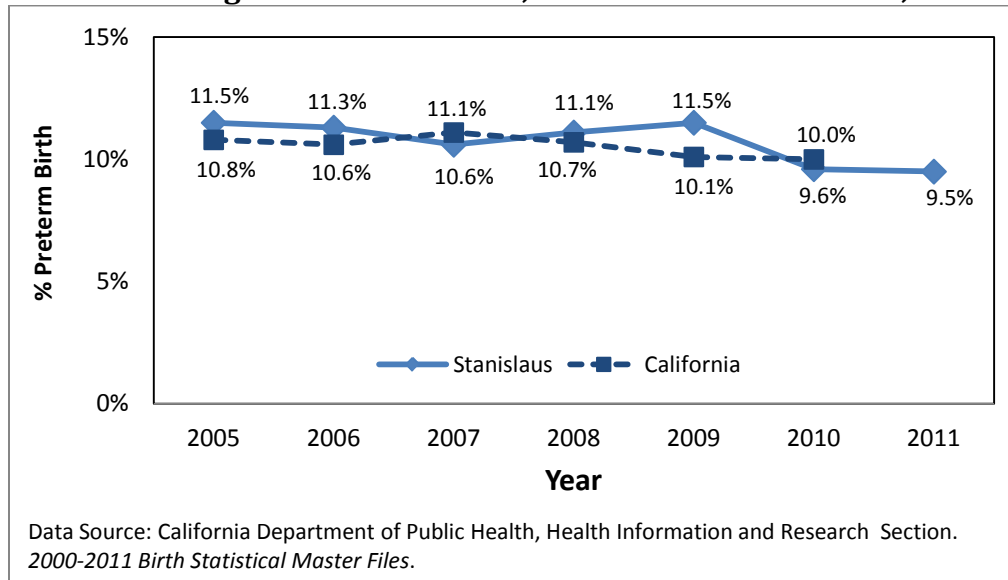
Babies born before 37 completed weeks of pregnancy are considered premature and are at greater risk for newborn complications (even death) than those born after that milestone. Premature babies more often suffer from health problems such as respiratory distress syndrome, apnea and intraventricular hemorrhage. Research has also shown that a baby's brain continues developing after reaching "term" at 37 completed weeks; the brain at the 37th week is only 80% of the weight at the 40th week (California Maternal Quality Care Collaborative, 2007).

Trends

- As Figure 6 (on the next page) shows, Stanislaus County and California have similar rates of preterm births.
- In 2011, 9.5% of babies in Stanislaus were born preterm. Statewide data was not available at the time of this report.

- The County has achieved the HP 2020 target for preterm births: 11.4%.

Figure 6: Percentage of Preterm Births, Stanislaus and California, 2005-2011



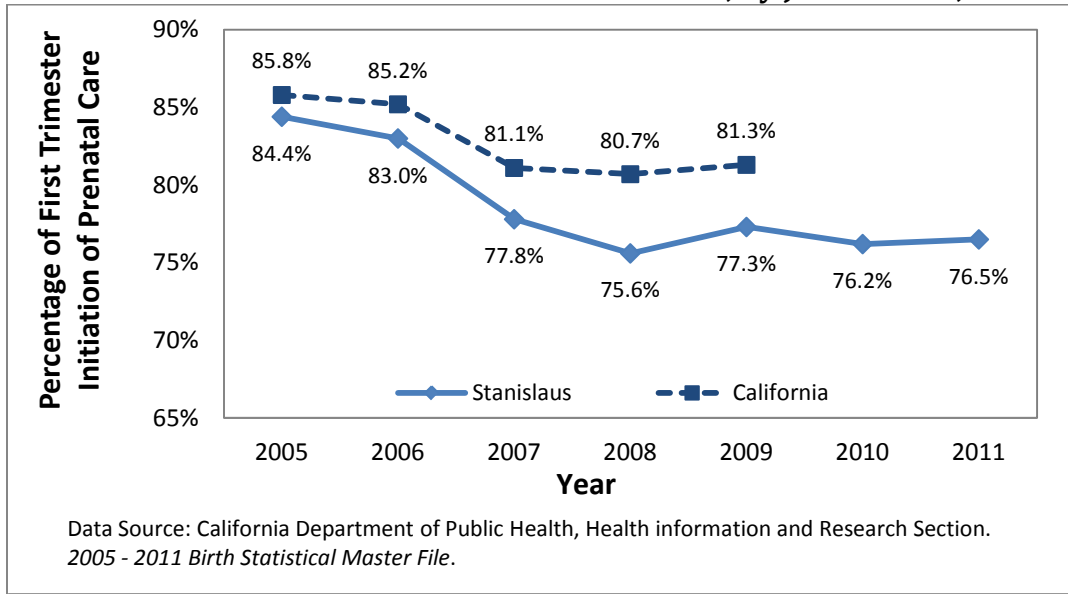
Timeliness of Prenatal Care

Timely and adequate prenatal care is important for the health of both the mother and her fetus. Having a health care provider monitor the mother's and fetus' health helps ensure that small problems do not progress into big health problems. It is recommended that a woman begin prenatal care in the first trimester of her pregnancy.

Trends

- The percentage of all Stanislaus County live births receiving first trimester prenatal care has been worsening since 2005, with a slight improvement in 2009. By 2011, only 76.5% of women had received first trimester prenatal care (see Figure 7 on the next page).
- In 2005 and 2006, the County met the Healthy People 2020 target of at least 77.9% of pregnant women receiving prenatal care in the first trimester, but has not maintained this achievement since.
- The causes of this decline are unclear. Factors may include the shortage of providers, transportation issues, lack of legal documentation and fear of authorities, linguistic and cultural barriers and lack of understanding of the importance of early and consistent prenatal care.

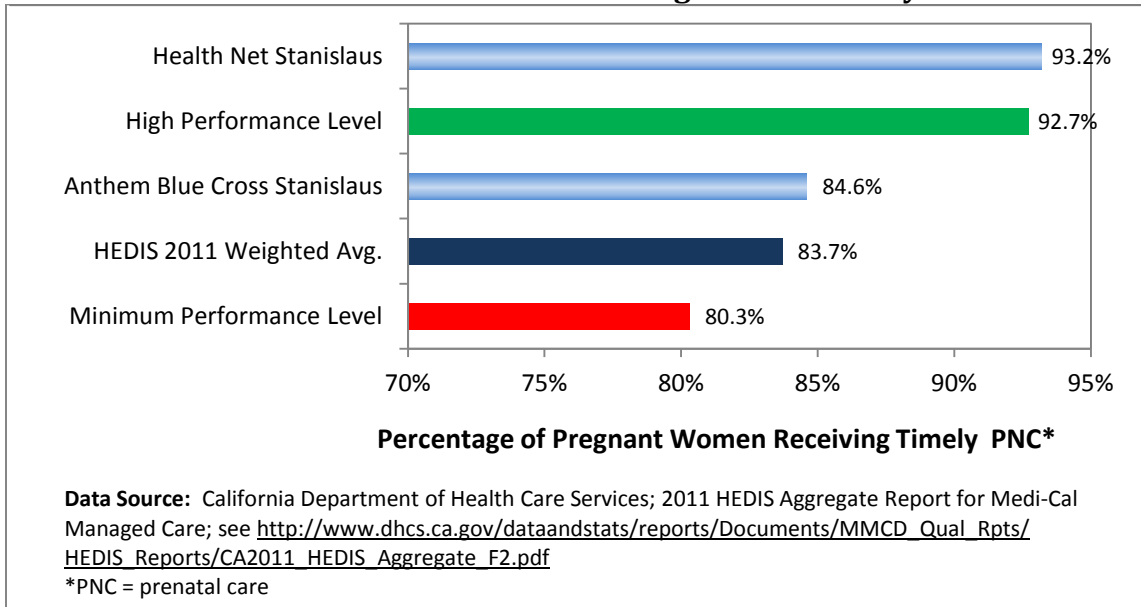
Figure 7: Prenatal Care Initiation in the 1st Trimester, by Jurisdiction, 2005-2011



Quality of Clinical Care

- One indicator in HEDIS looks at the timeliness of prenatal care, specifically the percentage of women (who delivered a live baby) who received prenatal care in the 1st trimester or within 42 days of enrolling into the health plan.
- In 2011, as Figure 8 shows below, Health Net Stanislaus performed above the High Performance Level (the 2010 national Medicaid 90th percentile) in 2011 for this measure, with 93.2% of women receiving timely prenatal care. Eighty-four percent of women in Anthem Blue Cross Stanislaus received timely prenatal care.

Figure 8: 2011 HEDIS Measure for Medi-Cal Managed Care: Timely Prenatal Care



Non-Medically Indicated Induced Deliveries <39 Weeks

An elective induction of labor is defined as induced labor without a medical or obstetrical indication *before* the spontaneous onset of labor or rupture of membranes. Recent studies have shown that elective induction prior to 39 weeks may pose an increased risk of health complications to babies (California Maternal Quality Care Collaborative, 2007).

The drug used to induce labor (pitocin), which is an oxytocin, may cause forceful labor contractions thereby lowering the baby's heart rate (March of Dimes, 2013c). When an induction fails and the baby cannot be delivered naturally, a cesarean delivery will have to be performed (March of Dimes, 2013c). Women who delivered their babies by cesarean section face longer hospital stays and longer recovery periods (March of Dimes, 2013d). Babies scheduled for cesarean sections between 37 and 39 weeks gestation are at higher risk of complications (i.e. increased NICU admissions and respiratory distress syndromes) than babies delivered after 39 weeks (California Maternal Quality Care Collaborative, 2010). Local data is unavailable as this information cannot be easily extracted from the birth certificate.

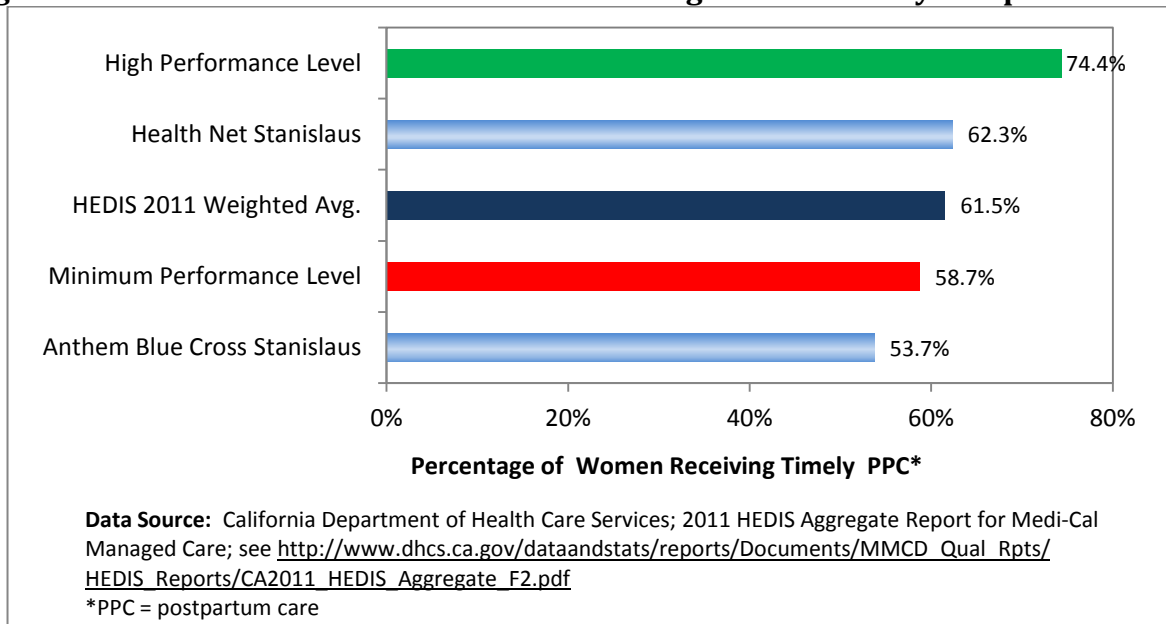
Post-Partum Care

The American Academy of Pediatrics (AAP) and the American College of Obstetricians and Gynecologists (ACOG) recommend that women schedule a postpartum care visit 4 to 6 weeks after delivery but no later than 6 to 8 weeks after delivery. Women who delivered by cesarean section or had a complicated gestation should schedule a visit within 7 to 14 days of delivery (NYSDOH 2010). The postpartum care visit is important because this is when postpartum depression is assessed, family planning/contraceptive needs are discussed, inter-conception counseling is offered, and medical complications associated with the delivery are monitored (NYSDOH 2010).

Quality of Clinical Care

- One HEDIS indicator examines the percentage of women who delivered a live birth and who subsequently received a postpartum visit, as recommended, on or between 21 and 56 days of delivery.
- As Figure 9 shows (on the next page), Health Net Stanislaus performed above and Anthem Blue Cross Stanislaus performed below the Minimum Performance Level, with 62.3% and 53.7% of women receiving timely postpartum visits.

Figure 9: 2011 HEDIS Measure for Medi-Cal Managed Care: Timely Postpartum Care



Chronic Disease Burden

The specific source and time period on which each reviewed finding is based are noted in parentheses in the text (e.g. 2009 CHIS or 2009-2011 DSMF). All rates presented are age-adjusted. Analyses were performed by HSA staff. Population figures for calculating rates were obtained from the US Census Bureau, either from the Census, or the American Community Survey, depending on the relevant time period and topic area.

Overview of Risk and Protective Factors

Chronic diseases are among the leading causes of hospitalization and death nationwide. Underlying risk factors such as tobacco use, physical inactivity, being overweight or obese and poor diet are responsible for much of this trend. An improvement in these modifiable risk factors can result in alleviating the burden of chronic disease (Centers for Disease Control and Prevention, 2010a, 2011b, 2011d, 2011f, 2011g), and therefore much of the total burden of disease. Protective factors are behaviors, lifestyle factors and environmental conditions that decrease the likelihood of disease. They include things such as regular physical activity, a healthy diet that includes the five food groups in appropriate amounts and a built environment that facilitates walking and biking.

Environmental Factors

Air Quality

Air pollution increases the risks of heart and lung illnesses such as asthma, chronic obstructive pulmonary disease, lung cancer and heart failure (Health Canada, 2006).

- Despite reductions in absolute air pollution, the San Joaquin Valley has poor air quality compared with other areas.

- The San Joaquin Valley is second only to the Los Angeles basin in poor air quality within California (Bedsworth, 2004).
- Stanislaus County, and its capitol, Modesto, rank poorly nationwide, as shown in Table 6.

Table 6: Air Quality Rankings and Grades for Modesto and Stanislaus, 2013

Jurisdiction	Short-Term Particle Pollution (PM _{2.5})		Year-Round Particle Pollution (Annual PM _{2.5})		Ozone Pollution	
	Ranking*	Grade	Ranking*	Grade	Ranking*	Grade
Modesto	5 th worst	NA	6 th worst	NA	13 th worst	NA
Stanislaus County	5 th worst	F	7 th worst	F	20 th worst	F

Data Source: American Lung Association's 2013 State of the Air Report

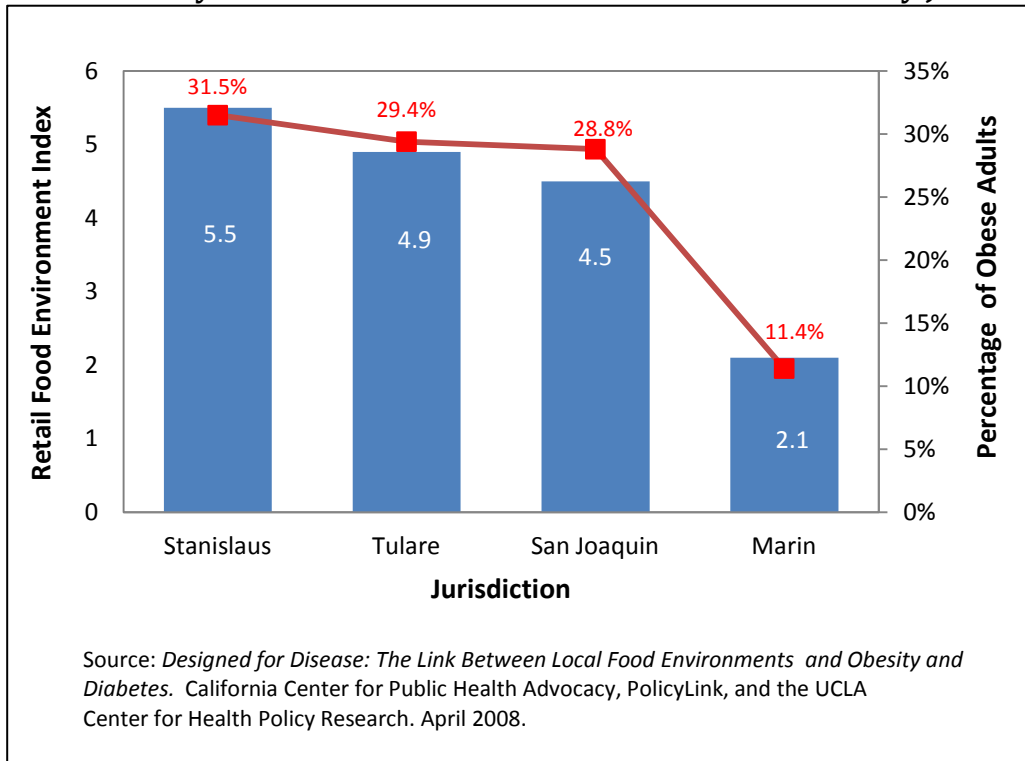
**For Modesto, the ranking is out of US Metropolitan Statistical Areas (Office of Management and Budget) with at least 50, 000 residents. For Stanislaus, the ranking is out of approximately 3,000 US counties.*

Retail Food Environment

The neighborhood environment affects a person's diet choices and risk of obesity and chronic disease. UCLA's Center for Health Policy Research (California Center for Public Health Advocacy, 2008), found an association between the quality of the retail food environment and rates of both obesity and diabetes. Researchers calculated an index they called the Retail Food Environment Index (RFEI): the ratio of fast-food restaurants and convenience stores to grocery stores and produce vendors. Data for California jurisdictions showed that the higher the Retail Food Environment Index (RFEI) in a jurisdiction, the higher the prevalence of obesity and diabetes.

- The average RFEI for California is 4.48, which means that for each grocery store or produce vendor around homes, there are nearly four and a half times as many fast-food restaurants, pizza places and convenience stores.
- Stanislaus has the second highest RFEI (5.48) and the highest obesity prevalence (31.5% vs. 21.2% for California) in the state. Figure 10 (on the next page) compares Stanislaus to some neighboring and other California counties.

Figure 10: Obesity Prevalence and the Retail Food Environment by Jurisdiction



Behavioral Factors

Diet

A healthy diet, including consumption of adequate fruits and vegetables, whole grains and moderate quantities of lean meats, supports the body's growth and a strong immune system. In contrast, poor diet contributes to lowered immunity and vulnerability to certain infectious and chronic diseases. Unhealthy diets are one of the many factors that contribute to obesity, which in turn increases the risk of chronic diseases.

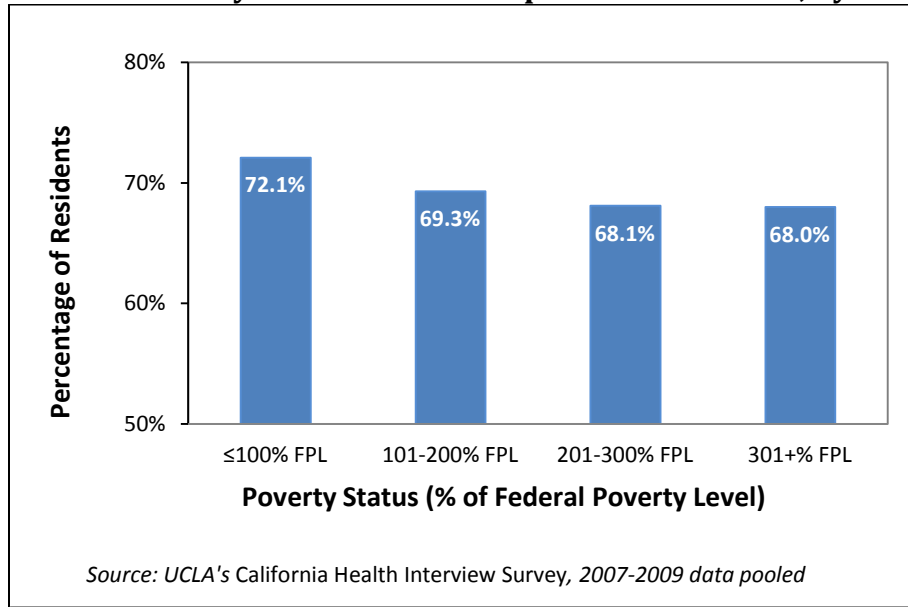
Fast food consumption

A mainstay of the US diet, fast food is typically high in empty calories (i.e. low in nutritional value), is highly processed and contains excess salt and sugar (Center on Hunger and Poverty, no date). Between 2007 and 2009, 72.4% of Stanislaus residents ate fast food at least once in the past week, compared to 64.7% in California (2007 & 2009 pooled; CHIS).

Disparities

- **Income:** Fast food consumption in the County is highest in the low-income ($\leq 100\%$ FPL) population compared to those living above the FPL (2007 & 2009 pooled; CHIS; see Figure 11).

Figure 11: At Least Weekly Fast Food Consumption in Past Week, by Poverty Status



- **Race/Ethnicity:** Fast food consumption is also higher in the Latino population (74.7%) than in Whites (65.8%) or Blacks (46.5%; 2007 & 2009 pooled; CHIS).

Fruit and vegetable consumption

The CDC (Centers for Disease Control and Prevention, 2012b) recommends consumption of 5 to 7 servings of fruits and vegetables per day to maintain health.

Disparities

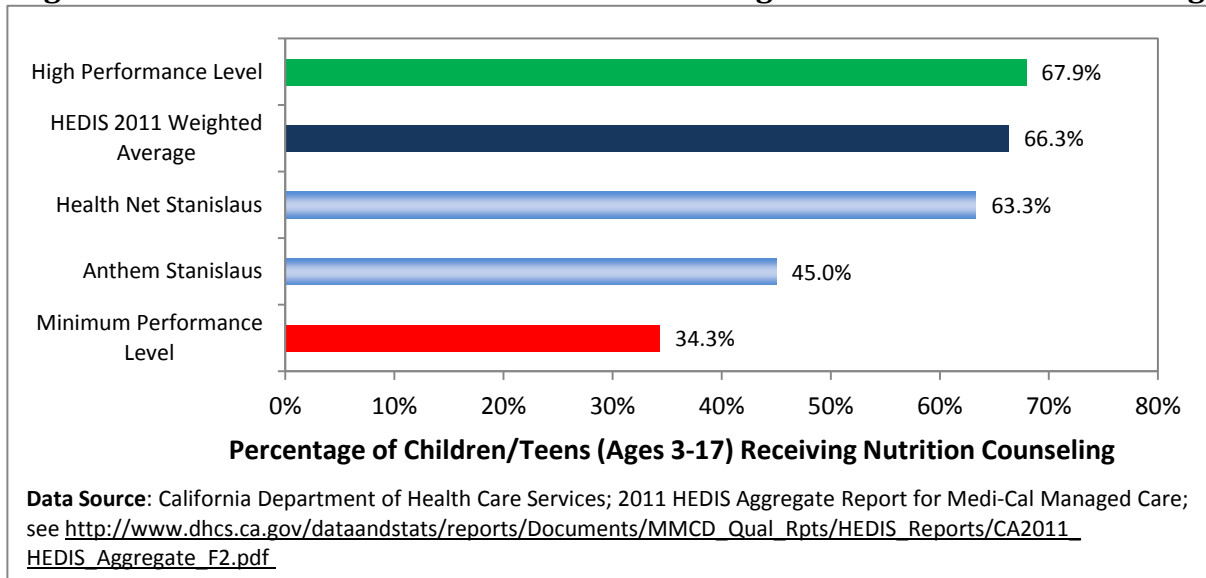
- **Age:** 51.3% of Stanislaus County adults report not eating the recommended 5 or more servings of fruits and vegetables every day (Brutschy & Stevens, 2010), while 49.9% of Stanislaus County children and 16.9% teens do so (2007 & 2009 pooled CHIS).
 - Adults reported multiple reasons for not consuming sufficient fruits and vegetables, including time required to prepare (31.8%), cost (23.1%) and not liking the taste (15%).
- **Income/Poverty:** Among Stanislaus County children between the ages of 2 and 11, a (non-statistically significantly) higher percentage of those living at or below 200% of the FPL consume adequate amount of fruits and vegetables compared to children living above the 200% FPL level (55.0% compared to 45.6%; 2009 CHIS).
 - The reason behind this finding is unknown as one would expect the opposite. It is conceivable that children in higher poverty could be getting more subsidized food through the Women Infants and Children (WIC) program, or through participation in the federal food stamps program or school breakfast and lunch programs.

Quality of Clinical Care: Nutrition Counseling

Beginning in 2010, Medi-Cal Managed Care plans have been required to report the percentage of children and adolescents (3-17 years) who had an outpatient visit with a personal care physician or an OB/GYN and who had received nutrition counseling. Figure

12 below shows that in 2011, 63.3% of Health Net children/adolescents and 45% of Anthem children/adolescents received nutrition counseling. Both health plans performed below the HEDIS weighted average.

Figure 12: 2011 HEDIS Measure for Medi-Cal Managed Care: Nutrition Counseling



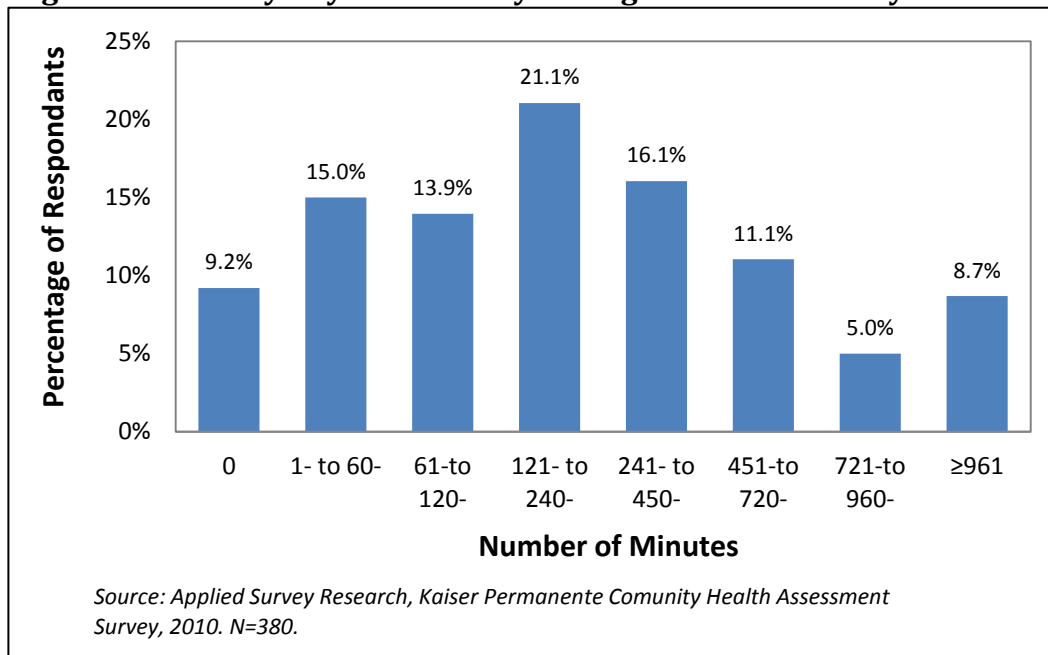
Physical Activity

Physical activity is important for maintaining a healthy weight, cardiovascular system and mental health. The Centers for Disease Control and Prevention (2011f) recommend that adults perform at least 150 minutes of moderate intensity aerobic activity every week, or 75 minutes of vigorous intensity aerobic activity, and muscle strengthening activities at least twice a week.

Trends

- 38.1% of Stanislaus adults get less than 120 minutes of exercise per week, not meeting CDC guidelines, while 21.1% reported 121 minutes to 240 minutes of physical activity each week (Brutschy & Stevens, 2010), which would meet CDC guidelines if it were of at least moderate intensity (see Figure 13 on the next page).

Figure 13: Weekly Physical Activity among Stanislaus County Residents



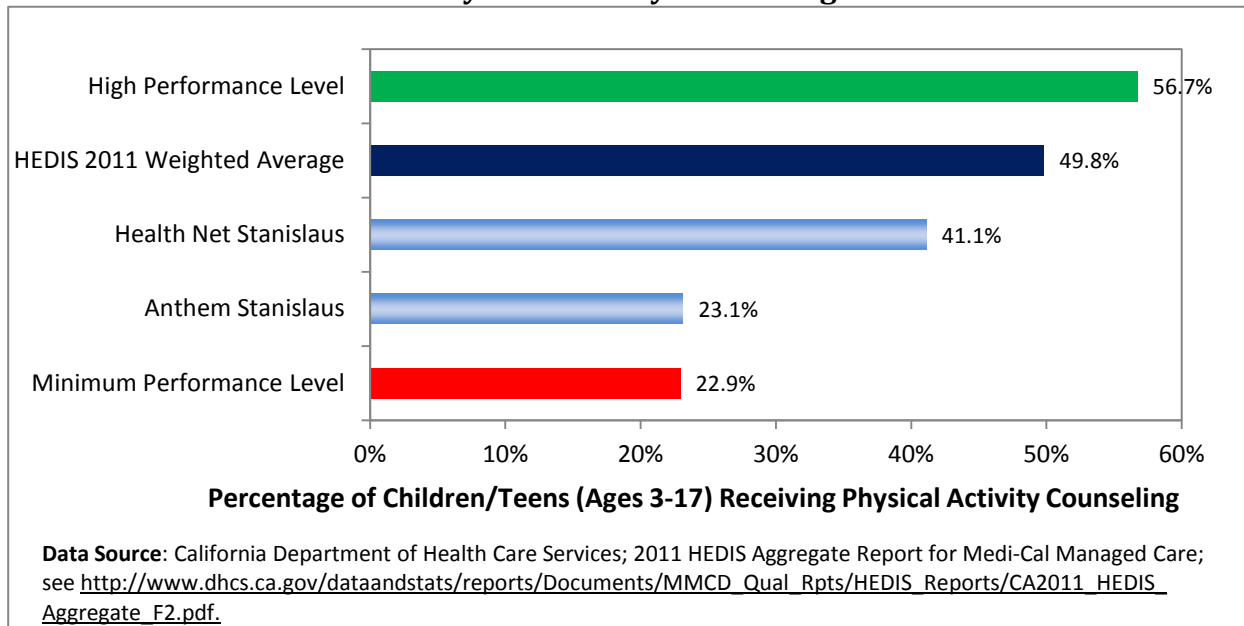
Disparities

- **Age:** The percentage of adults who meet national guidelines for physical activity decreases by age (39.2% in 18-34 year olds; 33.5% in 44-64 year olds, 25.8% in 65 and older; 2007 CHIS).
- **Gender:** A slightly higher percentage of women than men (but not statistically significantly) meet the national guidelines for physical activity (36.9% vs. 31.9%; 2007 CHIS).
- **Ethnicity:** In Stanislaus, a lower percentage of Latino adults (23.4%) than Non-Latino adults (39.9%) meet the national guidelines for physical activity (2007 CHIS).
- **Income:** A higher percentage of Stanislaus adults living below the FPL (41.6%) meet the national guidelines for physical activity, when compared to adults who live above the FPL (32.9%; 2007 CHIS).
 - This disparity is likely related to lower income individuals relying less on personal vehicles for transportation, and more on public transportation or more active modes.

Quality of Clinical Care: Physical Activity Counseling

Beginning in 2010, Medi-Cal Managed Care plans have been required to report the percentage of children and adolescents (3-17 years) who had an outpatient visit with a personal care physician or an OB/GYN and who had received physical activity counseling. Figure 14 (on the next page) shows that in 2011, 41.1% of Health Net children/adolescents and 23.1% of Anthem children/adolescents received physical activity counseling. Both health plans performed below the HEDIS weighted average.

**Figure 14: 2011 HEDIS Measure for Medi-Cal Managed Care:
Physical Activity Counseling**



Obesity

Poor diet and lack of physical activity often lead to overweight or obesity, which in turn are among the main risk factors to heart disease, stroke and Type II diabetes. Obesity is also costly; in 2008, medical costs associated with obesity were estimated to be \$147 billion nationwide (Centers for Disease Control and Prevention, 2011c).

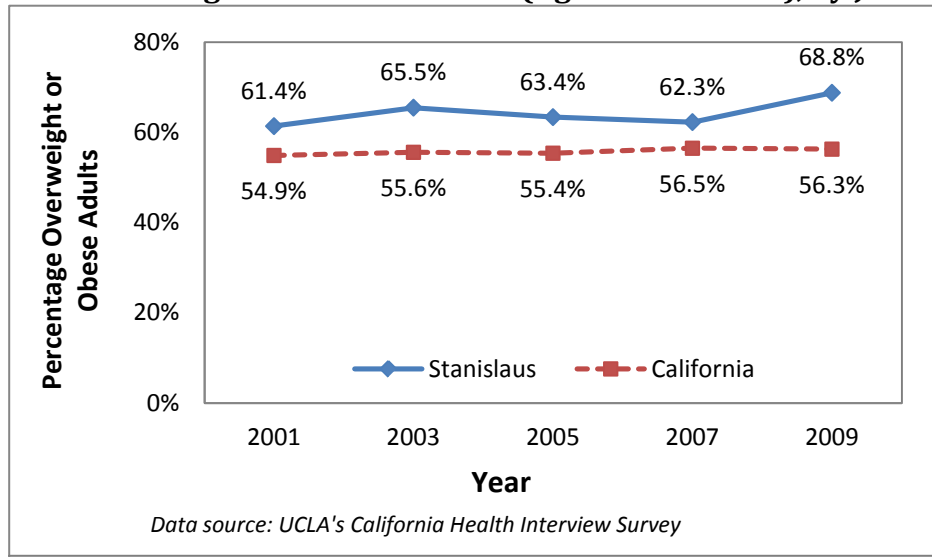
Different definitions of obesity for children (0-17) and adults (18 and over) complicate comparisons across these groups, thus adults and children will be discussed separately in this section.

Adult Obesity

Trend

- The percentage of adults who are overweight or obese in Stanislaus has long been higher than in California (2001-2009 CHIS). See Figure 15 on the next page.

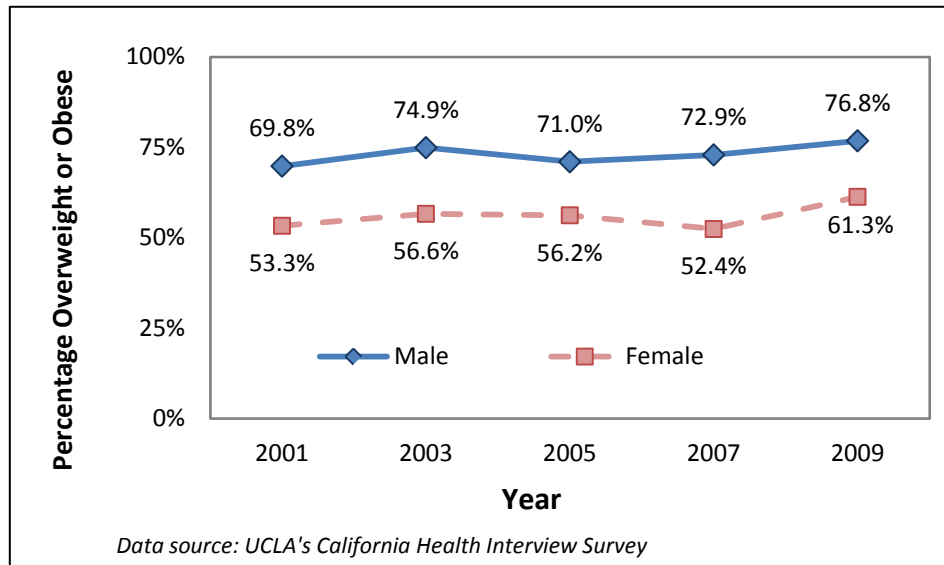
Figure 15: Overweight and Obese Adults (Ages 18 and over), by Jurisdiction



Disparity

- Gender:** In Stanislaus County, a statistically significantly higher percentage of men are overweight or obese than women between 2001 and 2009. During this period, the prevalence of overweight/obesity has increased in both genders (see Figure 16).

Figure 16: Overweight and Obesity in Stanislaus Adults (Ages 18 and over), by Gender



- Race/Ethnicity:** Nationally, obesity prevalence among adults differs by race and ethnicity.
 - In Stanislaus, the percentage of overweight or obese Latino adults (64.2%) is approximately the same as that of Non-Latino adults (66.2%; pooled 2007-2009 CHIS).

- Between 2003- 2005 and 2007-2009, the percentage of overweight and obese Stanislaus adults was highest in African Americans and Whites. However, Asian adults experienced the largest increase in overweight/obesity prevalence (47.9%) during this time.
- **Gender, Income/Poverty:** Nationally, the relationship between obesity and income depends on gender (Ogden, Lamb, Carroll & Flegal, 2010).
 - The US obesity prevalence among men does not vary by income; among women, those with higher income and education are less likely to be obese (2005-2008 NHANES as reported in Ogden, Lamb, Carroll & Flegal, 2010).
 - In Stanislaus County, the prevalence of overweight/obese adults is higher among poor residents than among those living above the FPL (67.1% vs. 58.3%; 2007 & 2009 pooled data CHIS).

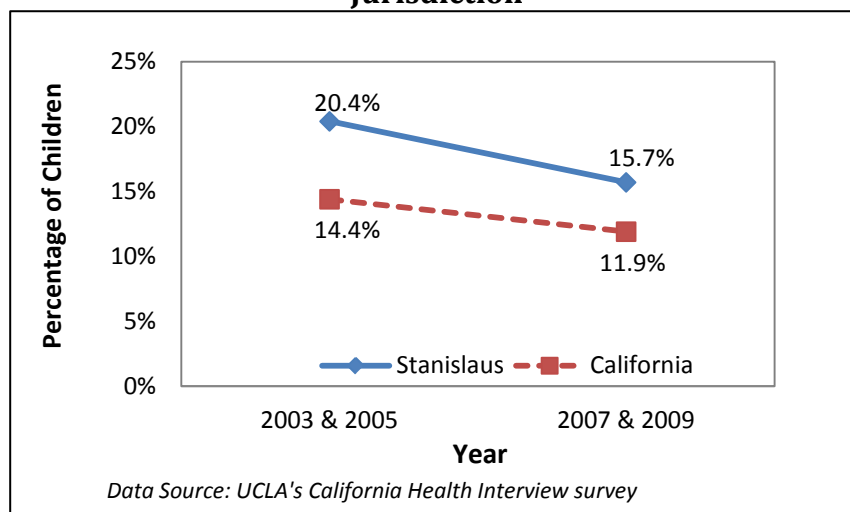
Childhood Obesity

Children who are obese are more likely to have high blood pressure, high cholesterol, joint problems, fatty liver disease and are more likely to become obese adults (Centers for Disease Control and Prevention, 2011c). Nationally, childhood obesity has tripled in the past 30 years (Centers for Disease Control and Prevention, 2011d, 2011h).

Trend

- A higher percentage of children in Stanislaus County are overweight for their age, compared to California as a whole.
- Data from CHIS (2003-2005 and 2007-2009), show that a higher percentage of Stanislaus Children aged 2-11 are overweight for age than California children.
- Likewise, Physical Fitness Tests using the FitnessGram (California Department of Education, 2012) in the 2010-2011 school year indicated that across three grades (Grades 5, 7 and 9), a higher percentage of school children in Stanislaus than in California had body compositions that were not in the Healthy Fitness zone (HFZ).
- The HFZs are criterion referenced standards that represent minimum levels of fitness that offer protection against diseases that result from sedentary living.
- Despite relatively high prevalence locally, recent trends are encouraging. The percentage of children overweight for their age in both the County and State decreased between 2003-2005 and 2007-2009; Stanislaus children experienced a decrease of 23.0%, while Californian children experienced a decrease of 17.4% (see Figure 17 on the next page).

Figure 17: Trends in Prevalence of Overweight for Age in Children (Ages 2 to 11), by Jurisdiction



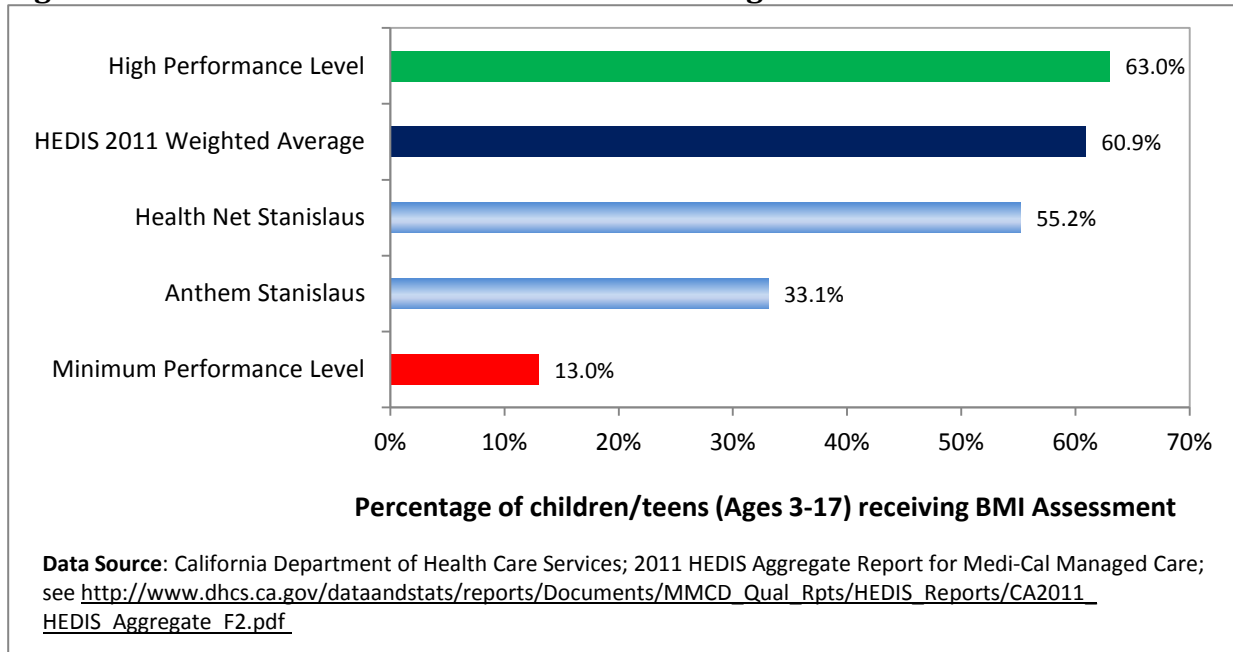
Disparities

- **Race/Ethnicity:** Local physical fitness testing in the 2010-2011 school years showed that race and ethnicity play a role in obesity in childhood.
 - Across all three grades, Latinos had the largest percentage of students with body mass composition not in the HFZ, Blacks had the second largest percentage, and Asians had the lowest percentage (California Department of Education, 2012).
- **Income:** A higher percentage of students (across all three grades) who are socioeconomically disadvantaged have body mass compositions that are not in the HFZ than students who are not socioeconomically disadvantaged (California Department of Education, 2012).
 - The California Department of Education (2011) defines as “socioeconomically disadvantaged” students of which neither parent has received a high school diploma and students who are eligible for the free or reduced-price lunch program, also known as the National School Lunch Program.
 - Low income families are more likely to live in neighborhoods that present barriers to physical activity, such as lack of sidewalks, not having parks and recreation centers that are within easy walking distance, or having gang activity that makes it difficult to exercise outdoors (e.g. Cubbin, Pedregon & Braveman, 2008).

Quality of Clinical Care:

Since 2010, Medi-Cal Managed Care plans have been required to report the percentage of children and adolescents (3-17 years) who had an outpatient visit with a personal care physician or an OB/GYN and who had received BMI assessment. As shown in Figure 18 (on the next page), in 2011, 55.2% of Health Net children/adolescents and 33.1% of Anthem children/adolescents received BMI assessments. Both health plans performed below the HEDIS weighted average.

Figure 18: 2011 HEDIS Measure for Medi-Cal Managed Care: BMI Assessment



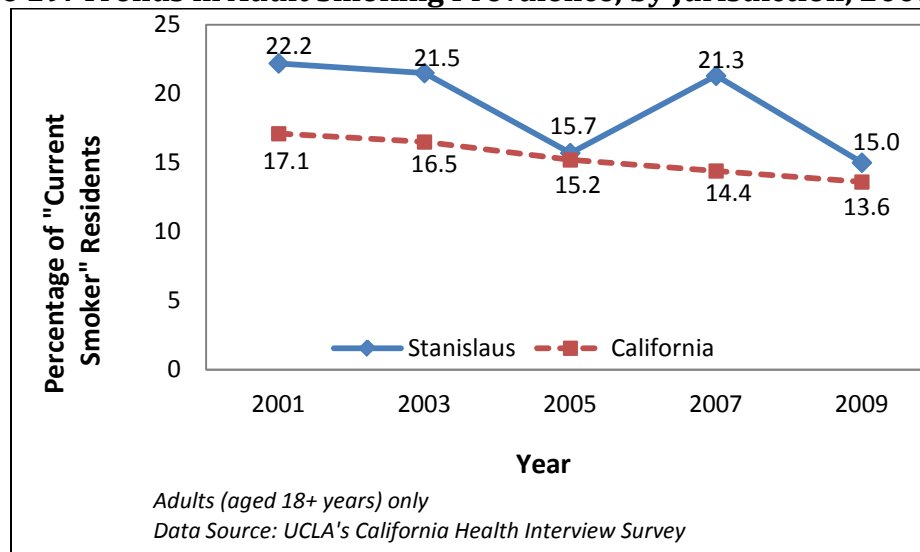
Tobacco Use

Smoking is a known risk factor for many diseases, including cancers (especially lung cancer), heart disease, emphysema and other forms of Chronic Obstructive Pulmonary Disease (Centers for Disease Control and Prevention, 2010b, 2011g). For example, recent research found that smoking causes approximately one-third of all cancers (Colditz, Wollin & Gehlert, 2012).

Trend

- Historically, the prevalence of smoking in Stanislaus residents has been higher than that of California residents (2001-2009 CHIS).
- The prevalence rate in Stanislaus County has not shown a steadily decreasing trend (see Figure 19 on the next page).
- The percentage of Stanislaus residents who smoke decreased 32.4% in the County over the past decade (between 2001 and 2009) a larger decrease than experienced by California as a whole (18.3% decrease).
- Decreases in smoking prevalence are likely the result of major anti-tobacco efforts, including social norm changes.
- Stanislaus restaurants and government buildings went smoke-free in 1994 and 2003 respectively; anti-tobacco campaigns have since reduced public acceptance of smoking and increased assistance to those wishing to stop smoking.

Figure 19: Trends in Adult Smoking Prevalence, by Jurisdiction, 2001-2009



Disparity

- **Gender:** The percentage of Stanislaus adult men who were current smokers is higher than that of women for the time periods 2003-2005 and 2007-2009 (CHIS; see Table 8 below).
- **Age:** In Stanislaus County, 10% of 5th grade students have ever smoked a cigarette (CHKS, 2008-2009). The percentage of students who have smoked at least one whole cigarette rises with age: 10% in 7th grade, 22% in 9th grade, and 30% in 11th grade.
 - Smokeless tobacco use or experimentation is lower, but also rises with age: 6% in 7th grade, 8% in 9th grade and 13% in 11th grade have ever tried smokeless tobacco.
 - These findings indicate that tobacco use starts relatively young and that educational messages and other prevention activities need to begin even younger to be effective.
- **Income:** National research has shown that smoking prevalence is higher in individuals whose household incomes are at or below the federal poverty level (CDC, 2011f). Stanislaus shows a similar pattern (see Table 7).
 - Smoking prevalence in Stanislaus residents who live below the FPL was significantly higher than those who are not living in poverty in 2003-2005 and marginally higher in 2007-2009 (CHIS).
- **Ethnicity:** In the County, smoking prevalence in Latinos also increased between 2003-2005 to 2007-2009, while the smoking prevalence has decreased in non-Latinos (CHIS, see Table 7 on the next page). These changes seem to have eliminated the ethnic disparity in smoking locally.
- **Race:** CHIS data are too unstable to make any conclusions regarding the existence of racial differences in smoking prevalence within Stanislaus County. National data, however, indicate that the group with the highest smoking prevalence is American Indian/Alaska Natives, with a higher percentage of African American/Black and

Caucasian/White smokers than Asian smokers (Centers for Disease Control and Prevention, 2010c).

Table 7: Trends in Adult Smoking Prevalence

Demographic Factor	Smoking Prevalence among Adults (≥18 years)	
	2003-2005	2007-2009
Gender		
Male	20.7%	26.0%
Female	16.7%	10.8%
Poverty Status		
<100 % FPL	30.0%	26.7%
≥100% FPL	16.7%	16.3%
Ethnicity		
Latino	9.5%	20.1%
Non-Latino	22.9%	17.2%

Note: Bold font indicates statistically significant differences.

Data Source: UCLA's California Health Interview Survey

Overview of Chronic Disease Burden

Chronic disease has reached global epidemic proportions (WHO, 2005). The cost of chronic diseases in the United States is enormous. A study released by the Milken Institute (2007) calculated the total economic impact of seven of the most common chronic diseases to be \$1.3 trillion annually, with \$1.1 trillion accounting for lost productivity and \$277 billion being spent on medical treatments. This report reviews local data on the burden of five major chronic conditions and diseases—hypertension, heart disease, stroke, diabetes and asthma.

Hypertension

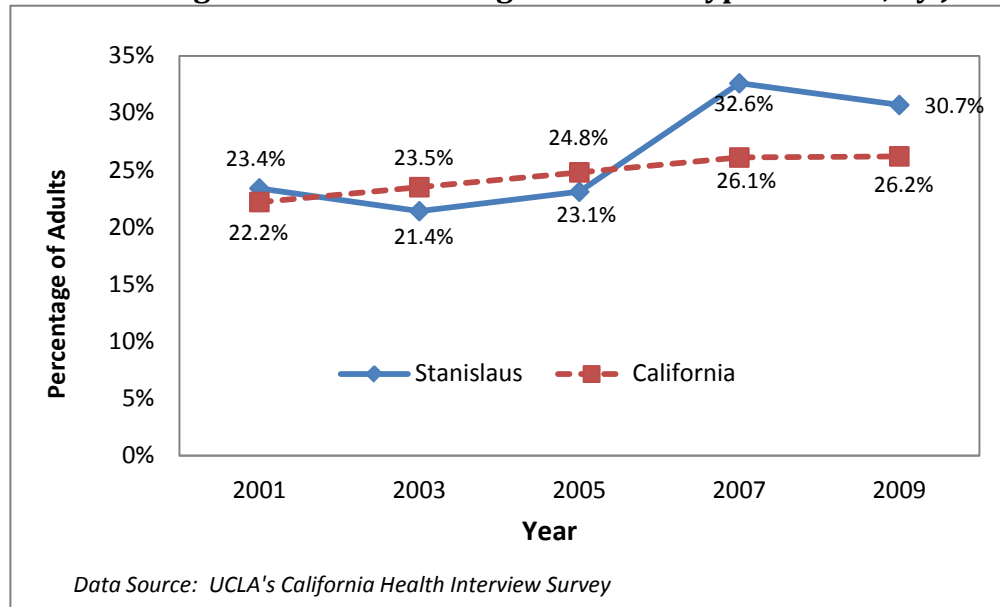
Overview:

In the United States, one in three adults has been diagnosed with hypertension, known more commonly as *high blood pressure* (Centers for Disease Control and Prevention, no date-c). Hypertension is a major risk factor for heart disease (e.g. Centers for Disease Control and Prevention, no date-c). Experts estimate that, in 2010, hypertension cost the US \$76.6 billion in treatment costs and lost productivity (Centers for Disease Control and Prevention, no date-c).

Trends in Prevalence:

- Between 2001 and 2009, the percentage of Stanislaus adults ever diagnosed with high blood pressure increased 31.2%, and by 2007, it had surpassed the percentage of California adults ever diagnosed with high blood pressure (CHIS; see Figure 20 on the next page).

Figure 20: Percentage of Adults Ever Diagnosed with Hypertension, by Jurisdiction



ER Visit Findings:

- Each year, on average, over 1,200 Stanislaus County residents face a visit to an emergency room (ER) due to hypertension (defined as International Classification of Disease [ICD] version 9 codes I10.0-I10.9 corresponding to *Essential Hypertension and Renal Disease*), for an age-adjusted ER visit rate of 257.5 per 100,000 people (Emergency Department and Ambulatory Surgery model dataset, 2006-2010).

Trends in Hospitalization:

- Approximately 269 Stanislaus County residents are hospitalized with a primary cause of hypertension (defined with the same ICD-9 codes as above) each year (Patient Discharge Data model dataset, 2008-2010).
- Hypertension (defined with the same ICD-9 codes as above) was the 13th most common primary cause of hospitalization in Stanislaus County from 2008-2010.
- During this period, the average charge for a single hospitalization of a Stanislaus County resident with a primary diagnosis of hypertension was \$87,180, for a total cost of \$70,267,388 per year.

Avoidable Hospitalizations – Prevention Quality Indicators (PQIs)

- The federal Agency for Healthcare Research and Quality (no date) has designated a number of factors as *Prevention Quality Indicators (PQIs)* to indicate causes of hospitalization that could have been prevented by primary prevention, early intervention or outpatient care. See Appendix A for a complete list.
- In Stanislaus County, hypertension is the 8th most frequent hospital admission out of the 13 PQIs (Office of Statewide Health Planning and Development, 2011), indicating that ambulatory care for hypertension in the County could be improved.

Mortality:

- Hypertension (defined as International Classification of Disease version 10 codes N0.0-N7.9, N17.0-N19.9 or N25.0-N27.9 corresponding to *Nephritis, Nephrotic Syndrome and Nephrosis*) is the 11th ranked cause of death in Stanislaus County (Death statistical master files, 2008-2010), causing an average of 49 deaths per year.
- Hypertension is the 13th leading cause of Years of Potential Life Lost (YPLLs) in the County, with a total of 119 years of potential life lost due to hypertension-caused premature mortality each year (Death statistical master files, 2008-2010). On average, a Stanislaus County resident who dies from hypertension loses 4.1 years of potential life.
- The average age at death due to hypertension in Stanislaus County is 79.6 years (Death statistical master files, 2008-2010).

Disparities:

- **Gender:** There are no local significant differences in hypertension prevalence (2001-2009 CHIS), rates of hospitalization (2000-2010 PDDF) or deaths due to hypertension (2008-2010 DSMF). However, females are significantly more likely to be hospitalized for hypertension than males, even after age-adjustment.
- **Ethnicity:** A higher percentage of Non-Latinos report being diagnosed with hypertension than Latinos (34.9% vs. 24.9%; 2007 & 2009 pooled CHIS). Similarly, Non-Latinos are at higher risk for ER visit (2008-2010), hospitalization (2008-2010) and death (2008-2010) from hypertension. Whether these differences are due to differences in health care access, health seeking behavior or actual disease incidence, prevalence or severity is unclear.
- **Race:** African Americans and Whites have the highest prevalence of hypertension locally, with Asians having the lowest prevalence, mirroring national trends (2007 & 2009 pooled CHIS).
- **Income/Poverty Level:** CHIS data show no local significant difference in hypertension prevalence by income (2007 & 2009).
- **Geography:** Table 8 below shows the County Regions with the highest age-adjusted ER rates, hospitalization rates and mortality rates for hypertension. See Figure 21 for the regional map of the age-adjusted ER visit rates, Figure 22 for the regional map of the age-adjusted hospitalization rates and Figure 23 for the regional map of the age-adjusted mortality rates of hypertension in Stanislaus residents.

Table 8: Geographic Disparities in Hypertension Morbidity and Mortality

Medical Care and Mortality Outcomes for Hypertension	County Region
Highest Age-Adjusted ER Rate	East Central
Highest Age-Adjusted Hospitalization Rate	East Central
Highest Age-Adjusted Mortality Rate	Southwest Central

Figure 21:

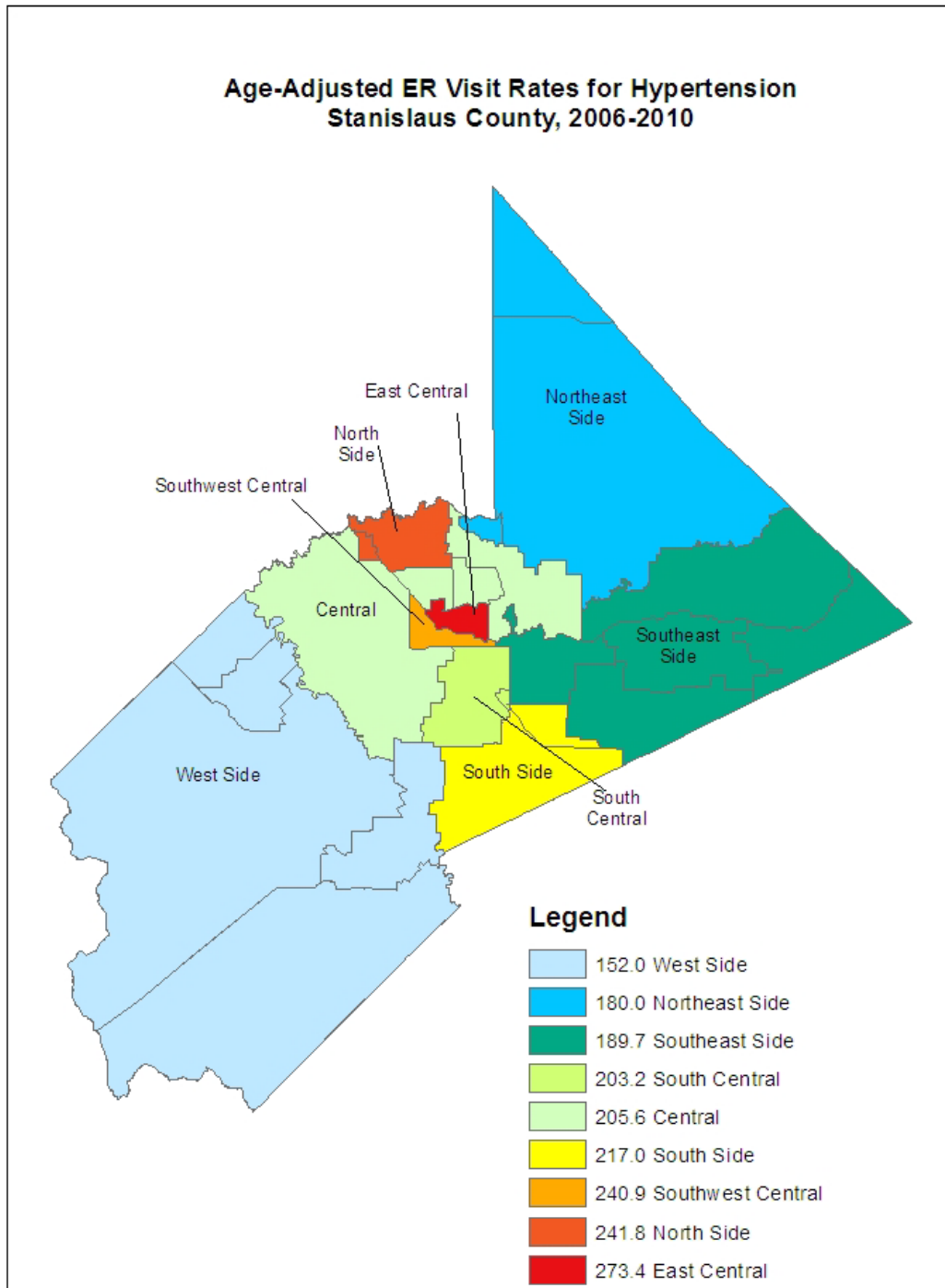


Figure 22:

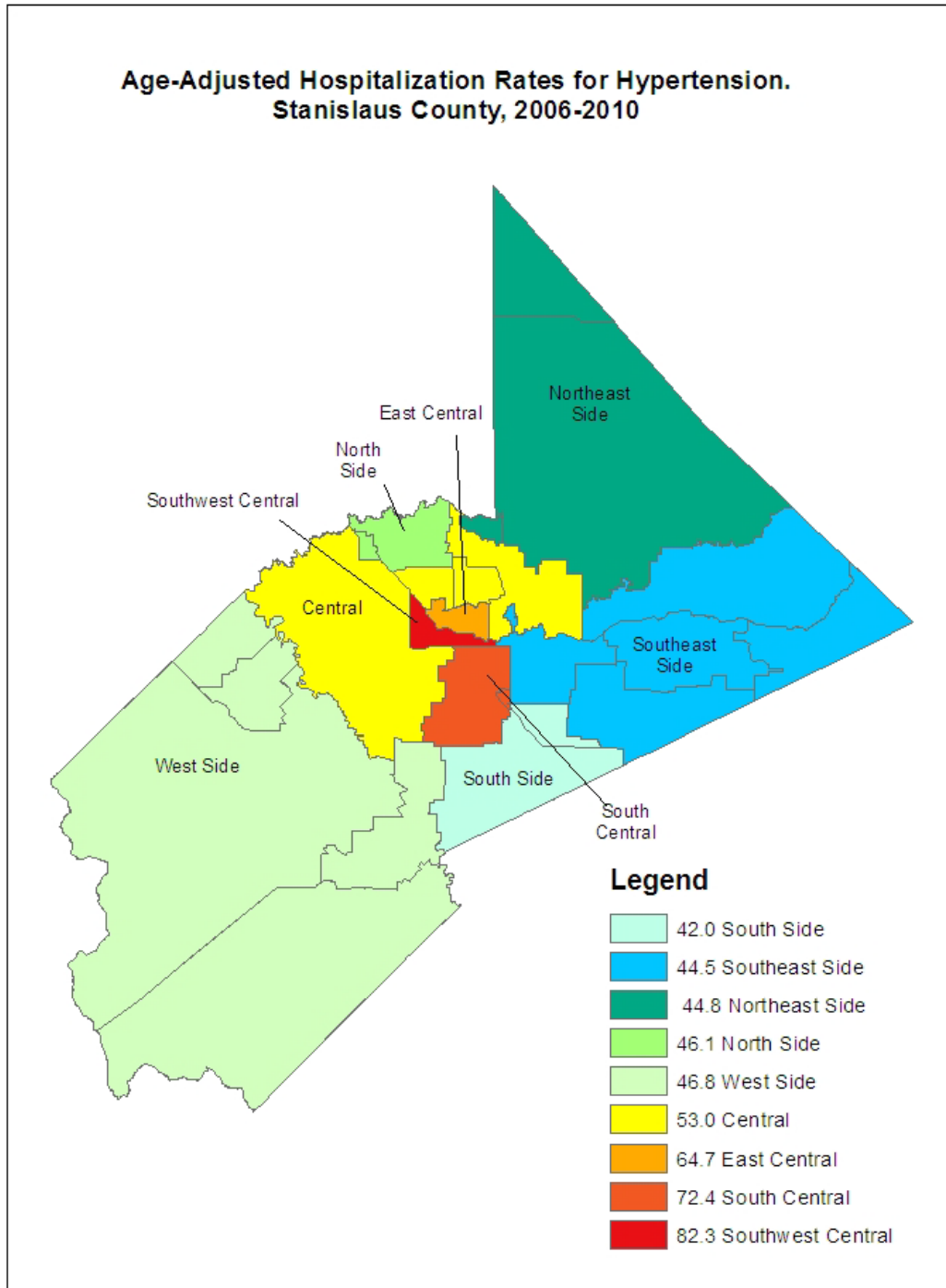
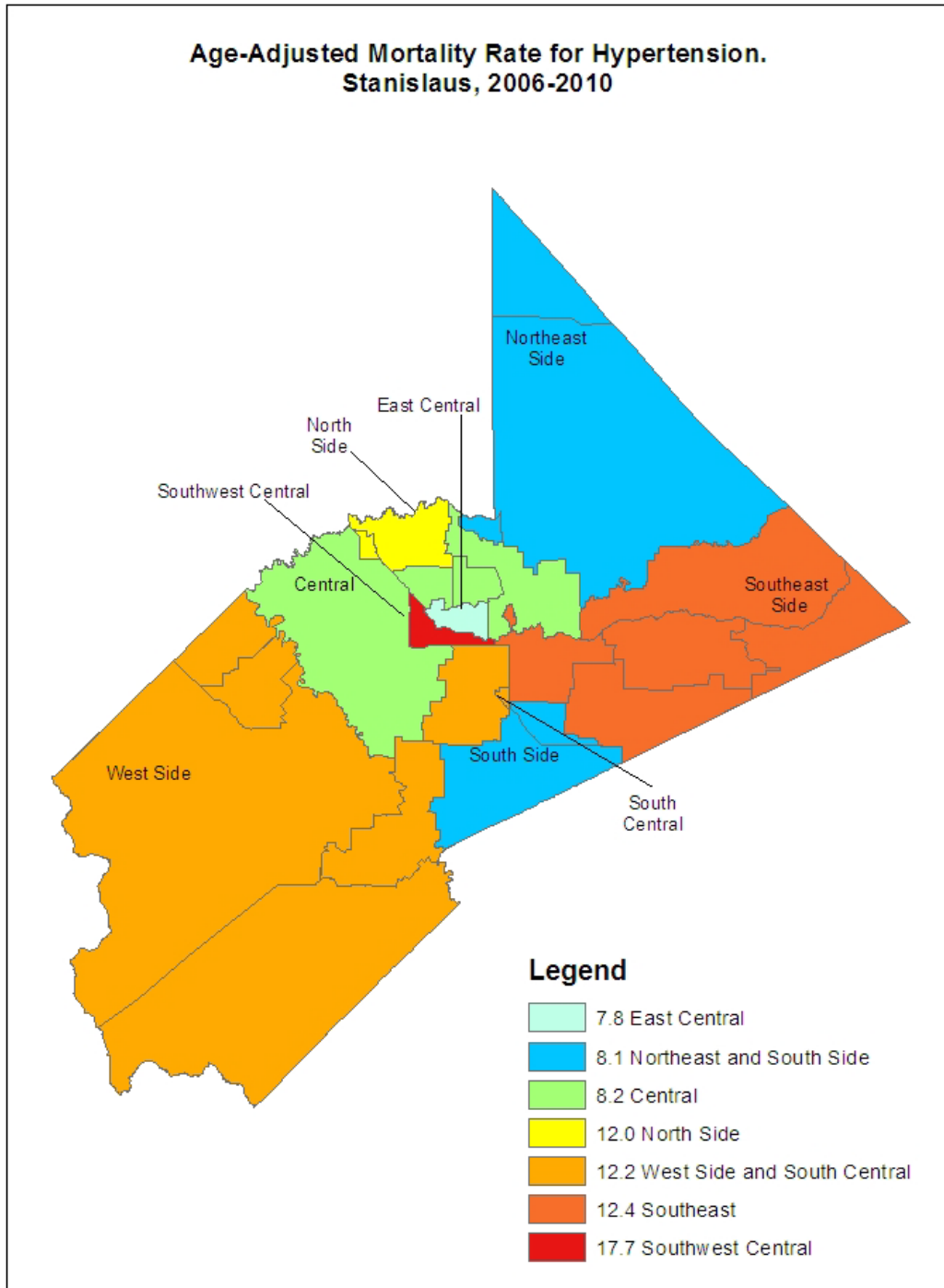


Figure 23:



Heart Disease

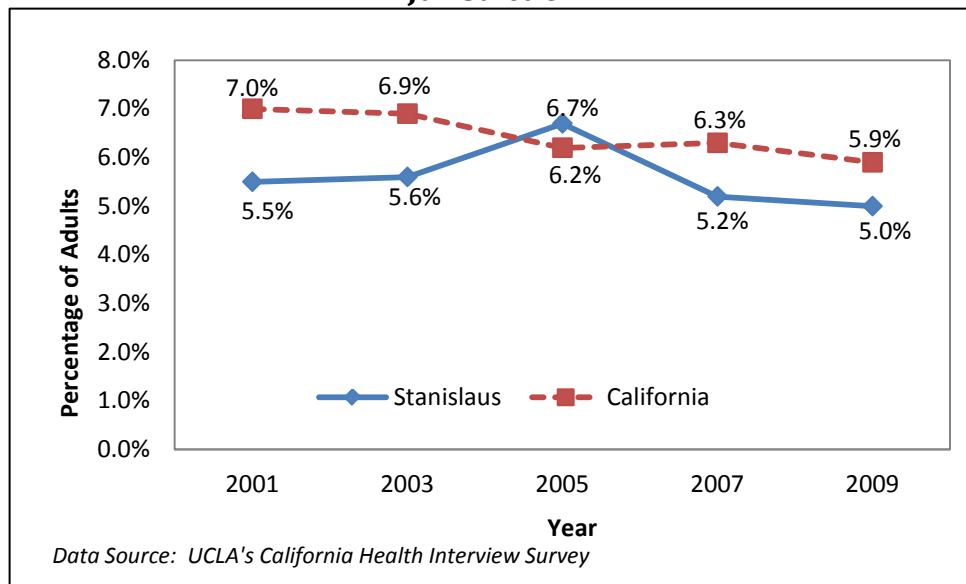
Overview:

Nationally, 12% of adults have been diagnosed with heart disease (Vital and Health Statistics, 2010). Heart disease is the leading cause of death in the US (Hoyert & Xu, 2012).

Trends in Prevalence:

- Between 2001 and 2009, the percentage of Stanislaus residents diagnosed with heart disease was fairly steady, with CHIS estimates varying between 5.0% and 6.7%.
- In California, the percentage of residents diagnosed with heart disease decreased 15.7% between 2001 and 2009. The percentage of adults in California ever diagnosed with heart disease has generally been higher than the percentage of Stanislaus adults (see Figure 24).

Figure 24: Percentage of Adult Residents Ever Diagnosed with Heart Disease by Jurisdiction



Quality of Clinical Care

Prevention Quality Indicators (PQIs):

- AHQC has three PQIs relevant to management of heart disease: the rates of hospitalization for congestive heart failure, angina without procedure and hypertension.
- As Table 9 on the next page shows, in 2011, Stanislaus County had worse performance in the first two of these three indicators than the state of California, indicating improvement is possible in the clinical management of heart disease in the primary care setting.

Table 9: Hospitalization Rates* for Heart Disease-Relevant Prevention Quality Indicators (PQI) in Stanislaus, 2011

Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicators	Stanislaus	California
Congestive heart failure	358.9	300.5
Hypertension	45.7	36.6
Angina without procedure	23.1	23.6

**Age-adjusted annual rates per 100,000 hospitalizations of jurisdiction residents.*

ER Visit Findings:

- On average, over 1,250 ER visits by Stanislaus residents for heart disease (defined as International Classification of Disease version 9 codes 401.0-405.90, corresponding to Hypertension and Hypertensive Disease) occur each year for an age-adjusted ER visit rate of 87.3 per 100,000 (Emergency Department and Ambulatory Surgery model dataset, 2008-2010).

Trends in Hospitalizations:

- On average, 2,278 hospitalizations of Stanislaus County residents for heart disease occur each year, making heart disease the 3rd most common primary cause of hospitalization in Stanislaus County (Patient Discharge Data model dataset, 2008-2010).
- Between 2008 and 2010, each hospitalization, for a Stanislaus County resident with a primary diagnosis of heart disease, cost \$143,514 for an annual cost to county residents of \$980,629,089.

Mortality:

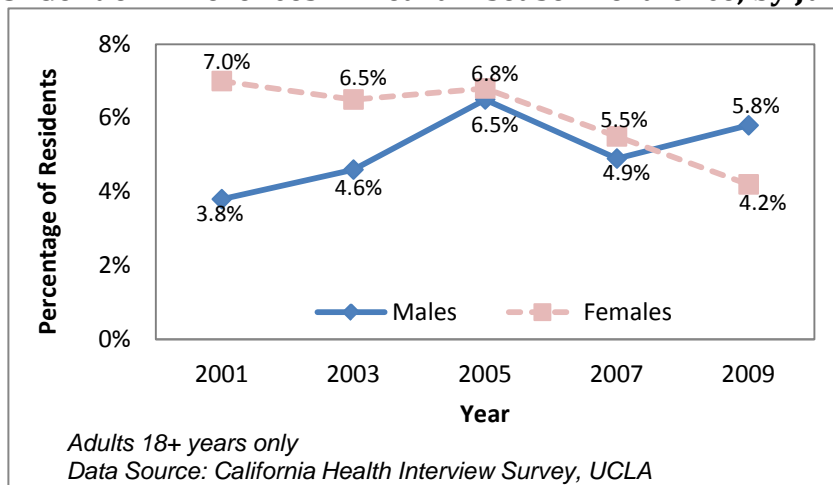
- Heart disease (defined as International Classification of Disease version 10 codes N0.0-N7.9, N17.0-N19.9, corresponding to Essential Hypertension and Renal Disease) is the number one cause of death in Stanislaus, with an average of 994 deaths due to heart disease annually (Death Statistical Master Files, 2008-2010).
- Between 2008 and 2010, 27.8% of Stanislaus residents' deaths had heart disease as their underlying cause.
- Heart disease is also the 10th leading cause of Years of Potential Life Lost (YPLLs) in the County.
- On average, a Stanislaus County resident who dies early from heart disease loses 5.2 years of potential life (based on 2006-2010), for a total of over 5,100 years of potential life lost by Stanislaus County residents each year.
- However, heart disease mortality is decreasing. Between 2000-2002 and 2007-2009, the age-adjusted heart disease mortality rate dropped locally by 27.6%.

Disparities:

- **Age:** The risk of heart disease and need for health care services to treat and manage it increases with age.
- **Gender:** In 2001, the percentage of adult women who were ever diagnosed with heart disease (7.0%) was higher than that of men (3.8%). However, by 2005, the gender difference was statistically insignificant (see Figure 25 on the next page).

- Men are at higher risk of hospitalization than women and experience significantly more YPLL than women due to heart disease.

Figure 25: Gender Differences in Heart Disease Prevalence, by Jurisdiction



- **Ethnicity:** Countywide data from CHIS was too unstable to provide reliable ethnic prevalence rates of diagnosed heart disease. However, the 2010 National Health Interview Survey (Centers of Disease Control and Prevention, 2012c) found that Non-Latinos have a slightly higher prevalence than Latinos (11.9% vs. 8.3%).
 - In Stanislaus, Non-Latinos are at greater risk of ER visits, hospitalizations and death due to heart disease.
 - However, Latinos suffer significantly more YPLL from heart disease.
- **Race:** Countywide data from CHIS was too unstable to provide reliable race-specific prevalence rates of diagnosed heart disease.
 - Data from the 2010 National Health Interview Survey (Centers for Disease Control and Prevention, 2012c) indicates that a higher percentage of Blacks were ever told that they had heart disease than Whites and Asians, while a higher percentage of Whites reported having been diagnosed compared to Asians.
- **Income/Poverty:** Countywide CHIS estimates of the prevalence of heart disease stratified by poverty status were too unstable to provide reliable information.
- Nationally, education and poverty level are inversely associated with heart disease prevalence (Centers for Disease Control and Prevention, 2012c). As education level increases, the percentage of adults with heart disease decreases.
- A higher percentage of adults living below the FPL reported having heart disease in the 2010 National Health Interview Study than did adults who were not poor.
- **Geography:** Table 10 (on the next page) shows the County Regions with the highest age-adjusted ER rates, hospitalization rates and mortality rates for heart disease. See Figure 26 for the regional map of the age-adjusted ER visit rates, Figure 27 for the regional map of the age-adjusted hospitalization rates and Figure 28 for the regional map of the age-adjusted mortality rates of heart disease in Stanislaus residents.

Table 10: Geographic Disparities in Heart Disease Morbidity and Mortality

Medical Care and Mortality Outcomes for Heart Disease	County Region
Highest Age-Adjusted ER Rate	Northeast Side
Highest Age-Adjusted Hospitalization Rate	Southeast Side
Highest Age-Adjusted Mortality Rate	East Central

Figure 26:

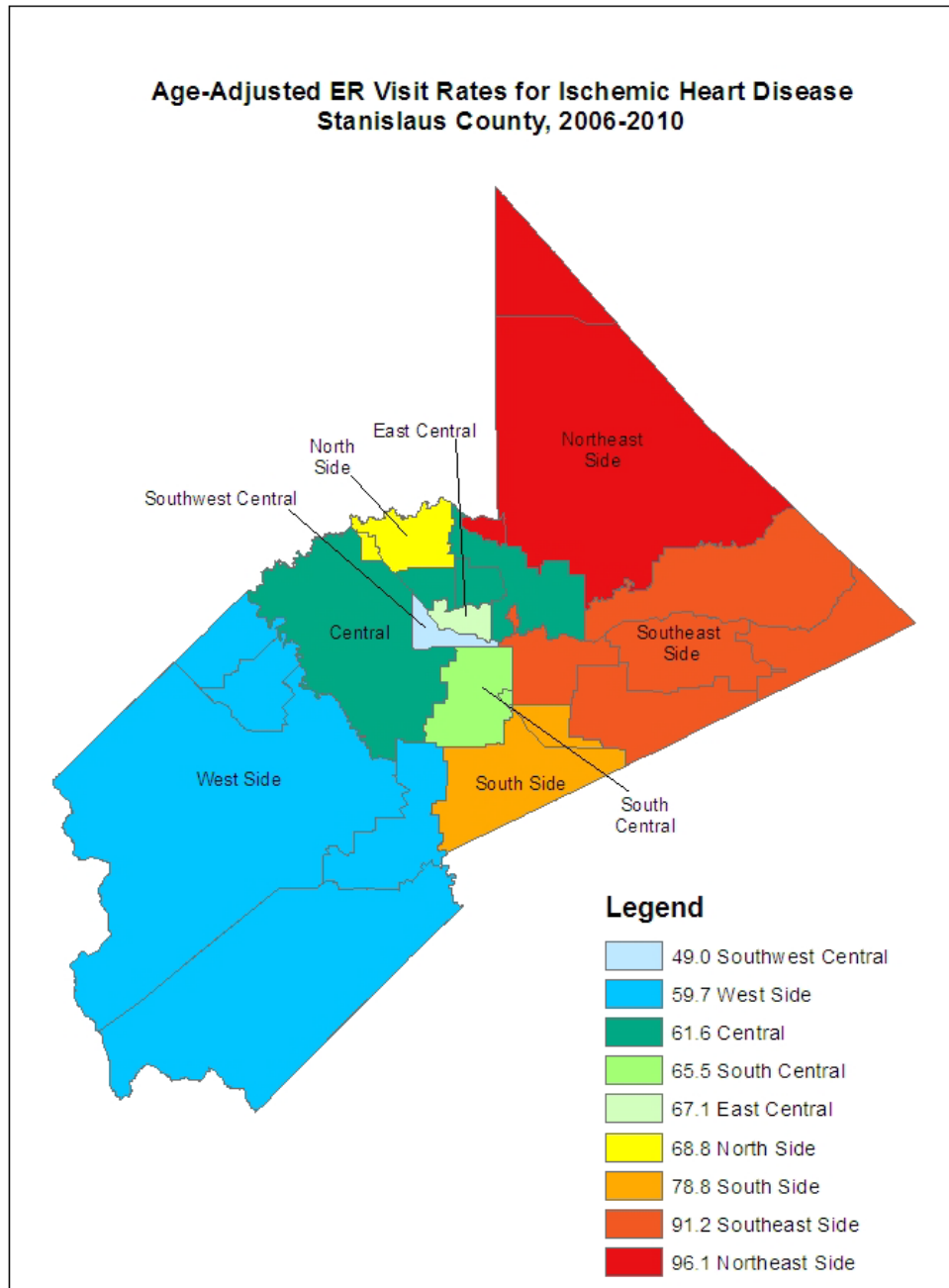


Figure 27:

**Age-Adjusted Hospitalization Rate for Ischemic Heart Disease
Stanislaus County, 2006-2010**

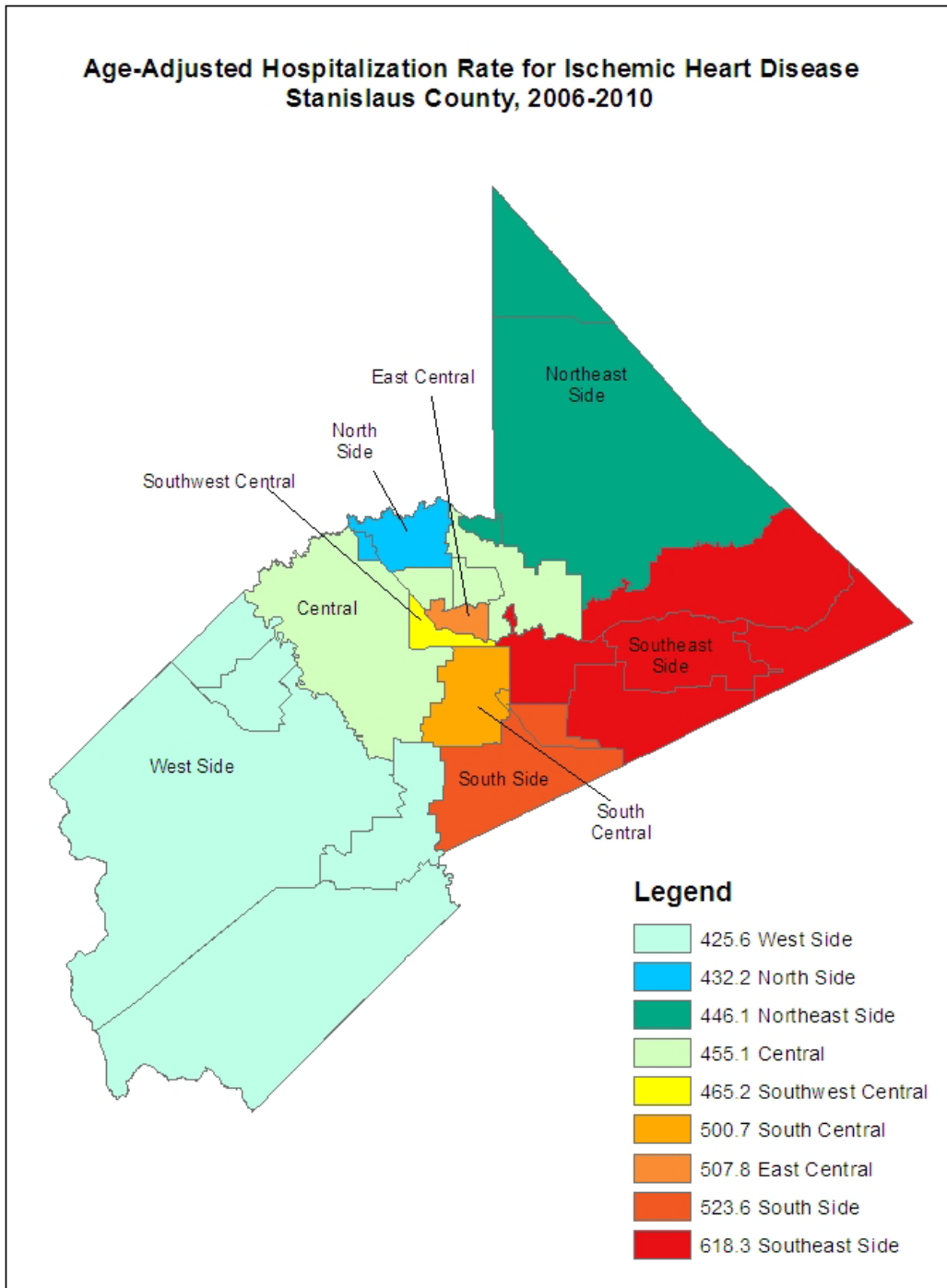
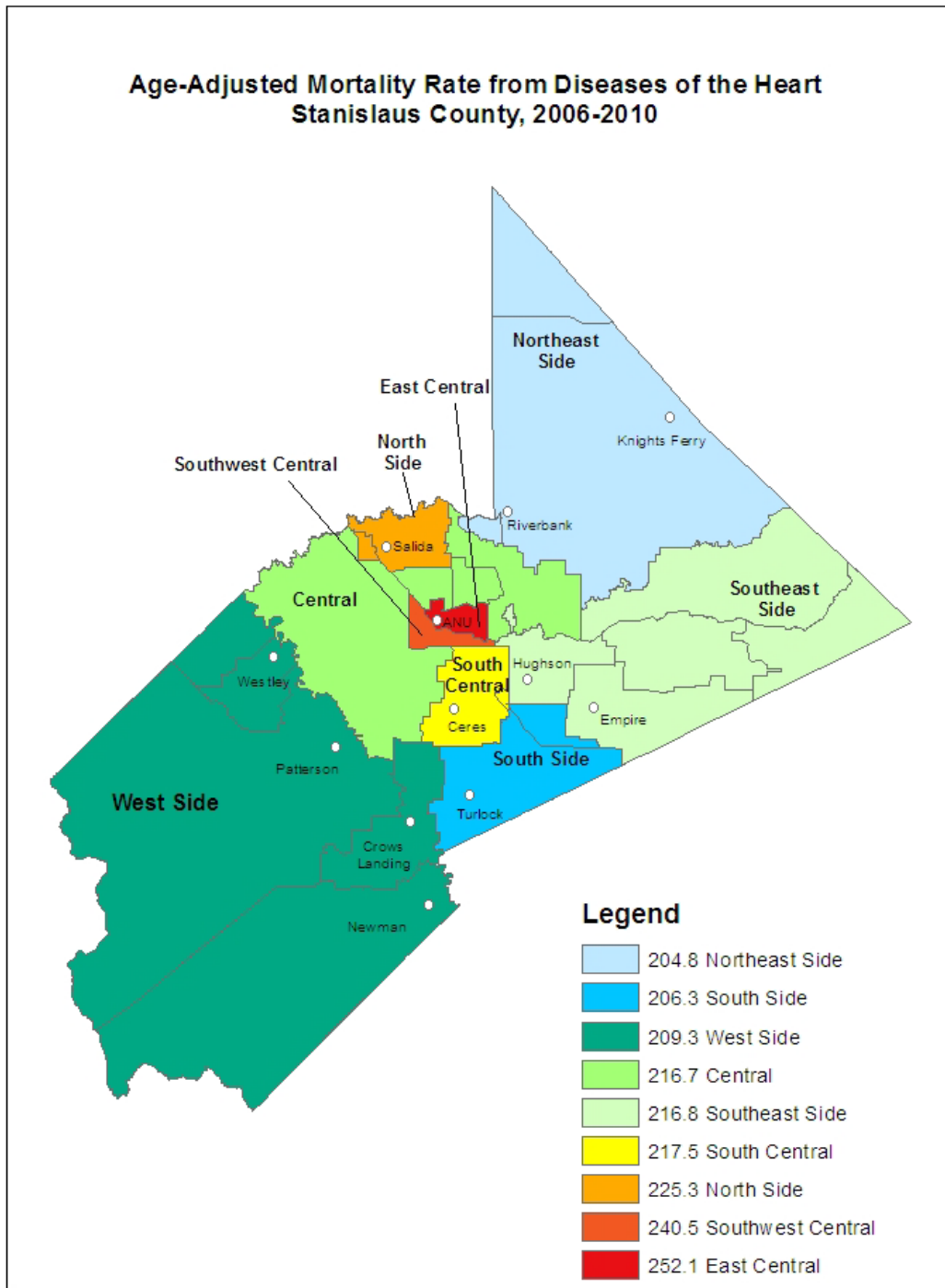


Figure 28:

Age-Adjusted Mortality Rate from Diseases of the Heart
Stanislaus County, 2006-2010



Cancer

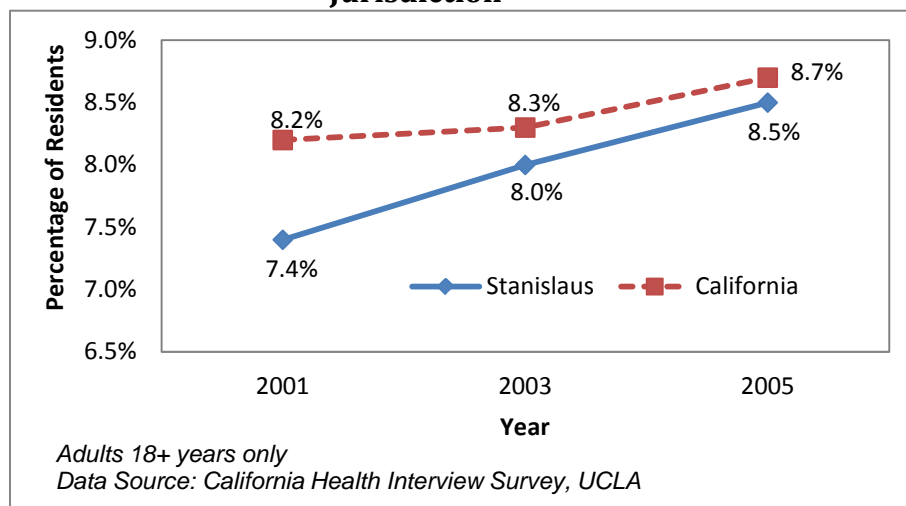
Overview

- Cancer is characterized by the uncontrolled growth of abnormal cells (CDPH, 2013)
- Many types of cancer are curable if detected early and treated properly.
- The risk of developing cancer can be reduced by lifestyle changes, such as tobacco cessation, sun avoidance, being physically active and adopting healthier eating habits.

Trends in Prevalence:

- The California Health Interview Survey has not consistently tracked the prevalence of cancer (overall) or of individual types of cancer.
- A higher percentage of adults in California have ever been diagnosed with any kind of cancer, compared to Stanislaus adults (see Figure 29).
- The percentage of Stanislaus residents ever diagnosed with any kind of cancer increased from 7.4% in 2001 to 8.5% in 2005 (Figure 29).

Figure 29: Percentage of Adult Residents Ever Diagnosed with any Kind of Cancer, by Jurisdiction

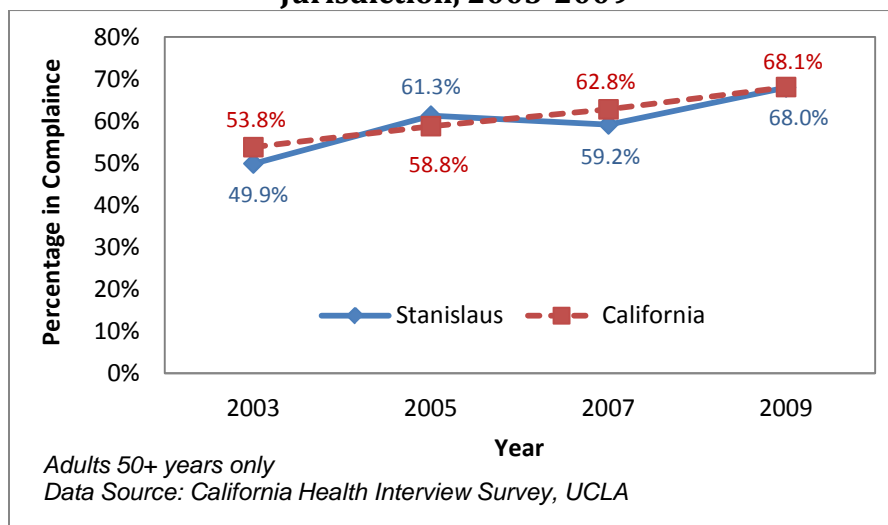


Access to and Quality of Clinical Care: Cancer Screenings

For some types of cancer, survival rates can be drastically improved if the cancer is diagnosed early, at a time when cancer is most curable (CDPH, 2013). For common cancers such as breast, prostate, colon and rectum, cervix and melanoma of the skin, five-year relative survival rates are 93% to 100% if the cancers were diagnosed early and they haven't spread beyond the organ of origin.

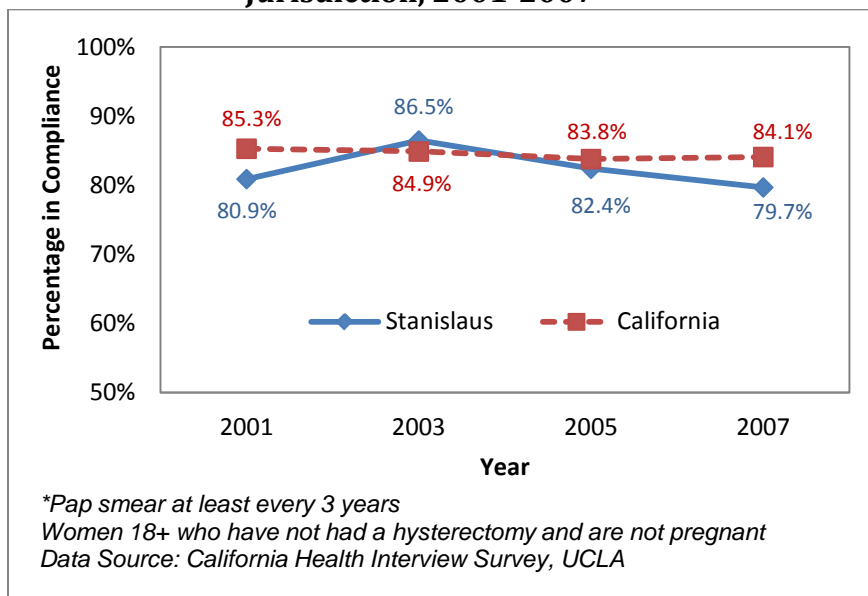
- The California Health Interview Survey (CHIS) tracks data for colorectal cancer screening, cervical cancer screening, mammograms, physician breast lump checks and prostate-specific antigen (PSA) tests.
 - Compliance with colorectal cancer screening recommendations was roughly the same between Stanislaus and California adults over the age of 50. Compliance slightly increased between 2003 and 2009, for both Stanislaus and Californian adults (see Figure 30).

Figure 30: Compliance with Colorectal Cancer Screening Recommendations, by Jurisdiction, 2003-2009



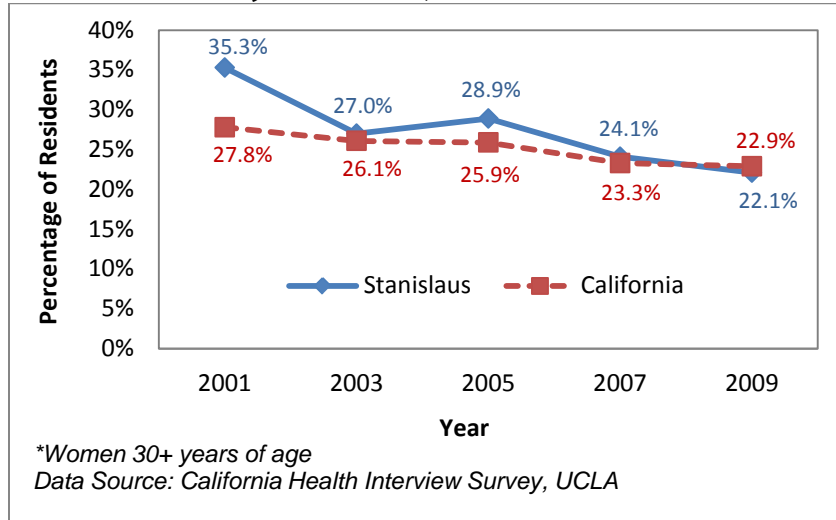
- Compliance with cervical cancer recommendations was generally slightly better in California than in Stanislaus. Between 2001 and 2007, a higher percentage of adult women in California than in Stanislaus had a pap smear in the last three years (with the exception of 2003; see Figure 31).

Figure 31: Compliance with Cervical Cancer Screening Recommendations*, by Jurisdiction, 2001-2007



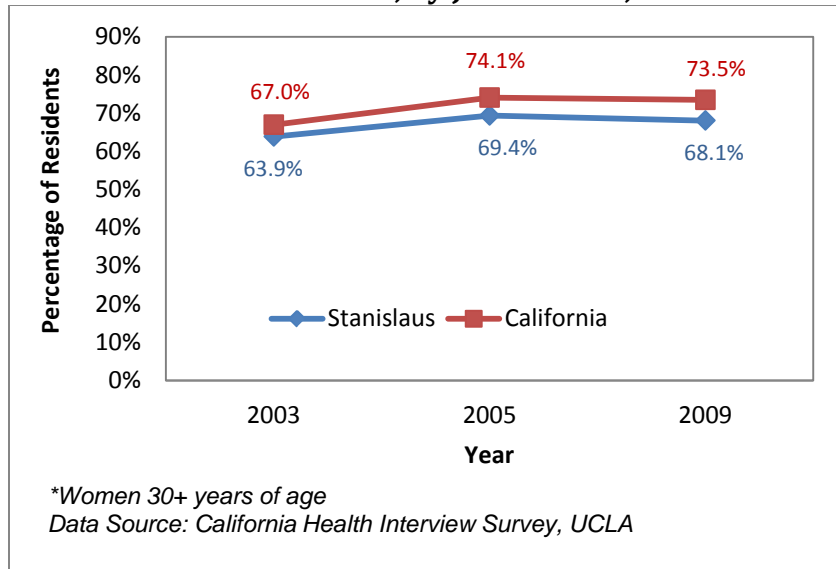
- Between 2001 and 2009, the percentage of women who have never had a mammogram is consistently higher in Stanislaus than in California. However, the trend is showing improvement in Stanislaus (see Figure 32).

Figure 32: Percentage of Women Who Have Never Had a Mammogram*, by Jurisdiction, 2001-2009



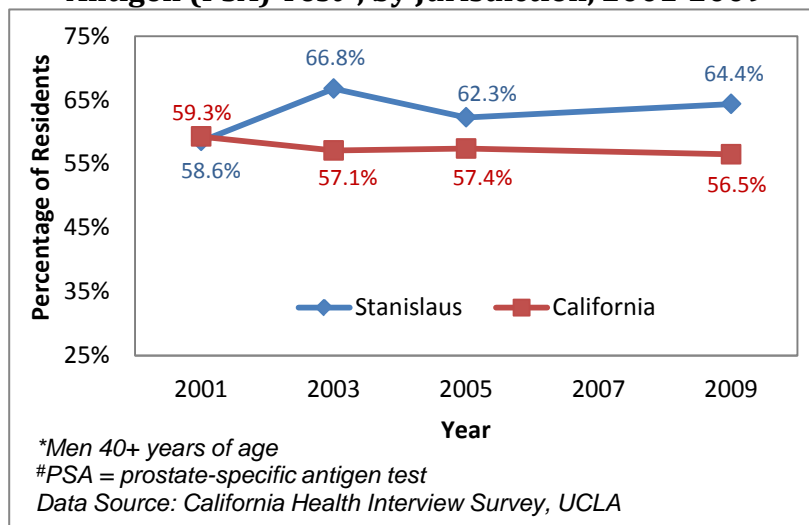
- Between 2003 and 2009, the percentage of women who received a physician breast lump check in the past year was consistently lower in Stanislaus than in California (see Figure 33).

Figure 33: Percentage of Women Who Received a Physician Breast Lump Check in the Past 12 Months*, by Jurisdiction, 2003-2009



- Between 2001 and 2009, the percentage of men who have never had a prostate-specific antigen (PSA) test was consistently higher in Stanislaus than in California. Data for 2007 is unavailable (see Figure 34).

Figure 34: Percentage of Men Who Have Never Had a Prostate-Specific Antigen (PSA) Test*, by Jurisdiction, 2001-2009



ER Visit Findings:

- Each year, approximately 120 visits, on average, are made by Stanislaus County residents to an emergency room due to some type of cancer (defined as International Classification of Disease version 9 codes 140.0-209.9 or 230.0-234.9).
- The local age-adjusted ER visit rate for cancer is 25.2 per 100,000 (2006-2010 EDAS).

Trends in Hospitalization:

- Typically, more than 1,560 Stanislaus residents are hospitalized due to cancer annually, making cancer (all types) the 6th most common primary cause of hospitalization (defined with the same ICD-9 codes as above) in Stanislaus County from 2008-2010.
- The age-adjusted hospitalization rate for cancer is 323.0 per 100,000 (2006-2010).
- Between 2006 and 2010, each hospitalization of a Stanislaus County resident with a primary diagnosis of cancer (any type) cost \$79,469, for an annual cost of \$307,227,248.

Mortality:

- Cancer (defined as International Classification of Disease version 10 codes ICD 10 codes I60.0 – I69.8) is the 2nd ranked cause of death in Stanislaus County, causing on average over 750 deaths per year (21.4% of all deaths).
- Cancer causes an average of 6,220 years of potential life lost (YPPL) per year in the County, 8.1 years per death. It is the 7th leading cause of YPPL; 2006-2010 DSMF).
- The average age at death from cancer in the County is 51.3 years.
- Stanislaus County saw a 10.4% decline in the age-adjusted mortality rate from cancer 2000-2002 (185.4 per 100,000) and 2008-2010 (166.2 per 100,000).

Disparities:

- **Age:** Like most chronic diseases, mortality from cancer increases dramatically with age, with the highest rates in the 65+ age group.
- **Gender:** Females have a higher hospitalization rate for cancer than males while males have a dramatically higher (by ~1/3) mortality rate than females.
- **Ethnicity:** In Stanislaus County, non-Latinos have significantly higher age-adjusted rates of ER visitation, hospitalization and mortality due to cancer than do Latinos.
- **Race:** Whites have statistically significantly higher ER visit rates for cancer than Asians, Whites have higher hospitalization rates than Blacks, who in turn have higher hospitalization rates than Asians, and mortality rates are higher for Blacks and Whites than for Asians.
- **Geography:** Table 11 shows geographic disparities in cancer burden. See Figure 35 for the regional map of the age-adjusted ER visit rates, Figure 36 for the regional map of the age-adjusted hospitalization rates and Figure 37 for the regional map of the age-adjusted mortality rates of cancer in Stanislaus residents.

Table 11: Geographic Disparities in Cancer Morbidity and Mortality

Medical Care and Mortality Outcomes for Cancer	County Region
Highest Age-Adjusted ER Rate	East Central
Highest Age-Adjusted Hospitalization Rate	Southeast
Highest Age-Adjusted Mortality Rate	East Central

Figure 35:

**Age-Adjusted ER Visits for Cancer
Stanislaus County, 2006-2010.**

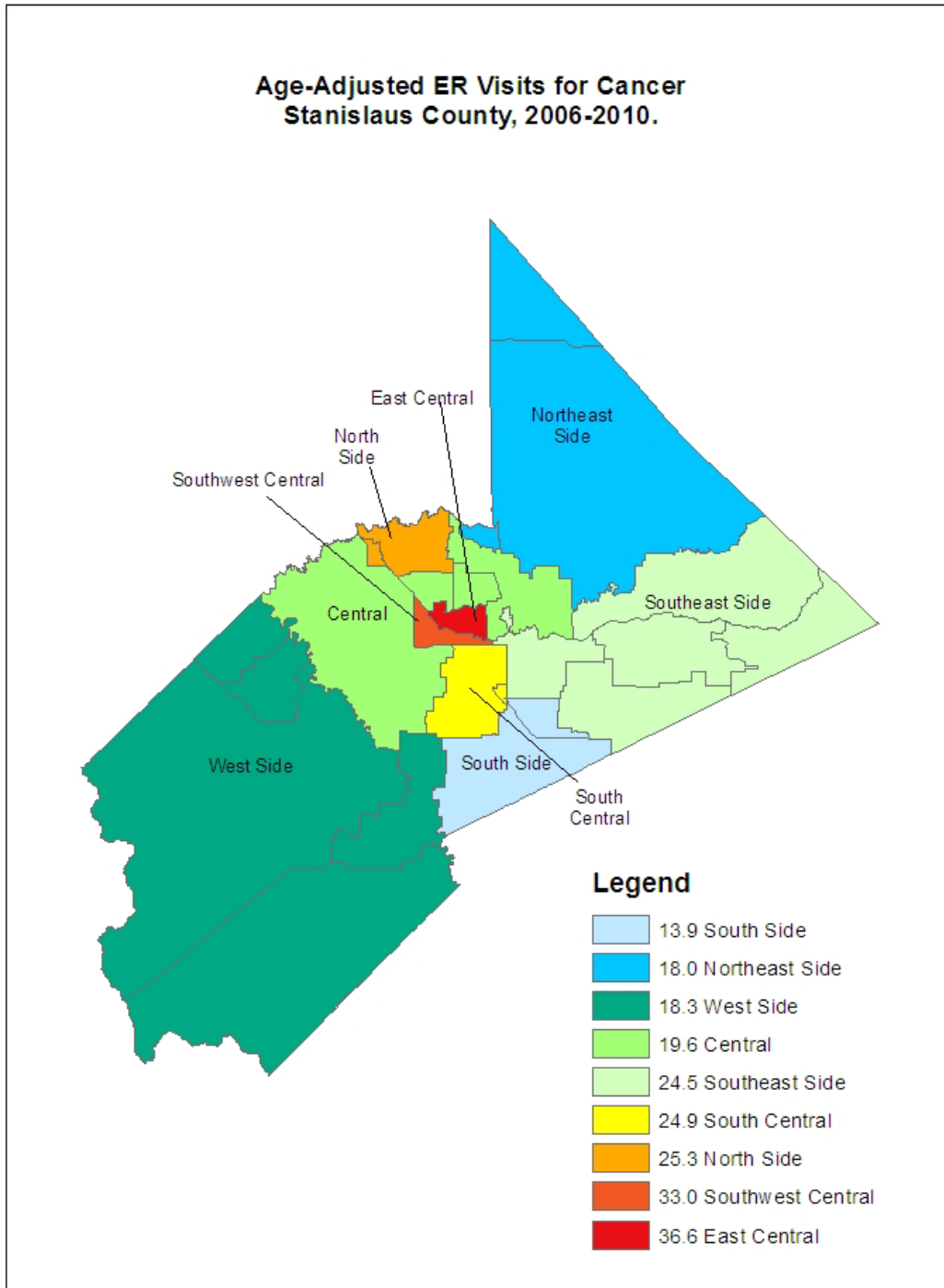


Figure 36:

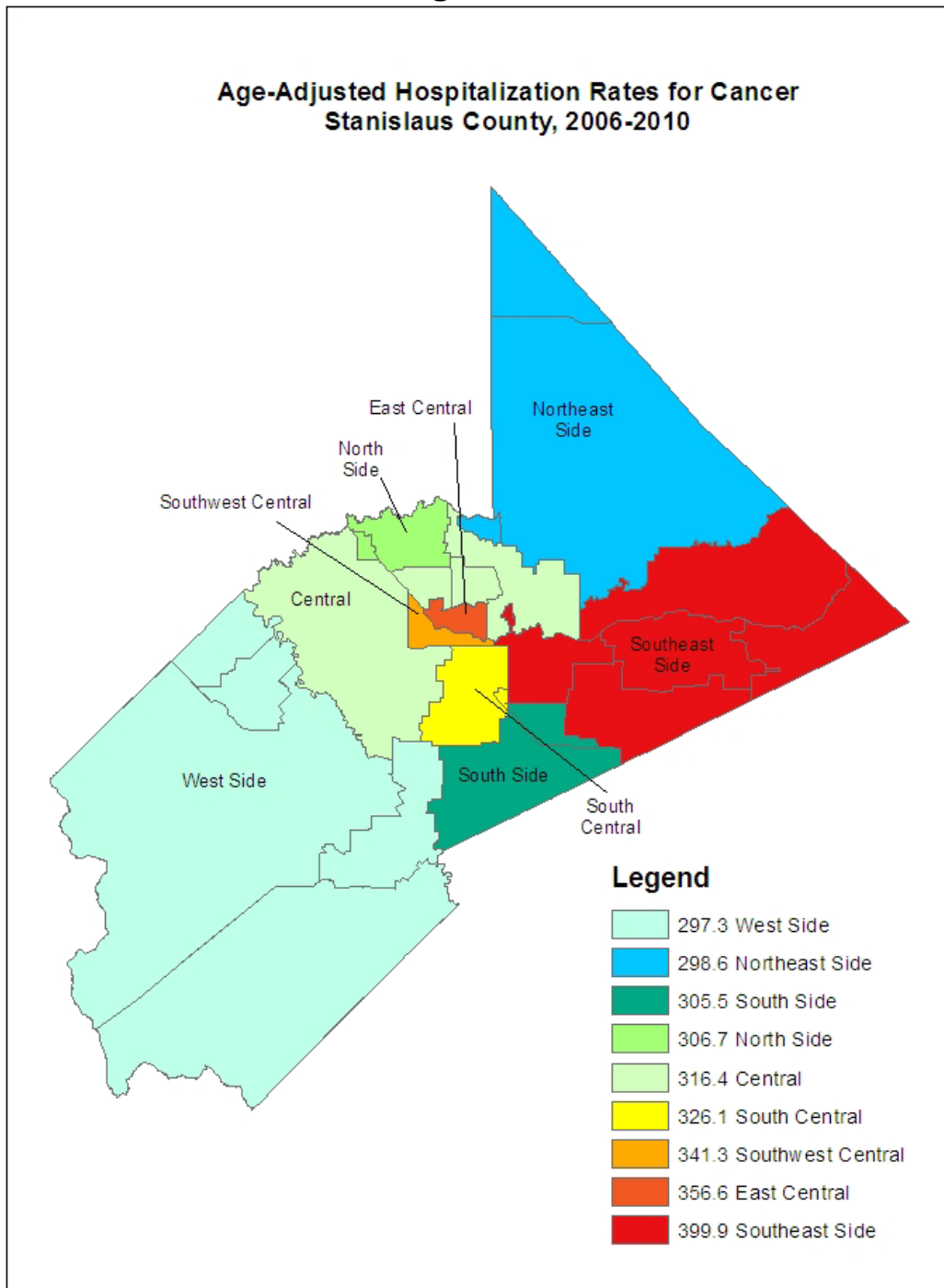
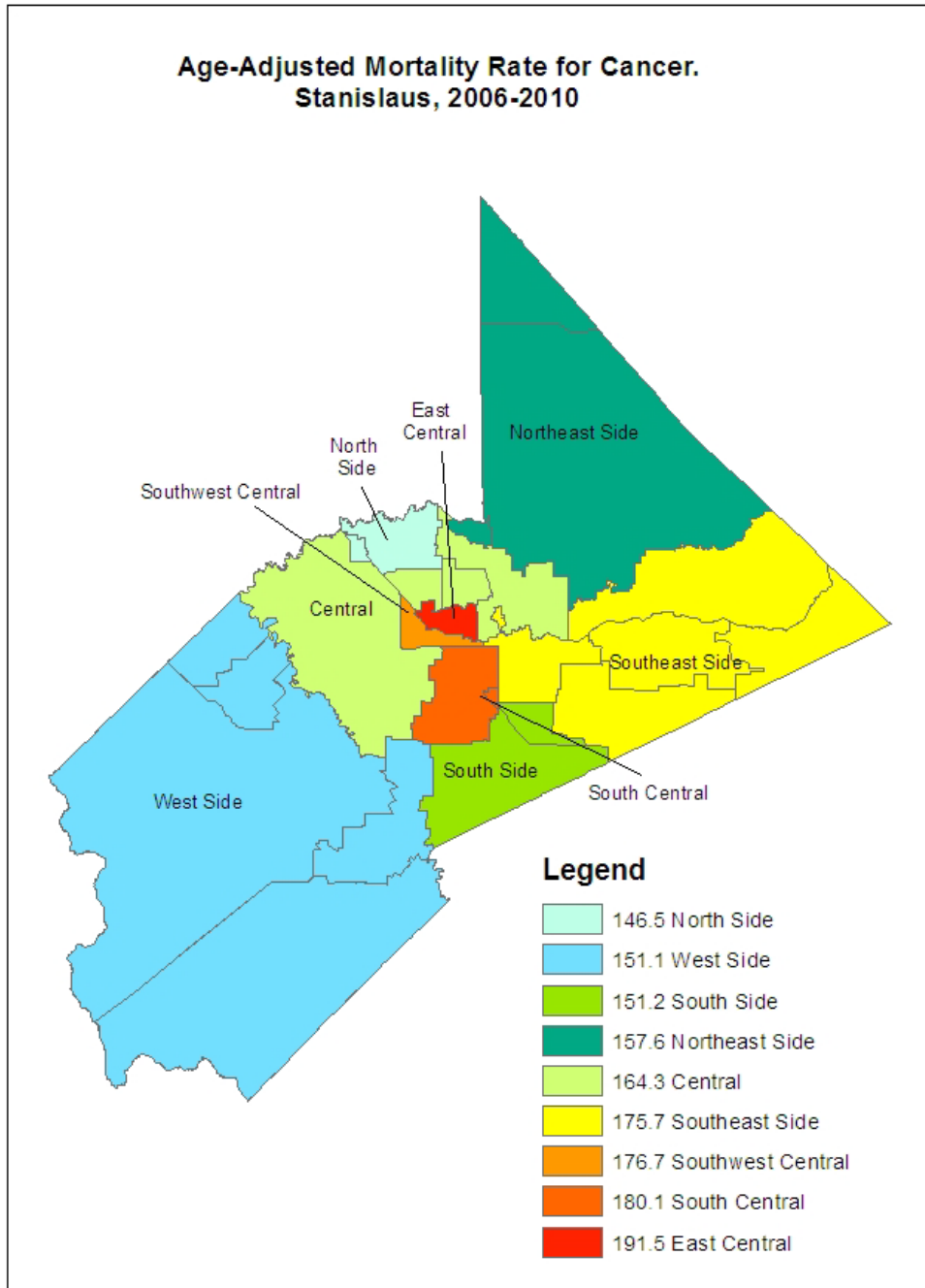


Figure 37:

**Age-Adjusted Mortality Rate for Cancer.
Stanislaus, 2006-2010**



Diabetes

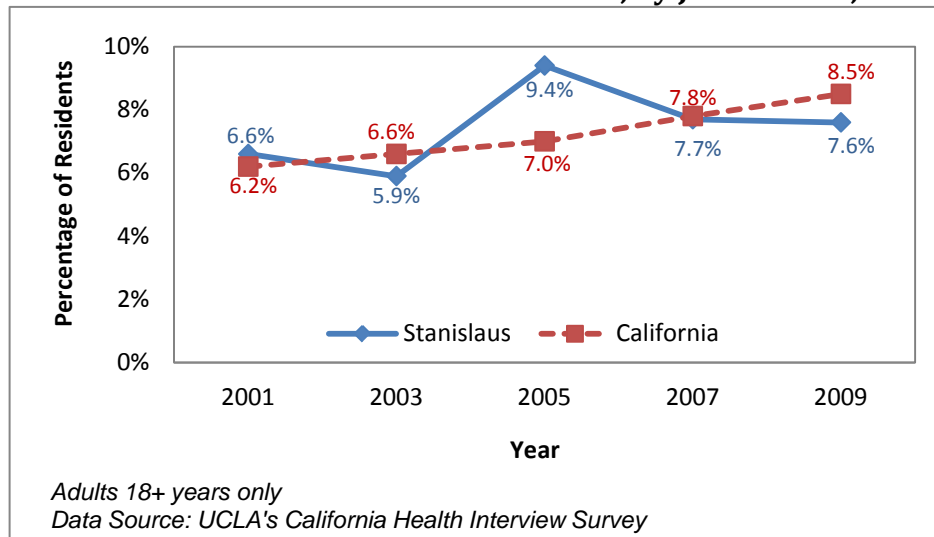
Overview

- Diabetes comes in two common forms: Type I, or what formerly was called juvenile-onset diabetes, and Type II, also termed adult-onset diabetes. Type I diabetes occurs when the body's immune system destroys pancreatic beta cells which produce insulin. It is not known whether Type I diabetes can be prevented. Type II diabetes, however, is preventable through adopting a healthier lifestyle.
- According to the Centers for Disease Control and Prevention (2011b), diabetes affects 8.3% of the US population, or 25.8 million Americans.
- Diabetes complications include kidney disease, hypertension, amputations and blindness (Centers for Disease Control and Prevention, 2011b).
- Diabetes is the seventh leading cause of death in the US and is a major cause of heart disease and stroke (Centers for Disease Control and Prevention, 2011b).

Trends in Prevalence:

- In 2009, 7.6% of adults in the County had ever been diagnosed with diabetes, similar to the prevalence for California as a whole (see Figure 38).
- The percentage of Californians ever diagnosed with diabetes increased by 37% between 2001 and 2007 (6.2% to 8.5%).
- While CHIS data for Stanislaus County shows more variability due to the much smaller sample size, it is consistent with a rising trend in diabetes prevalence.

Figure 38: Trends in Adult Diabetes Prevalence, by Jurisdiction, 2001-2009



Quality of Clinical Care:

Prevention Quality Indicators:

- AHRQ has four PQIs for primary diabetes management: the rate of hospitalization for a) short-term diabetes complications, b) long-term diabetes complications, c) lower-extremity amputation among patients with diabetes, and d) uncontrolled diabetes.

- As Table 12 shows, in 2011, Stanislaus County had worse performance on each of these four indicators than California, indicating improvement is possible in the clinical management of diabetes in the primary care setting.

Table 12: Hospitalization Rates* for Prevention Quality Indicators (PQI) in Stanislaus, 2011

Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicators	Stanislaus	California
Diabetes long term complications ¹	140.4	115.3
Diabetes short term complications ²	84.8	51.1
Lower-extremity amputation among patients with diabetes	19.8	15.2
Uncontrolled diabetes	16.0	11.9

*Age-adjusted annual rates per 100,000 hospitalizations of jurisdiction residents.

¹Diabetes long term complications include Diabetes with renal manifestation, Diabetes with ophthalmic manifestations, Diabetes with neurological manifestations and Diabetes with peripheral circulatory disorders.

²Diabetes short term complications include ketoacidosis, hyperosmolarity and coma.

HEDIS Measures:

Eight HEDIS measures monitor the quality of diabetic care for patients with Type I or Type II diabetes, ages 18 to 75, enrolled in Medi-Cal Managed Care Programs (2011 HEDIS Aggregate Report).

- HbA1c Testing: This measure tracks the percentage of diabetic members who had one or more HbA1c tests conducted within the past year. Blood glucose testing lets the patients and their doctors know whether their blood glucose levels are within the acceptable range. It is important to control blood glucose in diabetics as that significantly reduces the risk of blindness, heart disease, lower extremity amputation and other complications.
- HbA1c Control (<8.0 Percent): This measure tracks the percentage of diabetic members whose most recent HbA1c test during the past year showed an HbA1c level of less than 8%.
- Poor HbA1c Control (>9.0 Percent): This measure tracks the percentage of diabetic members whose most recent HbA1c test showed greater than 9% HbA1c level, which indicates poor blood glucose control.
- LDL-C Screening: This measure tracks the percentage of diabetic members who had an LDL-C test within the past year to monitor cholesterol levels.
- LDL-C Control (<100 mg/dL): This measure tracks the percentage of diabetic members who had LDL-C levels that are less than 100 mg/dL. Improved cholesterol levels can reduce cardiovascular complications.
- Blood Pressure Control (<140/90 mm Hg): This measure tracks the percentage of diabetics who had blood pressure reading of <140/90 mmHg. High blood pressure is a complication and its control reduces the risk of heart disease.
- Eye Exam (Retinal) Performed: This measure tracks the percentage of diabetic members who had an eye screening for diabetic retinal diseases or a negative retinal exam. The three most common eye complications are retinopathy, cataracts and glaucoma.

- **Medical Attention for Nephropathy:** This measure tracks whether diabetic patients were screened for or received treatment for nephropathy (kidney disease). Diabetes is the leading cause of kidney failure.

Table 13 shows the performance of the two Medi-Cal Managed Plans in Stanislaus County in 2011 on each of these eight measures, relative to the HEDIS High Performance Level, Weighted Average and Minimum Performance Level. While health plan performance varies, there is clearly room for improvement of clinical diabetes control and management in Stanislaus County.

Table 13: 2011 HEDIS Measures Related to Diabetes Care for Medi-Cal Managed Care

Diabetes-Related HEDIS Measure	High Performance Level	HEDIS Weighted Average	Minimum Performance Level	Anthem Blue Cross	Health Net Stanislaus
HbA1c Testing	90.2%	83.6%	76.0%	76.2%	82.0%
HbA1c Control	58.8%	49.2%	38.7%	34.1%	52.8%
Poor HbA1c Control	27.7%	40.2%	53.4%	58.4%	37.1%
LDL-C Screening	84.0%	79.1%	69.3%	72.3%	75.4%
LDL-C Control	45.5%	39.4%	27.2%	24.8%	37.4%
Blood Pressure Control	73.4%	64.6%	53.5%	57.7%	67.8%
Eye Exam (Retinal) Performed	70.1%	50.5%	41.4%	22.4%	48.7%
Medical Attention for Nephropathy	86.2%	80.5%	72.5%	71.3%	82.0%

Note: Green shading indicates the health plan had better than average performance. Red shading indicates the health plan did not reach the minimum performance level.

ER Visit Findings:

- Each year, Stanislaus County residents make more than 1,500 ER visits, on average, due to diabetes (defined as International Classification of Disease version 9 codes 250.00- 250.99 or 648.0).
- The age-adjusted ER visit rate for diabetes was 325.8 per 100,000 (2008-2010).

Trends in Hospitalization:

- Typically, 816 Stanislaus residents are hospitalized due to diabetes complications annually, making diabetes (type I or II) the 9th most common primary cause of hospitalization (defined as above) in Stanislaus County from 2008-2010.
- Between 2008 and 2010, each hospitalization of a Stanislaus County resident with a primary diagnosis of diabetes (type I or II) cost \$79,469, for an annual cost of \$307,227,248.

Mortality:

- Diabetes (defined as International Classification of Disease version 10 codes E10.0-E14.9) is the 7th ranked cause of death in Stanislaus County, causing on average 106 deaths per year (2.9% of all deaths).

- Diabetes causes an average of 806 years of potential life lost (YPLL) annually in the County, 7.6 years per death. Diabetes is the cause of death with the 8th largest average YPLL (2008-2009 DSMF).
- The average age at death from diabetes in the County is 51.3 years.
- Unlike heart disease, no improvement in age-adjusted mortality from diabetes was seen between 2000-2002 and 2007-2009.

Disparities:

- **Age:** Type I diabetes usually begins in early childhood, while Type II diabetes develops later in life (Centers for Disease Control and Prevention, no date-c;).
- However, national and international research has shown a dramatic increase in the frequency of Type I diabetes in adults (Skordis, Efsthaniou, Savvidou, Savva, Phylactou, Shammas & Neocleous, 2012). Between 2005 and 2009, the percentage of Stanislaus adults with Type I diabetes (formerly called juvenile-onset diabetes) increased 62.2% while those with Type II diabetes decreased 23.2%.
- Diabetes Type I prevalence has also been rising among children globally (Ehehalt, Blumenstock, Willasch, Hub, Ranke & Neu, 2008; Gyurus, Patterson & Soltesz, 2012; Jarosz-Chobot, Polanska, Szadkowska, Kretowski, Bandurska-Stankiewicz, Ciechanowska, Deja, Mysliwiec, Peczynska, Rutkowska, Sobel-Maruniak, Fichna, Chobot & Rewers, 2011). Local diabetes prevalence information is unavailable for children.
- **Gender:** Nationally, the percentage of men diagnosed with diabetes was slightly higher than that of women in 2010 (US Department of Health and Human Services, 2012).
 - The percentage of Stanislaus males with diagnosed diabetes in 2003-2005 was almost twice that of females, but by 2007 & 2009, the percentage of females with diagnosed diabetes surpassed that of men (CHIS: 2003, 2005, 2007, 2009).
 - Locally, diabetic males are more likely to be overweight or obese, and are at higher risk of hospitalization than diabetic females.
- **Ethnicity:** In Stanislaus County, there is no significant ethnic difference in diabetes prevalence. While non-Latinos have significantly higher age-adjusted rates of ER visitation, Latinos have significantly higher age-adjusted mortality rates.
- **Race:** CHIS data are too unstable to determine if racial differences exist locally in diabetes prevalence. However, age-adjusted ER visit rates, hospitalization rates and mortality rates are higher for Blacks than Whites, and for Whites than Asians.
- **Income/Poverty:** Nationally, a higher percentage of adults living in poverty have diabetes (12.4%) compared to adults who are not in poverty (7.8% diagnosed diabetes; US Department of Health and Human Services, 2012).
 - Local data from CHIS are based on a small sample, and thus differences are not statistically stable.
 - In 2003 & 2005, the percentage of diabetic adults living in poverty was almost twice that of diabetic adults not living in poverty (12.1% vs. 6.9%). By 2007 & 2009, that gap had decreased (8.2% vs. 7.6%).
- **Geography:** Table 14 shows geographic disparities in diabetes burden. See Figure 39 for the regional map of the age-adjusted ER visit rates, Figure 40 for the regional

map of the age-adjusted hospitalization rates and Figure 41 for the regional map of the age-adjusted mortality rates of heart disease in Stanislaus residents.

Table 14: Geographic Disparities in Diabetes Morbidity and Mortality

Medical Care and Mortality Outcomes for Diabetes	County Region
Highest Age-Adjusted ER Rate	Southwest Central
Highest Age-Adjusted Hospitalization Rate	Southwest Central
Highest Age-Adjusted Mortality Rate	Southwest Central

Figure 39:

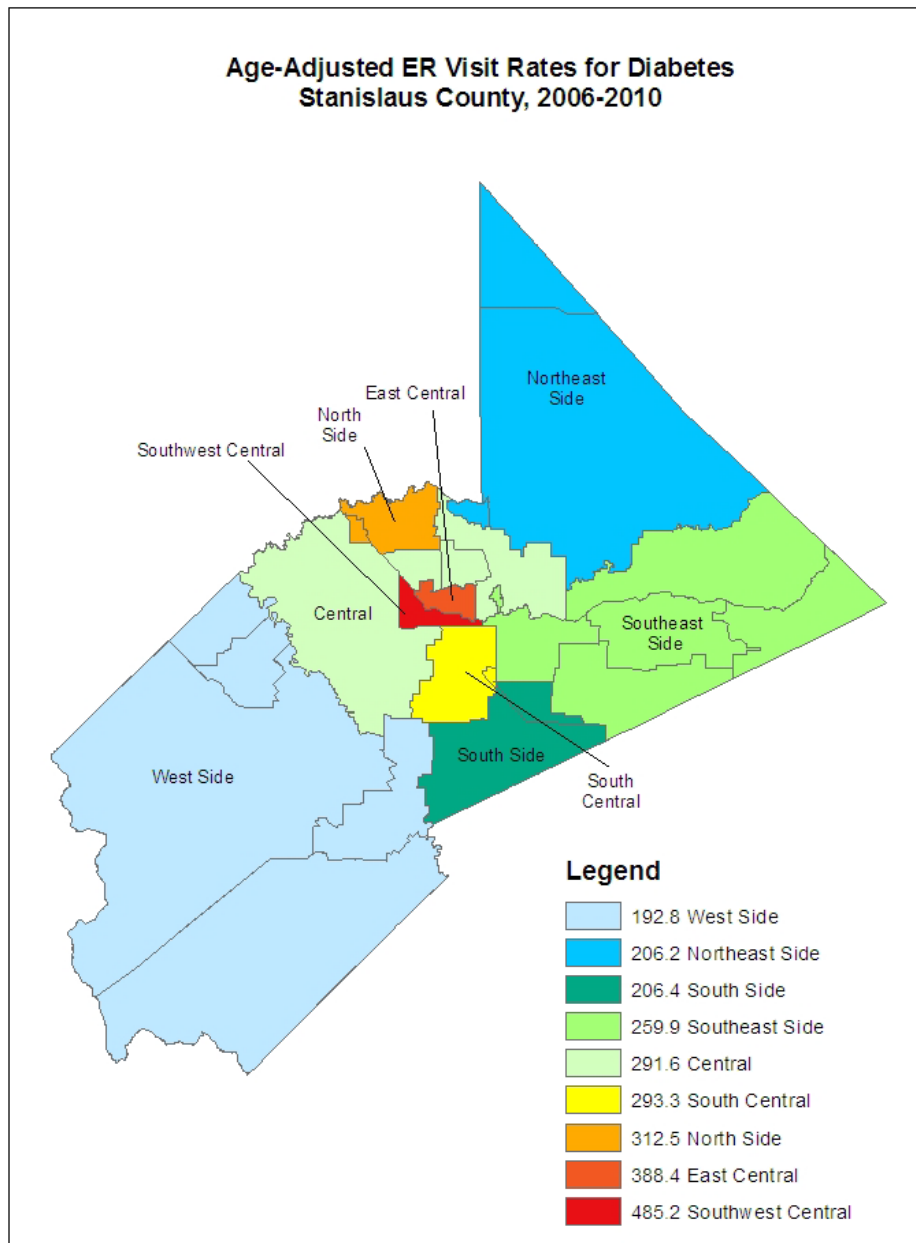


Figure 40:

**Age-Adjusted Hospitalization Rate for Diabetes.
Stanislaus County, 2006-2010**

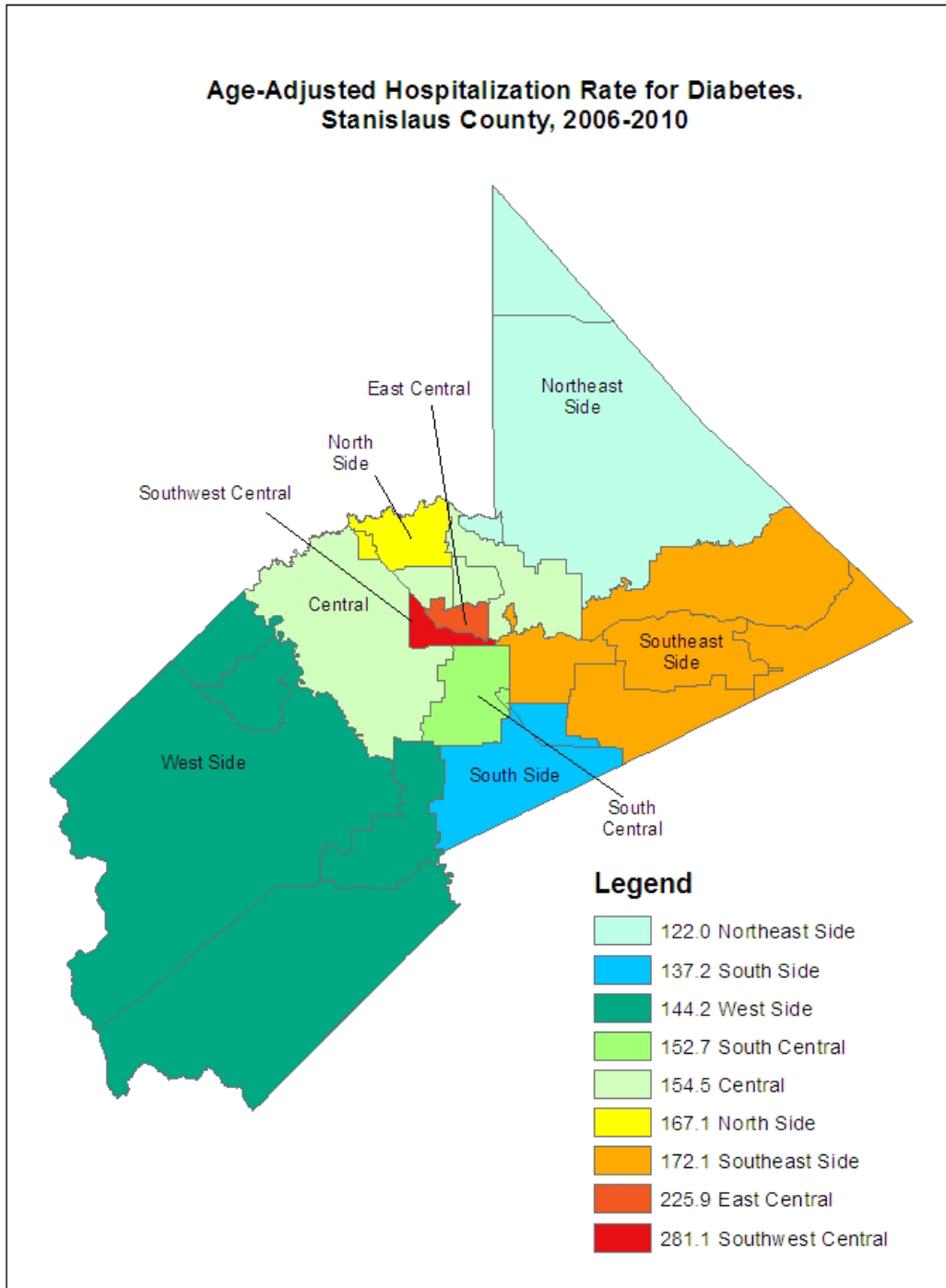
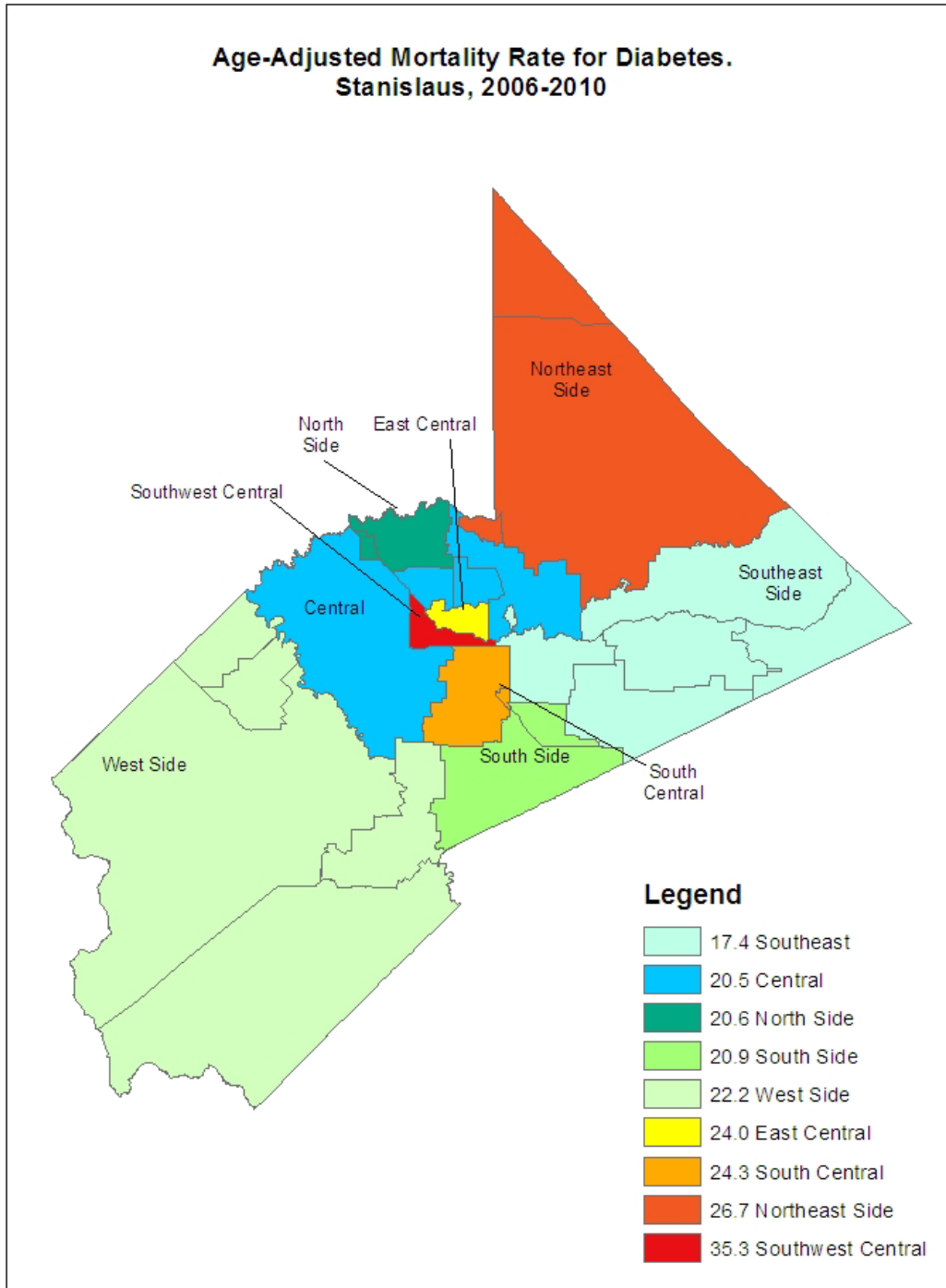


Figure 41:



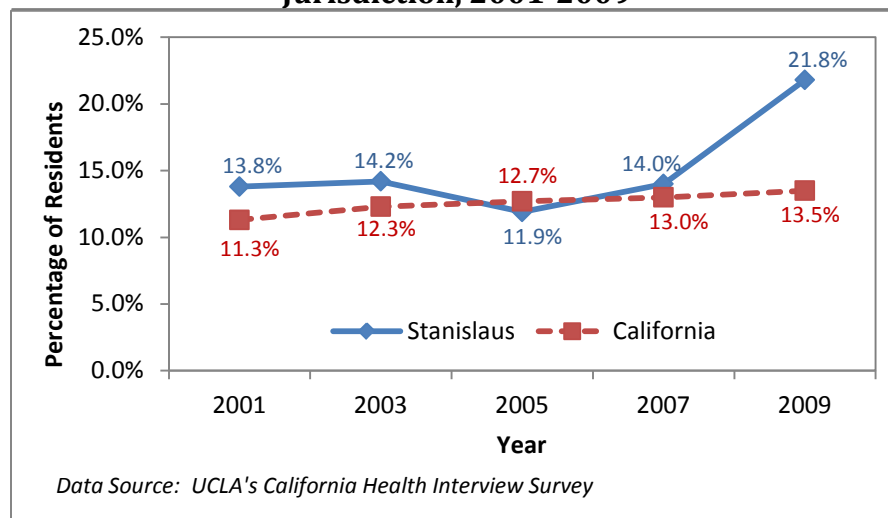
Asthma

Asthma is characterized by the inflammation of the airways and lungs; causes of asthma are currently unknown. Lifetime asthma prevalence (for both children and adults) has been increasing both nationally and in California (United States EPA, n.d.).

Trend

- The percentage of adults who report ever being diagnosed with asthma has stayed approximately the same in Stanislaus between 2001 and 2007, with a slight increase in 2009 (see Figure 42).
- Approximately 11% - 14% of Stanislaus adults report ever being diagnosed with asthma by a medical provider. Not all of these individuals have continued to experience asthma symptoms or exacerbations.

Figure 42: Trends in Lifetime Asthma Prevalence among Adults (Ages 18+) by Jurisdiction, 2001-2009



Disparity

- **Gender:** Within Stanislaus County, females suffer from asthma more frequently than males, but the difference isn't statistically significant (see Table 15). State and national research indicate that adult females have a higher prevalence of asthma than adult males while juvenile males have a higher prevalence than juvenile females (US Department of Health and Human Services, 2012).

Table 15: Trends in Lifetime Prevalence of Adults Suffering from Asthma, by Gender

Gender	Year				
	2001	2003	2005	2007	2009
Male	10.5%	13.7	9.1%	10.2%	21.5%
Female	16.9%	14.6%	14.7%	17.6%	22.1%

- **Ethnicity:** The prevalence of lifetime asthma in Stanislaus adults was higher in non-Latinos than in Latinos for both 2003 & 2005 and 2007 & 2009 (see Table 16 on the next page).

- Both ethnic groups experienced increases in lifetime asthma prevalence between the two time frames: 78.4% increase in Latinos and 26.7% increase in non-Latinos.

Table 16: Trends in Lifetime Prevalence of Adults Suffering from Asthma, by Ethnicity and by Poverty

Demographic Factor	Year	
	2003-2005	2007-2009
Ethnicity		
Latino	8.8%	15.7%
Non-Latino	15.0%	19.0%
Poverty Status		
<100% FPL	18.4%	23.5%
100% FPL	12.2%	16.8%

Note: Differences are not statistically significant.

- **Poverty Status:** The prevalence of lifetime asthma is higher in Stanislaus County adults living below the poverty level than adults living above the poverty level for both 2003 & 2005 and 2007 & 2009 (see Table 16 above).
- **Geography:** Table 17 shows the County regions with the highest age-adjusted ER rates and hospitalization rates and mortality rates for asthma. See Figure 40 for the regional map of the age-adjusted ER visit rates and Figure 41 for the regional map of the age-adjusted hospitalization rates for asthma in Stanislaus adult residents.

Table 17: Geographic Disparities in Asthma Morbidity and Mortality

Medical Care and Mortality Outcomes for Asthma	County Region
Highest Age-Adjusted ER Rate	Southwest Central
Highest Age-Adjusted Hospitalization Rate	Southwest Central
Highest Age-Adjusted Mortality Rate	NA*

**Rates are statistically unreliable due to small numbers of deaths due to asthma.*

Figure 43:

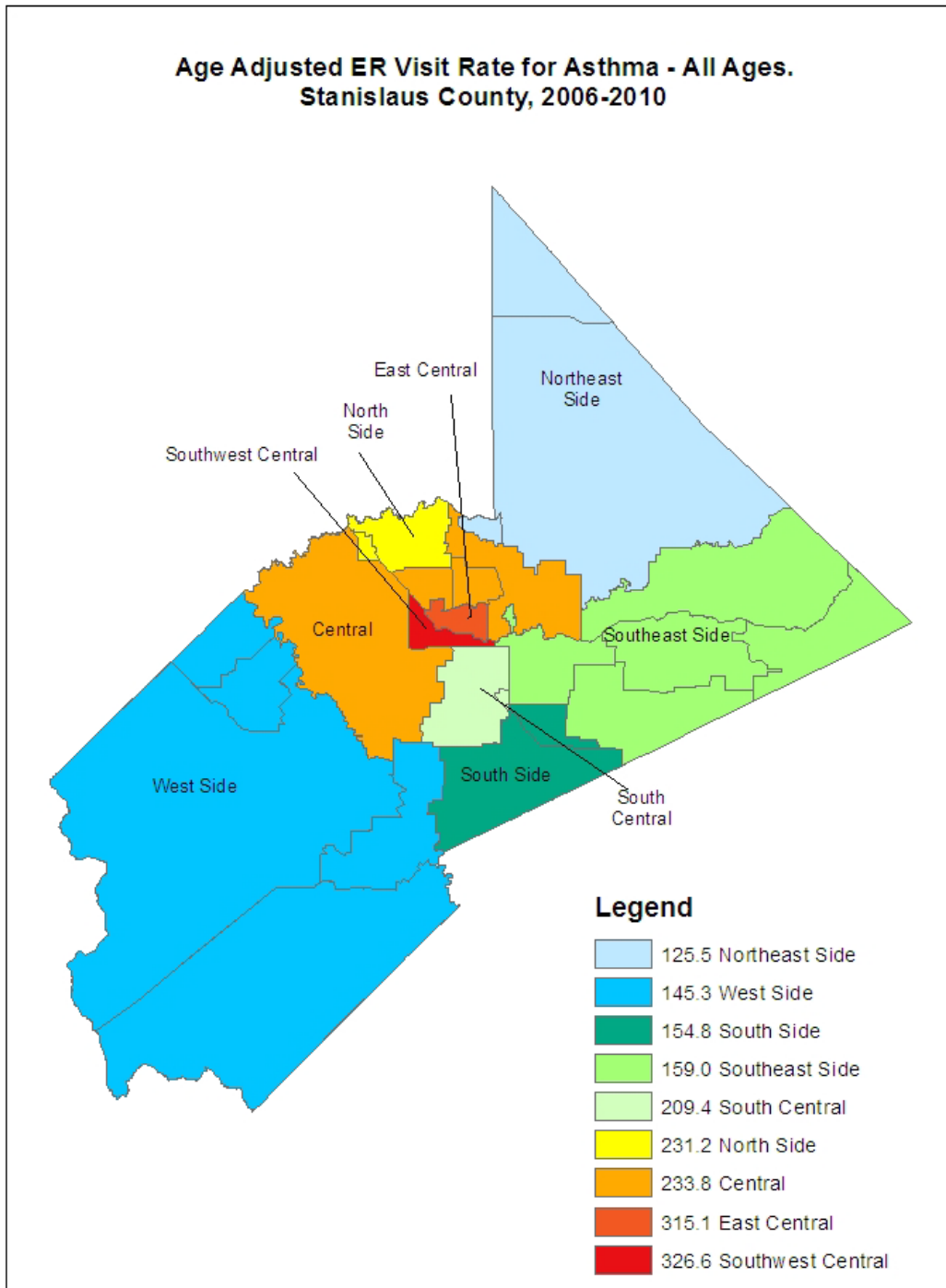
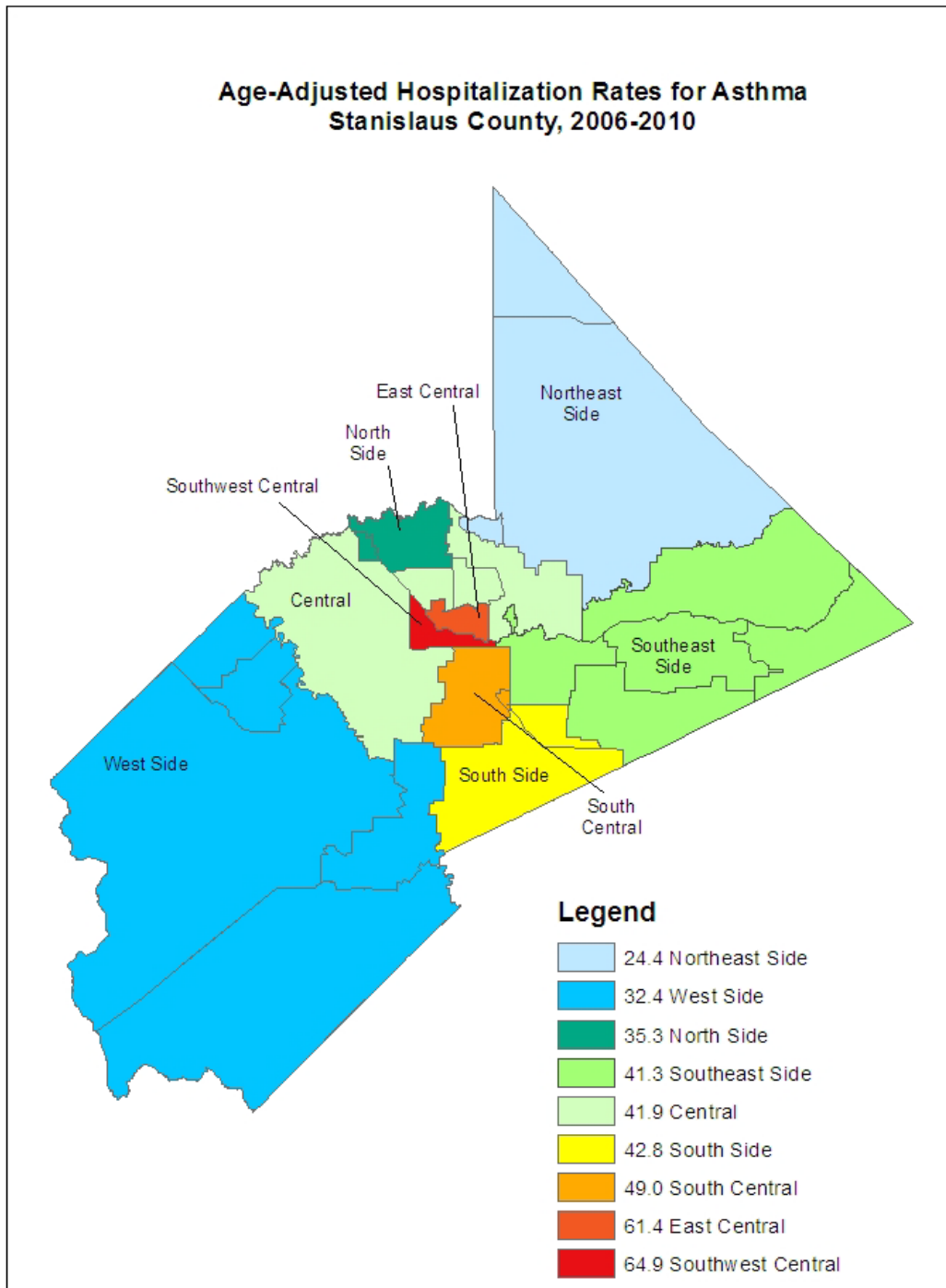


Figure 44:



Life Expectancy at Birth

Life Expectancy at Birth (LEB) is the number of years a newborn infant is projected to live if mortality patterns at the time of its birth were to remain the same throughout its life (World Bank, 2005). It is a measure of the overall quality of life in a nation or other jurisdiction. LEB in Stanislaus County (based on 2008-2010 age-adjusted mortality rates) is 79.1 years (HSA calculations based on CDPH’s death statistical master files), slightly higher but comparable to that of the US as a whole (78.1 years; CIA World Factbook, 2012 based on 2008 mortality data).

Disparities:

- **Gender:** Females have a higher LEB than males, both in Stanislaus County and the US (see Table 16).
- **Ethnicity:** Latinos have a higher LEB than Non-Latinos in Stanislaus County (see Table 16). This fact, combined with the higher proportion of Latino residents here than nationally, may help explain the slightly higher Stanislaus County overall life expectancy at birth compared to the US.
- **Race:** Individuals of Asian/Pacific Islander heritage have a statistically significantly longer LEB than those of Caucasian heritage, who in turn have a statistically significantly longer LEB than those of African American heritage (see Table 18).

Table 18: Life Expectancy at Birth by Jurisdiction and Demographic Factors

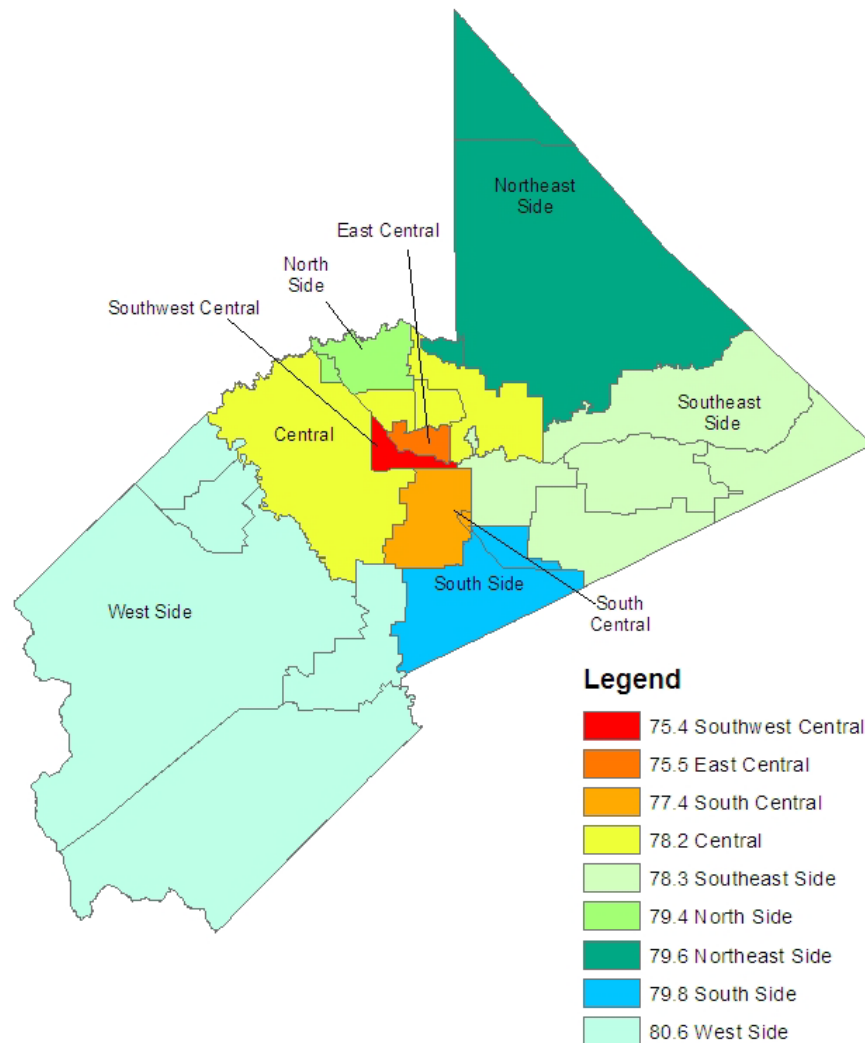
Demographic Factor	LEB in Stanislaus County (years)	LEB in USA (years)	Difference ¹ (years)	Pattern of Statistically Significant Differences
Gender				
Male	75.8	75.6	0.2	Female > Male
Female	80.7	80.6	0.1	
Total	79.1	78.1	1.0	
Race				
Asian/ Pacific Islander	83.8	NA	NA	Asian > White > Black
African American / Black	73.6	74.0	-0.4	
Caucasian / White	76.3	78.5	-2.2	
Ethnicity				
Latino	85.4	81.0	4.4	Latino > Non-Latino
Non-Latino	77.0	NA	NA	

¹Difference calculated as Stanislaus LEB – USA LEB.

- **Geography:** LEB in the County varies by geographic region (see Figure 45), and tends to be lower in urban areas than rural.
 - The predominantly rural West Side of the County has the highest life expectancy at birth (LEB = 80.6), comparable to Ireland’s LEB of 80.32.

- The regions in the County with the lowest LEB are the urban East Central (75.5) and Southwest Central regions (75.4), which have worse LEBs than Sri Lanka (75.94), Croatia (75.9), Georgia (77.32) and Albania (77.59).

Figure 45: Life Expectancy at Birth, Stanislaus County, 2006-2010



Other Major Causes of Morbidity and Mortality

This section reviews diseases and conditions that are substantial causes of morbidity and mortality in Stanislaus County other than prenatal and perinatal health challenges and chronic diseases.

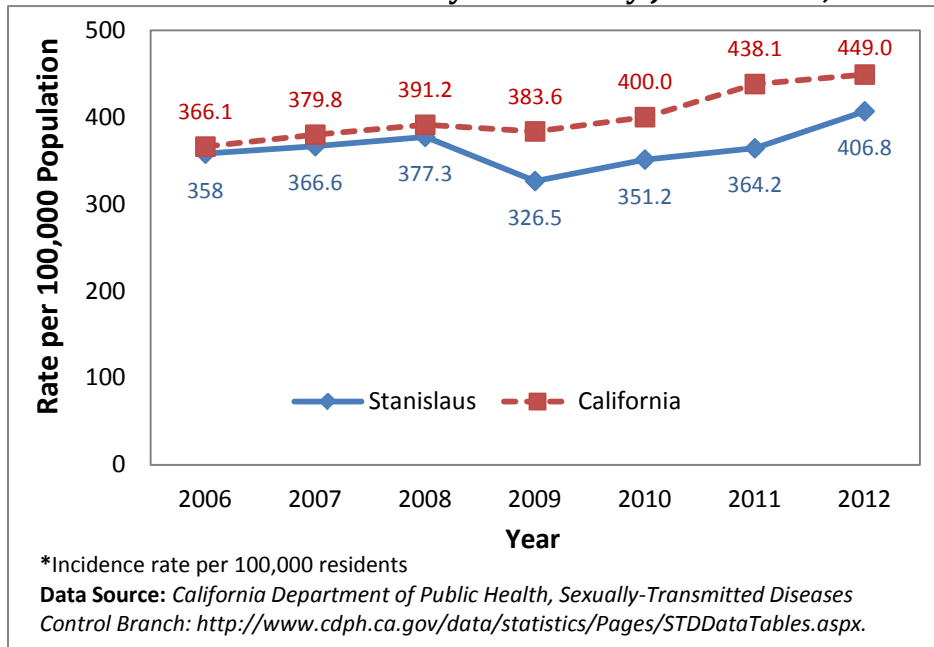
Chlamydia and Gonorrhea Infections

Sexually-transmitted infections (STIs) are the most commonly reported of all conditions that health care providers are legally obligated to report to the local health department under Title 17 of the California Health and Safety Code. Chlamydia is the most frequently reported, with an average of 1,900 infections reported to the county health department annually. In 2012, 2,126 cases of Chlamydia infections were reported in Stanislaus.

Chlamydia

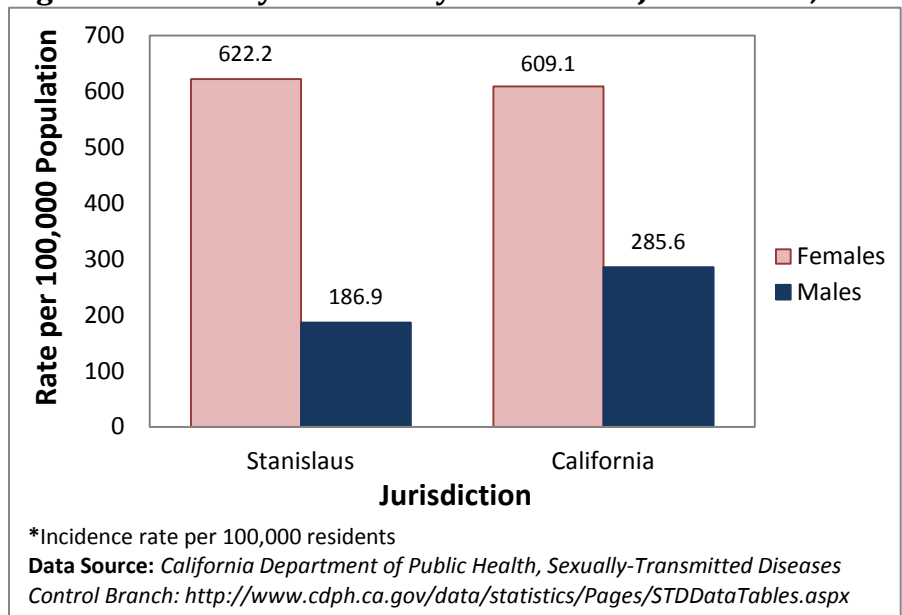
Over the past seven years (2006-2012), California consistently had higher Chlamydia infection rates than Stanislaus County. Chlamydia infection rates in California and Stanislaus have been on an upward trend for the past few years. See Figure 46 below.

Figure 46: Trends in Crude Chlamydia Rate* by Jurisdiction, 2006-2012



- **Gender Disparity:** The Chlamydia incidence (infection) rate in women is 3.3 times the rate in men (see Figure 47 on the next page).

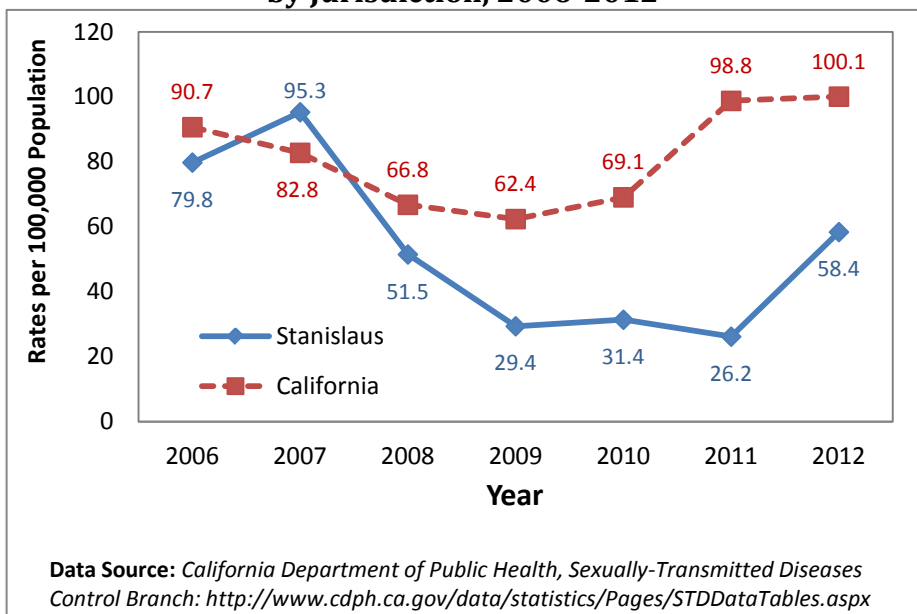
Figure 47: Chlamydia Rate* by Gender and Jurisdiction, 2012



Gonorrhea

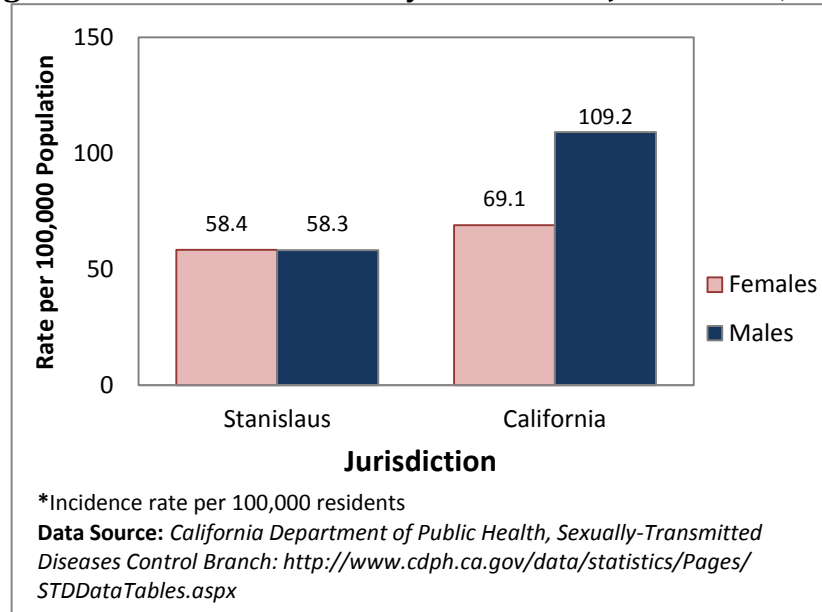
In the past seven years (2006-2012), California consistently had higher Gonorrhea infection rates than Stanislaus, except in 2007 when infection rates in the County spiked above California rates. As indicated by Figure 48 below, by 2012, the statewide infection rate (100.1 per 100,000 population) was 1.7 times the County infection rate (58.4 per 100,000 population).

Figure 48: Trends in Crude Gonorrhea Rate, per 100,000 Residents by Jurisdiction, 2006-2012



- **Gender Disparity:** In 2012, there was no significant difference in Gonorrhea infection rates between men and women in Stanislaus (see Figure 49).

Figure 49: Gonorrhea Rate* by Gender and Jurisdiction, 2012



Mental Illness

Public health surveillance systems for mental illness are poor and non-systematic. Thus, local data on the prevalence of common mental illnesses, such as depression and anxiety, are unknown. To close this data gap, questions concerning depression, anxiety and schizophrenia were included in the primary survey being conducted as part of the countywide Stanislaus County Community Health Assessment, 2013 (2013 CHA). Memorial Medical Center is one of 13 members of the Steering Committee for the 2013 CHA and will receive this data once it is collected and analyzed.

Trends in ER Visits:

- From 2006-2010, on average, the following number of ER visits occurred annually with a primary diagnosis of a common mental illness or condition
 - 2,725 for addiction or substance abuse;
 - 1,832 for anxiety or phobia;
 - 360 for depression; and
 - 122 for schizophrenia.
- From 2006-2010, the age-adjusted ER visit rates for these common mental illness were
 - 368.3 per 100,000 for anxiety or phobia;
 - 109.0 per 100,000 for addiction or substance abuse;
 - 72.7 per 100,000 for depression; and
 - 24.3 per 100,000 for schizophrenia.

Trends in Hospitalization:

- From 2006-2010, on average, the following number of Stanislaus residents were hospitalized due to a common mental illness annually
 - 1,015 for depression;
 - 677 for schizophrenia;
 - 289 for anxiety or phobia; and
 - 89 for addiction or substance abuse.
- From 2006-2010, the age-adjusted annual hospitalization rates for these common mental illness were
 - 201.1 per 100,000 for depression;
 - 137.2 per 100,000 for schizophrenia;
 - 18.2 per 100,000 for addiction or substance abuse; and
 - 11.4 per 100,000 for anxiety or phobia.

Mortality:

- Suicide (or intentional self-harm) is the 10th ranked cause of death in Stanislaus County (from 2006-2010), responsible for, on average, 51 deaths per year (1.4% of all deaths).

Disparity

- **Age:** The suicide rate increases by age group, until the oldest age category (65+ years), for whom the rate is somewhat lower than the 45-64 year age range.
- **Gender:**
 - ER visit rates and hospitalization rate for depression are higher among females than males (see Figures 50 and 51 on the next page). However, the mortality rate by suicide is nearly four times higher for males (16.1 per 100,000 deaths) than females (4.3 per 100,000 deaths). This contrast is common nationally, as males who are intent on self-harm are more likely to choose more lethal methods (e.g. firearm) than females (e.g. medication overdose; see Canetto & Sankinosfsky, 1998).
 - The ER visit rate for anxiety/phobia is higher for Stanislaus County females than males (see Figure 50). There are no significant gender differences in hospitalization rates for anxiety/phobia (Figure 51).
 - The ER visit rates and hospitalization rates for addiction/substance abuse and schizophrenia are higher for males than females (see Figures 50 and 51).

Figure 50: ER Visit Rates for Mental Illness by Gender, 2006-2010

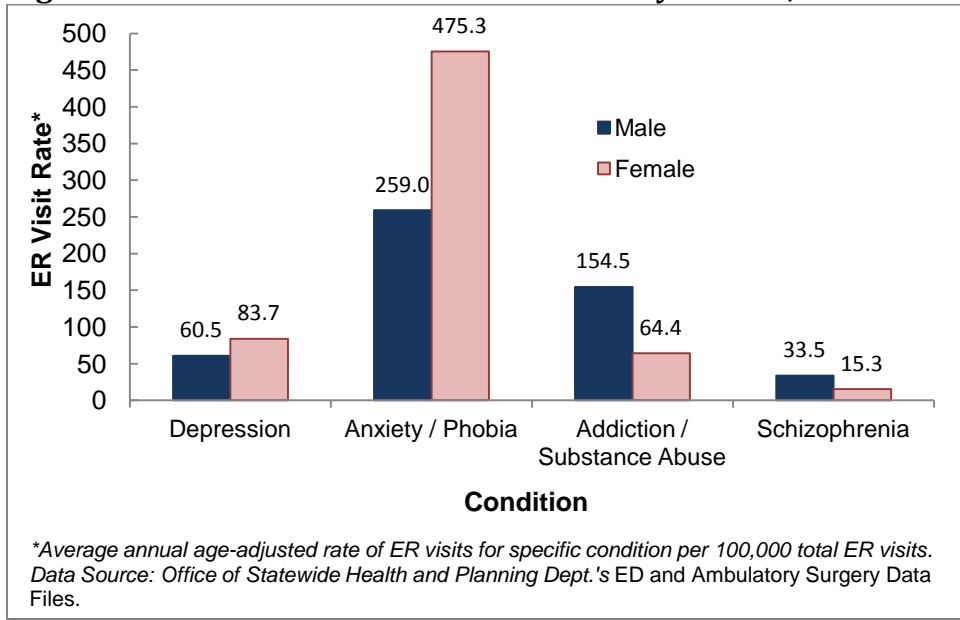
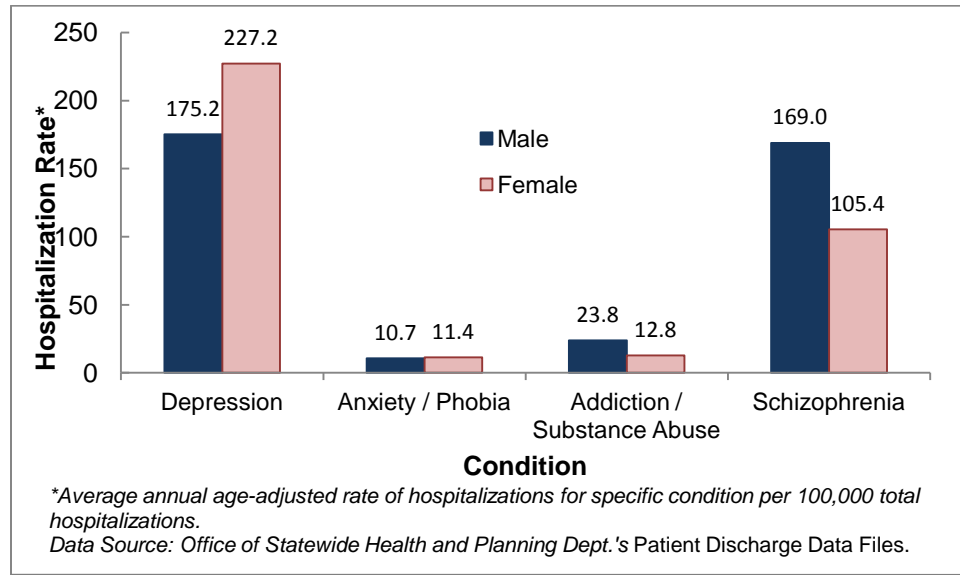


Figure 51: Gender Differences in Hospitalization Rates for Common Mental Illnesses, 2006-2010



- **Ethnicity:**
 - ER visit and Hospitalization rates for depression, anxiety and phobia, addiction/substance abuse and schizophrenia are statistically significantly higher among Non-Latinos than they are among Latinos (see Figures 52 and 53 on the next page).

Figure 52: ER Visit Rates for Mental Illness by Ethnicity, 2006-2010

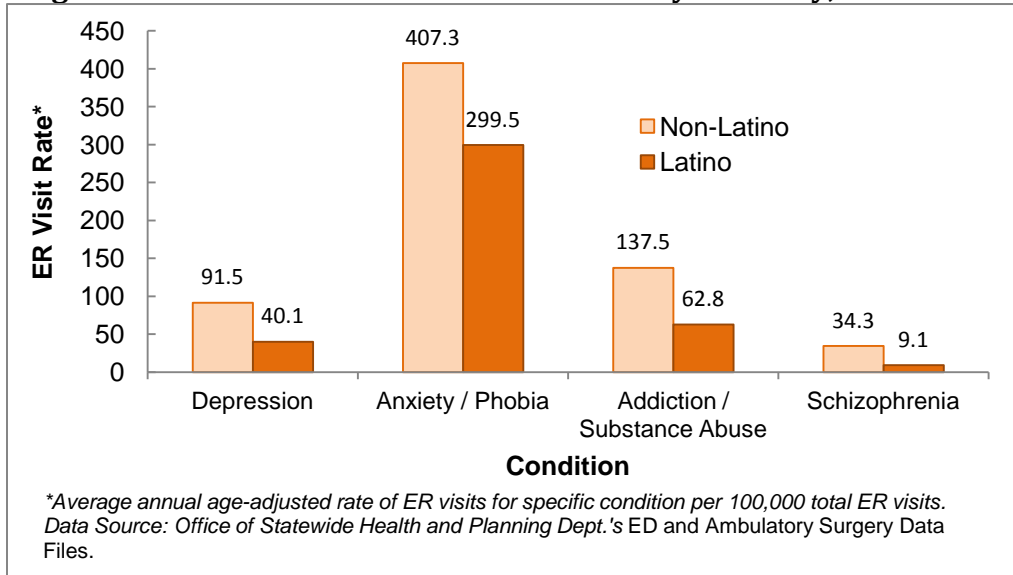
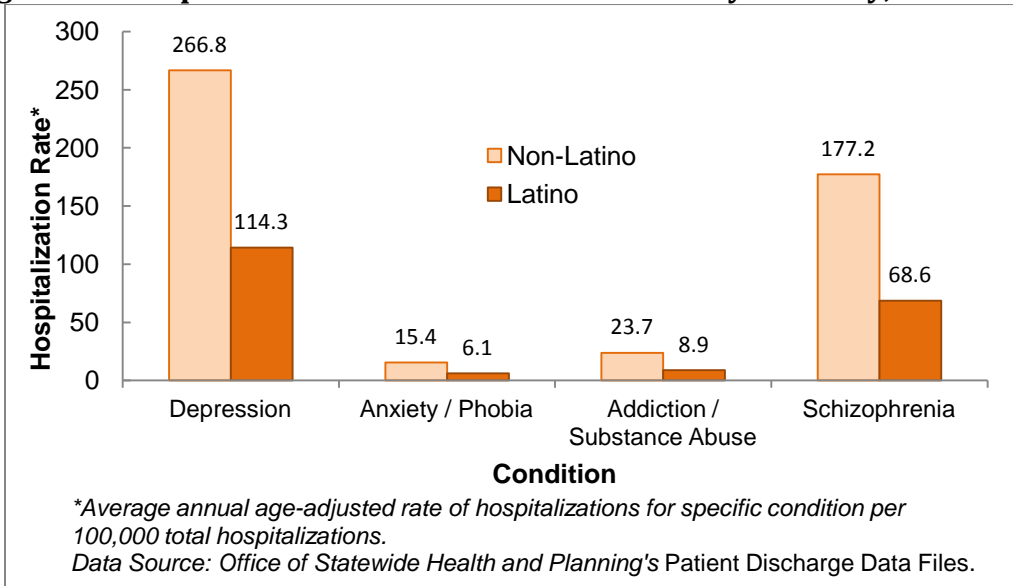


Figure 53: Hospitalization Rates for Mental Illness by Ethnicity, 2006-2010



- Race:
 - African American/Blacks have a significantly higher rate of hospitalization for depression than Caucasian/Whites, who in turn have a significantly higher rate than Asian/Native Hawaiian/Pacific Islanders (323.5 vs. 207.4 vs. 61.7 per 100,000 hospitalizations). The average annual age-adjusted suicide rate is statistically significantly higher among Non-Latinos than Latinos (13.4 per 100,000 deaths vs. 4.1 per 100,000 deaths). Comparison of suicide mortality rates by race is not possible due to statistical instability caused by low numbers.

- The statistically significant racial differences in hospitalization rates for anxiety and phobia match those of depression: African American/Blacks have the highest rate, followed by Caucasian/Whites, and then Asians/Native Hawaiians/Pacific Islanders (47.3 vs. 10.5 vs. 3.6 per 100,000 hospitalizations).
- African American/Blacks and Caucasian/Whites had similar rates of hospitalization for addiction/substance abuse (19.5 and 19.9 per 100,000 hospitalizations, respectively), both statistically significantly higher than the rate for Asians/Native Hawaiians/Pacific Islanders (4.0 per 100,000 hospitalizations).

Figure 54: ER Visit Rates for Mental Illness by Race, 2006-2010

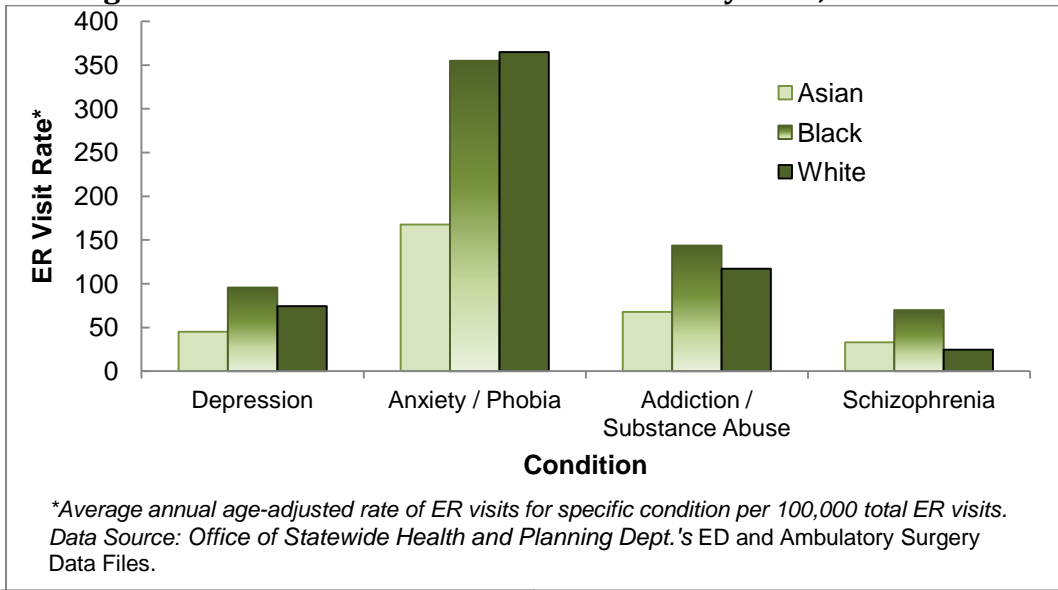
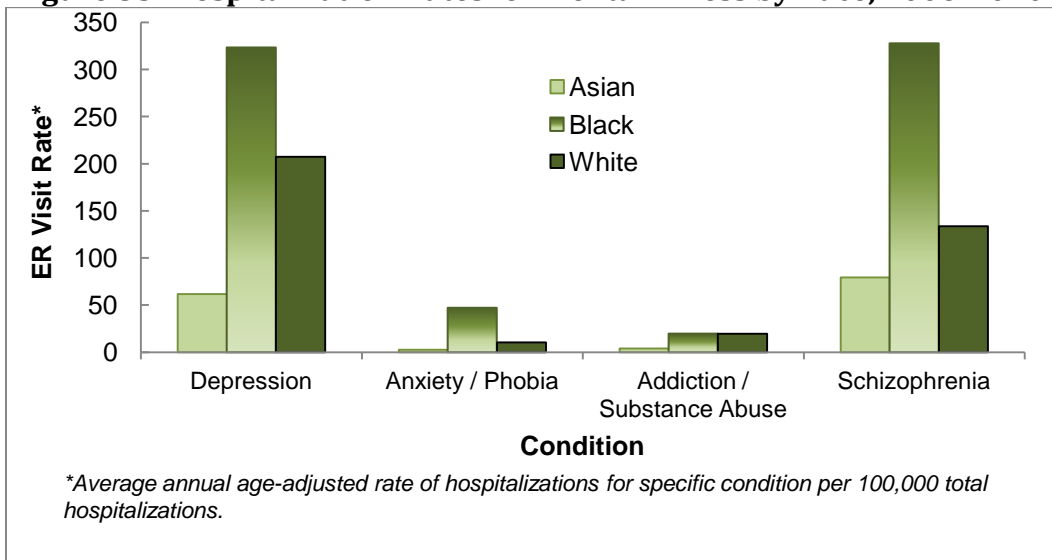


Figure 55: Hospitalization Rates for Mental Illness by Race, 2006-2010



- Geography:
 - Urban vs. Rural
 - ER visit rates for each of the four mental illnesses in question are highest in Stanislaus County regions classified as primarily urban. Mixed (urban/suburban/rural) areas had the next highest rates, except for depression, for which the mixed and rural areas did not differ.
 - Hospitalization rates for depression and schizophrenia were highest in Stanislaus County regions classified as urban, lower for areas classified as mixed and lowest in areas classified as rural
 - Regions: ER visit, hospitalization and suicide mortality rates differed across the nine geographic regions of the county (see Table 19). See Figures 56-64 for regional maps of the age-adjusted ER visit rates and hospitalization rates for depression, anxiety/phobia, addiction/substance abuse and schizophrenia, as well as suicide mortality in Stanislaus County residents.

Table 19: Hospitalization Rates* for Mental Illness by Geographic Region, 2006-2010

Region	Depression	Anxiety and Phobia	Addiction and Substance Abuse	Schizophrenia
Central	238.1	12.4	22.4	165.3
East Central	352.3	20.4	24.0	207.2
Southeast	188.2	10.0	9.7	50.9
Northeast	159.5	7.2	13.8	117.1
North Side	157.2	9.9	21.8	83.5
Southwest Central	258.2	10.4	11.4	319.9
West Side	102.7	7.7	12.9	39.8
South Central	175.3	10.0	21.8	127.8
South Side	159.8	11.1	15.2	70.6

**Average annual age-adjusted hospitalization rates for specific conditions per 100,000 hospitalizations.*

Note: The highest regional hospitalization rate for each condition is bolded.

Figure 56:

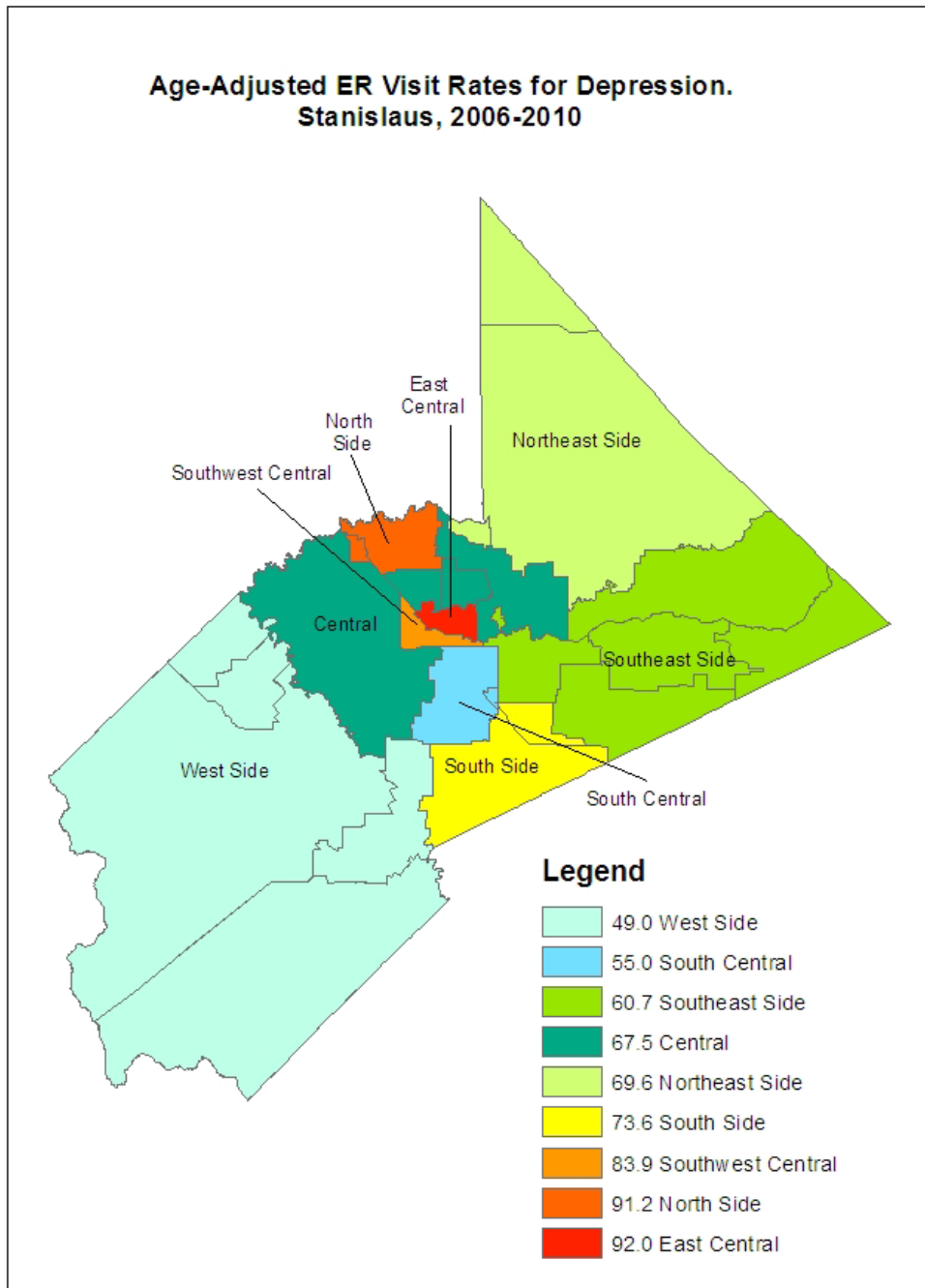


Figure 57:

**Age-Adjusted ER Visit Rates for Anxiety/Phobia.
Stanislaus, 2006-2010**

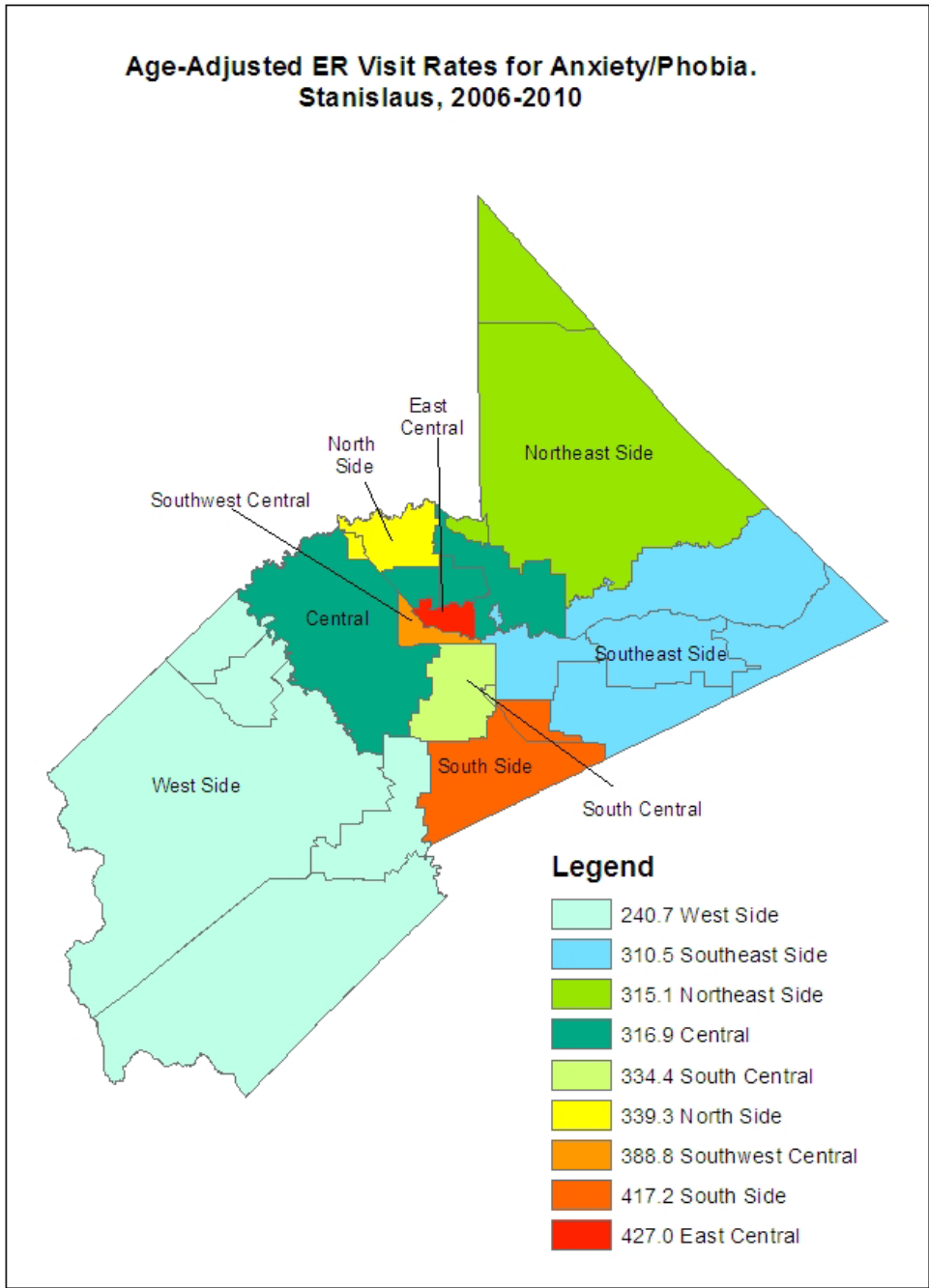


Figure 58:

**Age-Adjusted ER Visit Rates for Addiction / Substance Abuse.
Stanislaus County, 2006-2010.**

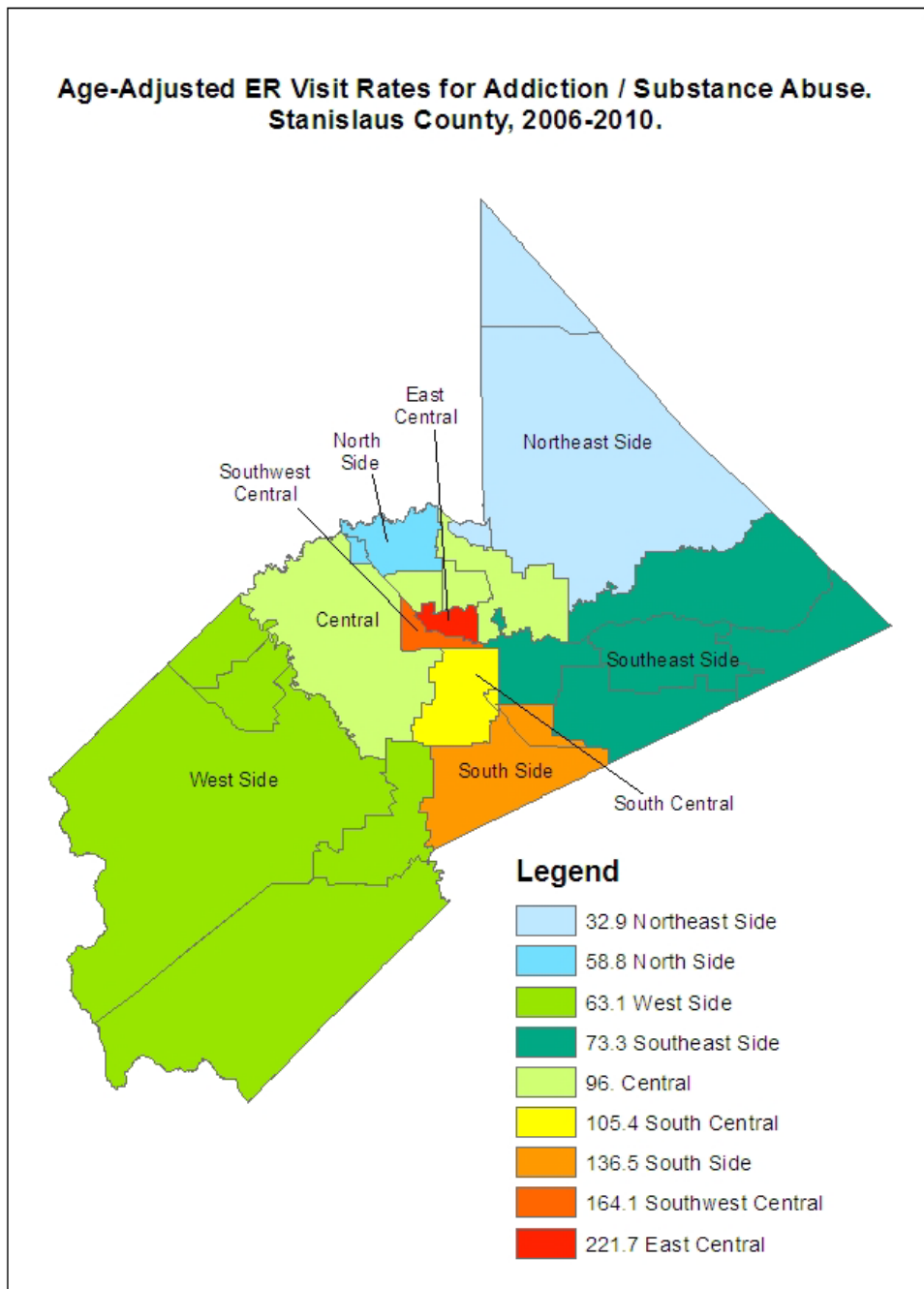


Figure 59:

**Age-Adjusted ER Visit Rate for Schizophrenia.
Stanislaus, 2006-2010.**

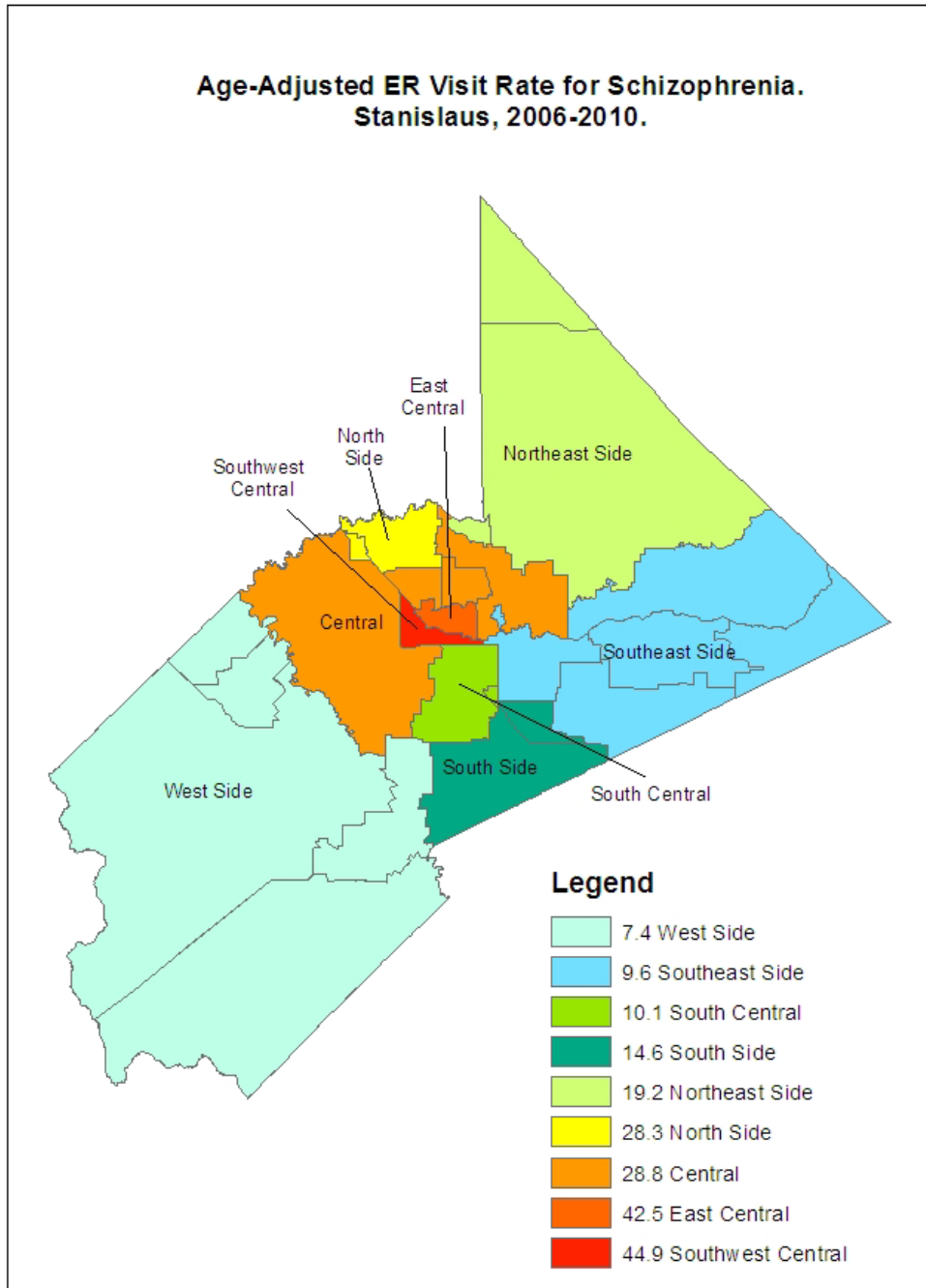


Figure 60:

**Age-Adjusted Hospitalization Rates for Depression.
Stanislaus, 2006-2010.**

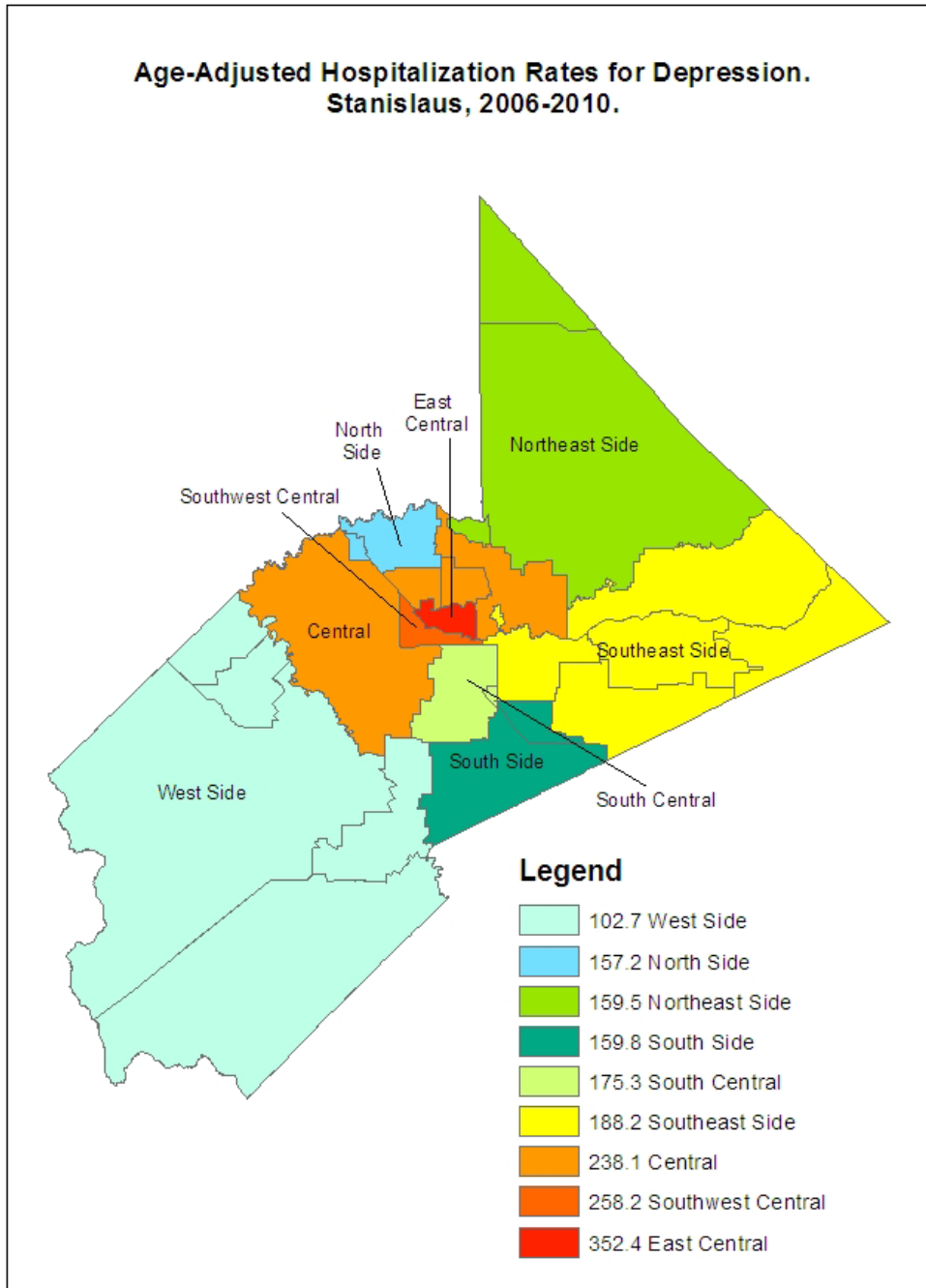


Figure 61:

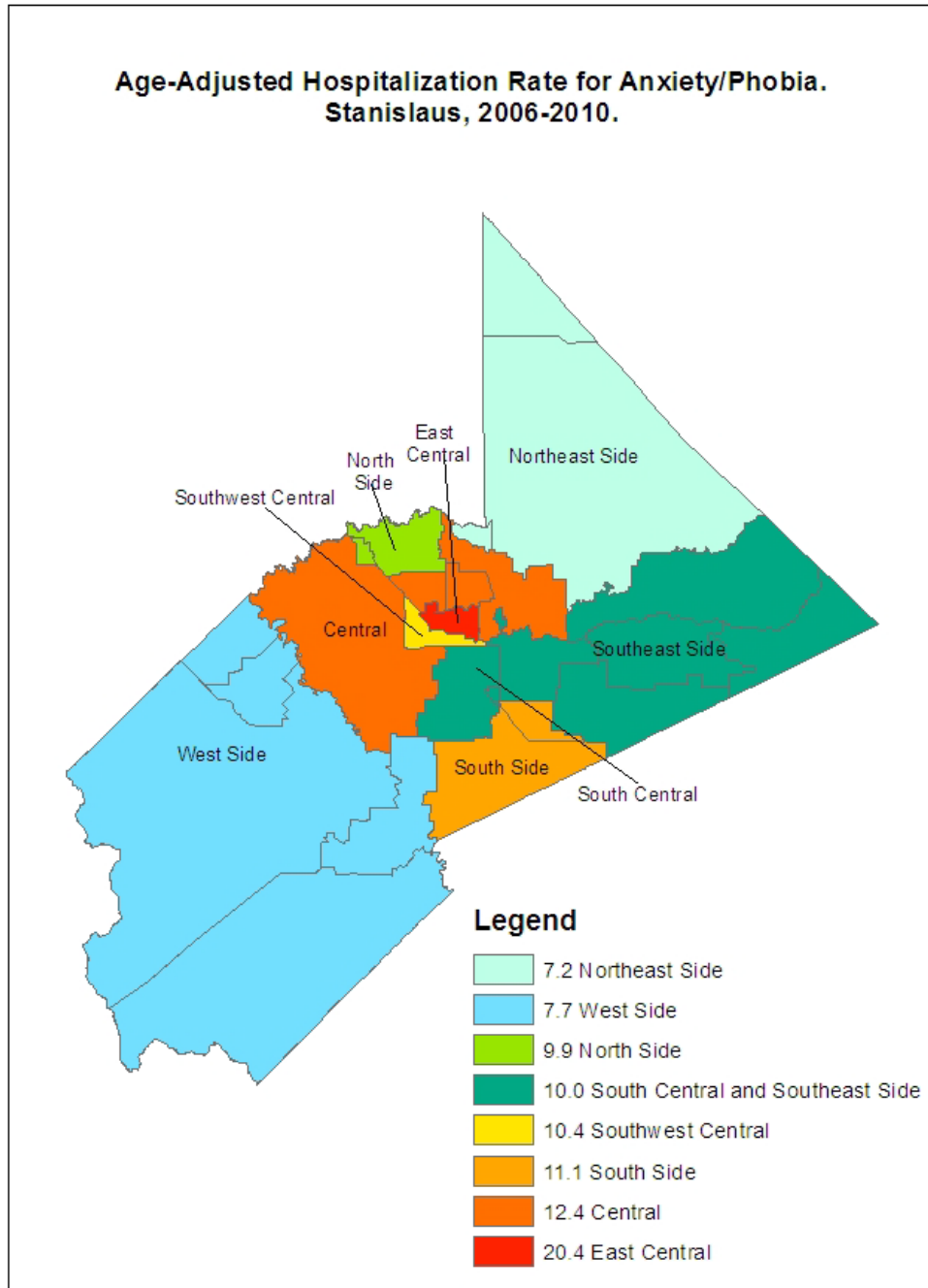


Figure 62:

**Age-Adjusted Hospitalization Rates for Addiction/Substance Abuse.
Stanislaus, 2006-2010.**

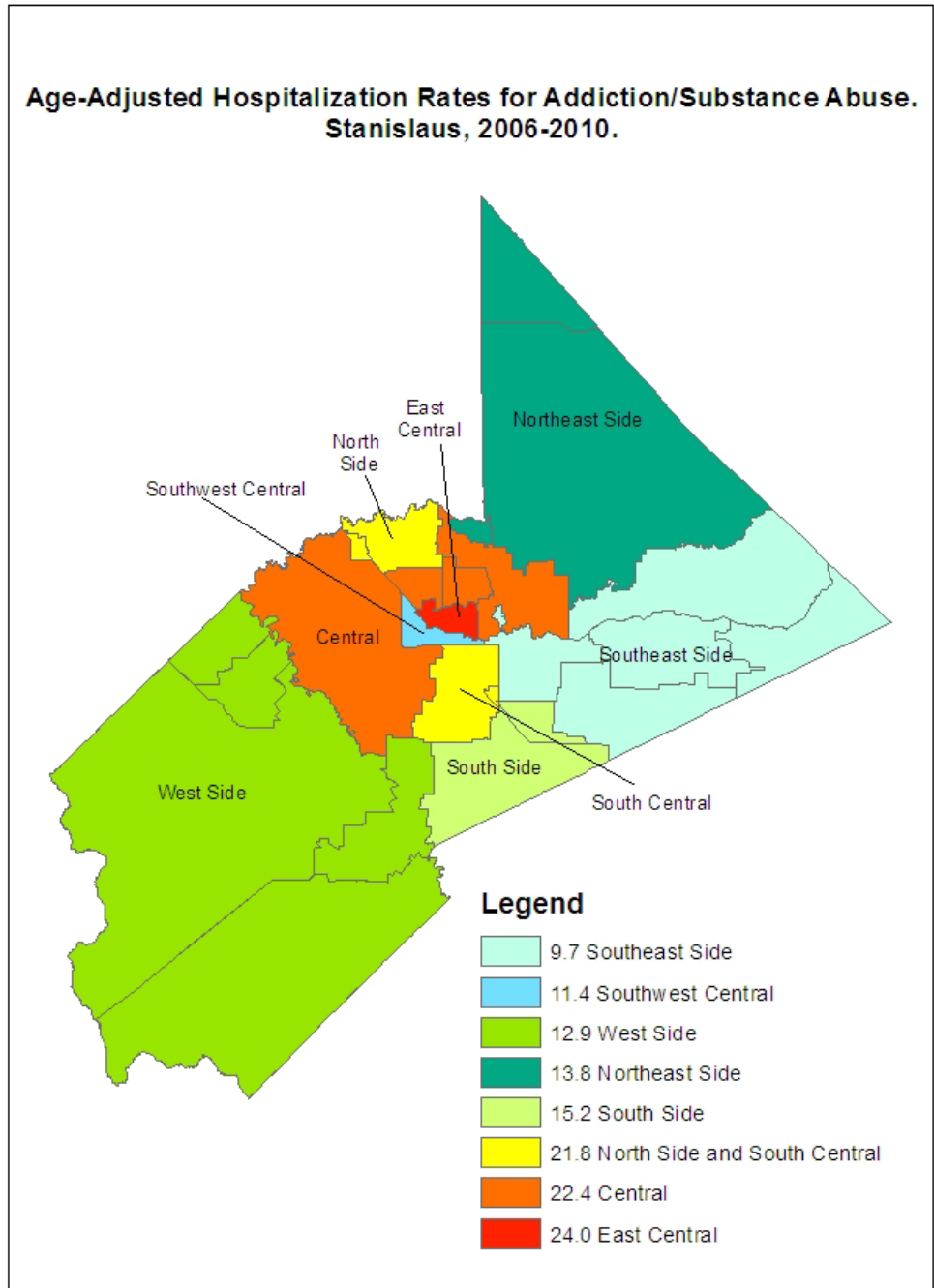


Figure 63:

**Age-Adjusted Hospitalization Rates for Schizophrenia.
Stanislaus, 2006-2010.**

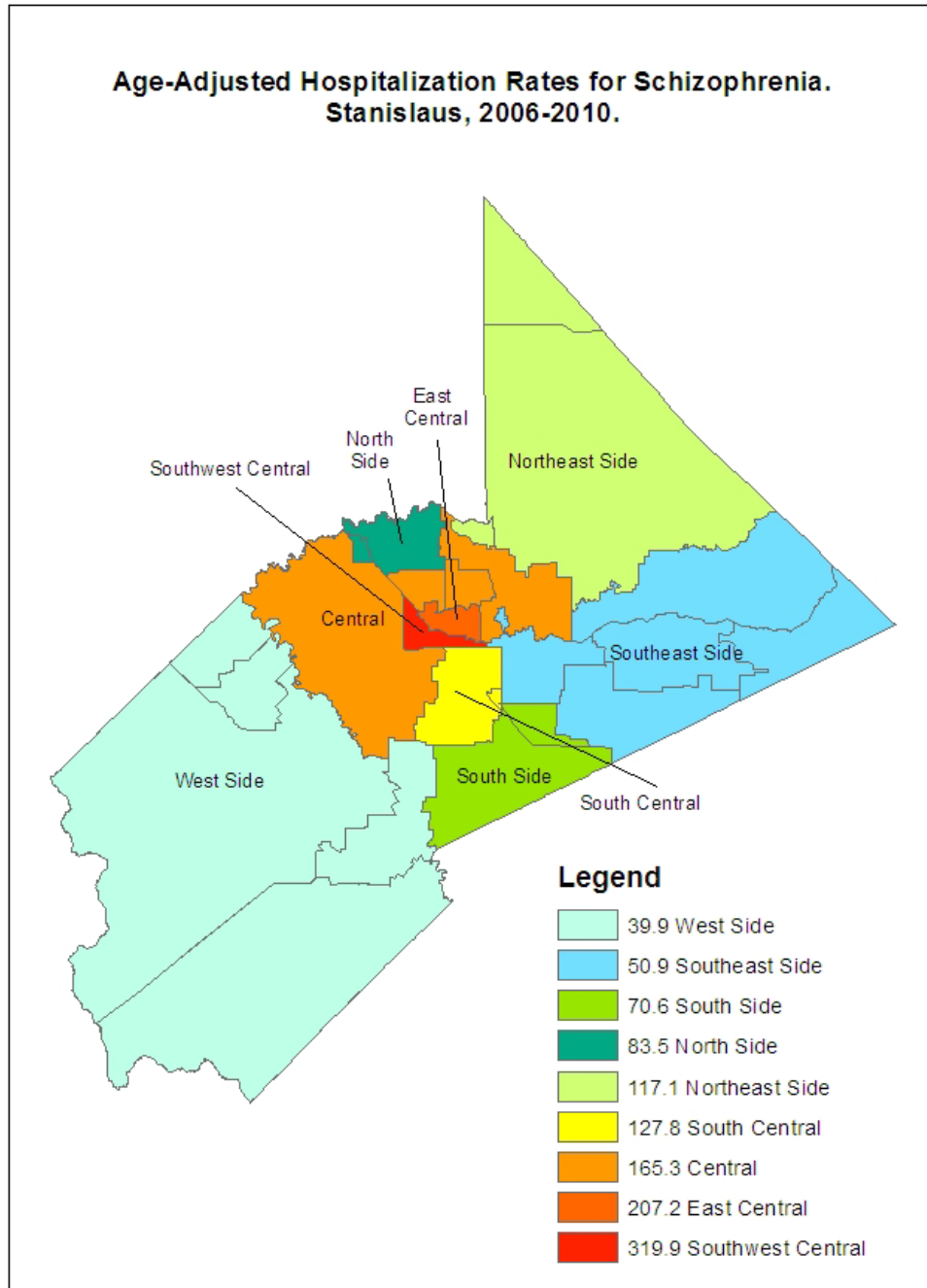
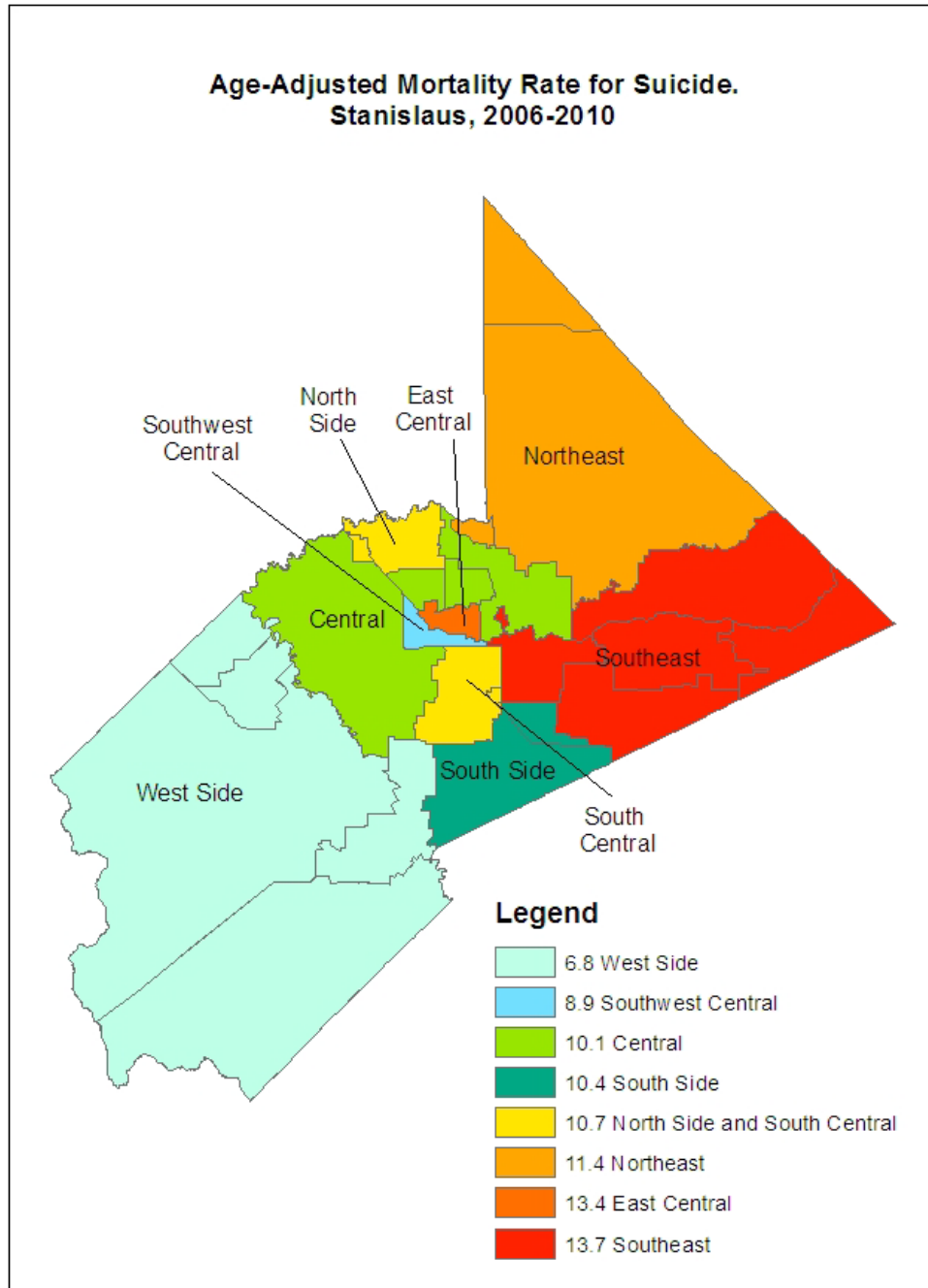


Figure 64:



Portrait of Stanislaus County's Assets

An asset map is an inventory of the strengths and opportunities within a community. Asset mapping reveals the assets of the entire community, highlights the interconnections among them and affords the opportunity to access those assets. Asset mapping promotes maximizing existing resources, reduction of duplicate efforts and improves collaboration among local stakeholders. It is a preliminary step before developing interventions within a community. Assets can include individual capacities and abilities, organizational resources, community resources, partnerships, access to medical services and environmental resources.

Chronic disease is a concern in Stanislaus. The County has the second worst retail food environment in California. Fast food consumption in County residents is highest in the low income population. The prevalence of obesity is also worse in the County than in the State, which a higher percentage of obese males than females. The percentage of smokers is higher in males than in females.

Consequently, asset maps of local organizations, community resources, partnerships and health care resources that promote healthy eating physical activity and smoke-free living were conducted for all nine regions within Stanislaus County (See Appendix B). For details about the nine County regions, please refer to the *Methodology Section*.

Assets identified within each region included Family Resource Centers (FRC), schools, joint use agreements for use of public facilities, health clinics, hospitals and urgent care facilities, colleges, health education classes, nutrition education classes, tobacco education or cessation classes, tobacco control funded programs (e.g. Tobacco Use Prevention Education, California Tobacco Education Center, Children and Families Commission), farmer's markets with and without electronic debit transfer (EBT) for public assistance programs (such as the food stamp program), flea markets that offer fruits and vegetables, farm stands and parks/recreational facilities (see Appendix B for the detailed asset inventory by geographical region).

The nine regions of Stanislaus County are rich in resources and partnerships. All regions have at least one FRC or community based organization that serves as a resource for the community. Through new funding streams from the USDA, the majority of the communities have some form of nutrition education classes. Several farmers markets accept EBT or are in the process of obtaining EBT access. Tobacco education programs are in both junior high and high schools in all 26 school districts. Approximately 11 of the 26 (42%) school districts have joint use agreements with parks and recreations. All regions have parks and/or recreational areas that can be accessed by community residents.

Priority Issues

Access to Care

- Healthcare provider shortage
- Health insurance for Latinos, adults with lower income and working-age adults

Quality of Clinical Care

- Prenatal and perinatal health
 - Low entry into prenatal care in the 1st trimester, especially teen mothers
 - Non-medically indicated elective inductions prior to 39 weeks gestation
- Chronic disease prevention and control
 - Prevention
 - Life style counseling and support: Insufficient health care provider counseling concerning nutrition and physical activity and BMI assessments for Medi-Cal managed care pediatric patients (3 to 17 years of age)
 - Recommended screenings:
 - Men failing to receive prostate exam for prostate cancer screening
 - Inadequate hypertension screening
 - Control
 - Diabetes control for Medi-Cal managed care patients
 - Hypertension and other cardiovascular conditions for the general population

Modifiable Risk Factors for Disease

- Behavioral risk factors
 - Poor diet, lack of physical activity, overweight/obesity, tobacco use
 - High risk sexual activity leading to sexually-transmitted infections/diseases: Chlamydia and Gonorrhea
- Environmental risk factors: Poor air quality and poor retail food environment

Burden of Disease

- Chronic diseases on the rise: Diabetes, heart disease, hypertension, asthma and depression
- Poor mental health: Depression and schizophrenia
- Major causes of death: Heart disease and cancer
- Years of potential life lost (YPLL): Infant mortality and suicide

Health Disparities

- Striking differences in health outcomes by geographic area, income/poverty status, and race/ethnicity.

Geographical Areas of Concern

- The Southwest Central and East Central regions of Stanislaus have the worst life expectancy at birth
- These two regions also have worse ER usage, hospitalization and mortality for chronic conditions than other regions in the County (see Table 20)

Table 20: Burden of Chronic Conditions by Stanislaus County Regions

Chronic Condition	Outcomes		
	Highest ER Usage Rate	Highest Hospitalization Rate	Highest Mortality Rate
Hypertension	East Central	East Central	Southwest Central
Heart Disease	Northeast Side	Southeast Side	East Central
Diabetes	Southwest Central	Southwest Central	Southwest Central
Asthma	Southwest Central	Southwest Central	NA

- In addition, these two geographic regions bear a disproportionate burden of some common mental illnesses (see Figures 56-66 in the earlier section).

Table 21: Burden of Common Mental Conditions by Stanislaus County Regions

Mental Condition	Outcomes		
	Highest ER Usage Rate	Highest Hospitalization Rate	Highest Mortality Rate
Depression	East Central	East Central	NA
Anxiety / Phobia	East Central	East Central	NA
Addiction / Substance Abuse	East Central	East Central	NA
Schizophrenia	Southwest Central	Southwest Central	NA
Suicide	NA	NA	Northeast Side

Recommendations

Access to Care

- Support efforts to increase the number of healthcare providers per capita, including participating in training programs for physicians, nurses and other health professionals.
- Consider strategies to increase health insurance coverage and healthcare access, particularly among those with lower incomes, working adults, and racial and ethnic minorities.

Quality of Clinical Care

- Support efforts to increase the quality of primary care for Stanislaus County residents, particularly concentrating on prenatal and postpartum care, BMI assessment, nutrition and physical activity counseling, prostate cancer screening, and diabetes testing, control and management.
- Explore new strategies and opportunities under the Affordable Care Act to integrate clinical services with community support services.

Modifiable Risk Factors for Disease

- Support initiatives involving policy and infrastructure change (e.g. Community Transformation Grant) to reduce behavioral and environmental risk factors and increase protective factors for chronic diseases and mental illnesses.
- Adopt social marketing campaigns to change group behavioral norms to increase healthy choices and public support for policy and infrastructural improvements that will help make the healthy choice the easy choice.
- Work with partners to ensure that comprehensive sexual education and access to reproductive planning resources are accessible to those at high risk for STIs, including young people.

Burden of Disease

- Increase mental and behavioral health preventive and treatment services and support initiatives to increase the prevalence of protective factors than can reduce the need for such services (e.g. promotores and community health workers).

Health Disparities

- Focus on reducing health disparities by addressing inequalities in the broad determinants of health, such as education, socioeconomic status, and the natural and built environments (e.g. support the *Framework for a Thriving Stanislaus*, see <http://www.schsa.org/PublicHealth/mainpages/coalitionPartnerships/framework.html>.)

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Appendix A: Agency for Healthcare Research and Quality, Prevention Quality Indicators, 2011

2011 AHRQ Prevention Quality Indicators	Stanislaus Hospitalization Rate*
Chronic obstructive pulmonary disease (COPD)	515.1
Congestive heart failure	358.5
Bacterial pneumonia	336.4
Urinary tract infection	198.9
Diabetes long term complications	140.4
Dehydration	110.9
Diabetes short term complications	84.8
Hypertension	45.7
Asthma in younger adults	40.8
Perforated appendix	31.5
Angina without procedure	23.1
Lower-extremity amputation among patients with diabetes	19.8
Uncontrolled diabetes	16.0

**Rate = per 100,000 county population, excepted for PQI for perforated appendix, which is per 100 appendicitis cases. All rates are age and sex adjusted.*

***Source = OSHPD Prevention Quality Indicators, see*

http://www.oshpd.ca.gov/HID/Products/PatDischargeData/AHRO/pqi_overview.html

East Central Region: Airport Neighborhood and Modesto (parts), Zip Code: 95354			
	Support, Involved with and/or Participate		
	Tobacco-Free	Healthy Eating	Active Living
Family Resource Centers: * Inter-Faith Ministries * Parent Resource Center	X (Prop 10)	X X	X
School Districts: Modesto City Schools (schools within zip code)	1. <u>X</u>	1. <u>X</u>	1. <u>X</u>
Health clinics, hospitals & urgent cares by zip codes: 95354 <ul style="list-style-type: none"> o Six Street Clinic (GVHC) o Tenaya Clinic - Satellite (GVHC) 			
Health, Nutrition and Tobacco Classes (free of charge) 95354:			
Inter-Faith Ministries: Healthy Eating Classes and the Importance of Milk		Parent Resource Center: Healthy Eating Courses for parents and children	
Orville Wright Healthy Start: Nutrition Courses (6 courses per year through DMC) Nutrition and Exercise classes (4 weeks through CSU)			
Tobacco-Funded Programs:	Zip Codes:		
Stanislaus County Office of Education (SCOE): Protecting Health And Slamming Tobacco (PHAST) Junior High Schools 95354 High Schools None Tobacco Use Prevention Education (TUPE) 95354 Youth Quest→Red Ribbon Week 95354	X	X	X
Children & Families Commission (Prop 10): El Concilio 95354 Sierra Vista Drop-In Center 95354 Stanislaus County (SCOE) 95354 Stanislaus Family Justice Center 95354 United Way of Stanislaus County 95354	X	X	X

CONTINUED: **East Central Region:** Airport Neighborhood and Modesto (parts), Zip Code: 95354

			Support, Involved with and/or Participate		
			Tobacco-Free	Healthy Eating	Active Living
Farmers Markets:	Neighborhood Based	EBT Accepted:			
1. Certified Farmers Markets 16 th Street (between H & I) Modesto, CA 95354 *Open: Thursdays & Saturdays, 7a-1p May thru November	Yes	Yes	X	X	
2. Sunblest Valley CFM (Gallo Center) 10 th Street (between H & I) Modesto, CA 95354 *Open: Saturdays, 7a-1p/now thru Oct.	No	In Process	X	X	
3. Sunblest Valley CFM (Gallo Center) 10 th Street (between H & I) Modesto, CA 95354 *Open: Fridays, 4p-8p/now thru Oct.	No	In Process	X	X	
<u>Flea Markets that offer fresh produce</u>					
Zip Code: None	How many: N/A	<u>EBT:</u> N/A			
Farm Stands					
Zip Code: None	How many: N/A				
Parks/Recreational Areas by Zip Code:			How Many		
95354	Total: 22			22	22

North Side: Del Rio, Salida and North Modesto (Zip Codes: 95356, 95368 and 95320)				
		Support, Involved with and/or Participate		
		Tobacco-Free	Healthy Eating	Active Living
School Districts: Escalon School District Modesto City Schools (schools within zip code) Salida Union School District * J.U.A. after school hours and weekends: 3 soccer teams, "Salida football", 2 basketball teams, 2 zumba classes (gymnasium) and baseball (downtown park).*		1. _____ 2. <u>X</u> 3. <u>X</u>	1. <u>X</u> 2. <u>X</u> 3. <u>X</u>	1. _____ 2. <u>X</u> 3. <u>X</u>
Health clinics, hospitals & urgent cares by zip codes: 95356 Dale Road Care Center (Sutter) ○ Kaiser Permanente Hospital Kaiser Permanente ○ Valley Oak Pediatrics		95320 Escalon Community Health Center		
Colleges:	Zip Codes:	Nutrition Courses?		
1) <u>Brandman University</u>	<u>95368</u>	NO	1) _____	1) _____
2) <u>Chapman University</u>	<u>95368</u>	YES	2) _____	2) <u>X</u>
3) <u>Community Business College</u>	<u>95356</u>	NO	3) _____	3) _____
4) <u>Heald College</u>	<u>95368</u>	NO	4) _____	4) _____
5) <u>Humphreys College</u>	<u>95356</u>	YES	5) _____	5) <u>X</u>
6) <u>Kaplan College</u>	<u>95368</u>	YES	6) <u>X</u>	6) <u>X</u>
7) <u>San Joaquin Valley College</u>	<u>95368</u>	NO	7) _____	7) _____
8) <u>University of Phoenix</u>	<u>95368</u>	YES	8) <u>X</u>	8) <u>X</u>
Tobacco-Funded Programs:		Zip Codes:		
Stanislaus County Office of Education (SCOE): Protecting Health And Slamming Tobacco (PHAST)			X	X
Junior High Schools	95368			
High Schools	95356			
Tobacco Use Prevention Education (TUPE)	95368			
Youth Quest→Red Ribbon Week	95356 & 95368			
<u>Kaiser Permanente Foundation:</u>		95356	X	X
American Lung Association				
California's Smokers' Helpline				
Children and Families Commission (Prop 10):	95356			
Stanislaus County - BHRS (Leaps & Bounds)	95356			
Children and Families Commission (Prop 10):	95356		X	X
Stanislaus County - BHRS (Leaps & Bounds)	95356			

CONTINUED: North Side: Del Rio, Salida and North Modesto (Zip Codes: 95356, 95368 and 95320)

			Support, Involved with and/or Participate		
			Tobacco-Free	Healthy Eating	Active Living
Farmers Markets:	Neighborhood Based	EBT Accepted:			
1. Vintage Faire Mall 3401 Dale Road Modesto, CA 95356 *Open: Sundays, 9a - 1p now thru Oct. 2 nd	No	?	X	X	
<u>Flea Markets that offer fresh produce</u>					
<u>EBT:</u>					
Zip Code: None	How many: N/A	N/A			
Farm Stands					
Zip Code: <u>95320</u>	How many within zip code: <u>3</u>			X	
<u>95356</u>	<u>3</u>				
<u>95368</u>	<u>0</u>				
Parks/Recreational Areas by Zip Code:		Total:	How Many		
95320		11		11	11
95356		6		6	6
95368		5		5	5

Northeast Side: Farmington, Knights Ferry, Riverbank, Oakdale & Valley Home, Zip Codes: 95230, 95361 & 95367				
		Support, Involved with and/or Participate		
		Tobacco-Free	Healthy Eating	Active Living
Family Resource Centers: Casa Del Rio Family Resource Center (95367) *J.U.A. w/city for gymnasium and a GVHC at Riverbank High School* Mobile Family Resource Center (95230) Oakdale Family Resource and Counseling Center (95361) Oak Valley Family Support Network (95361)		1. <input checked="" type="checkbox"/> 2. <input checked="" type="checkbox"/> (prop 10) 3. <input checked="" type="checkbox"/> (prop 10) 4. _____	1. <input checked="" type="checkbox"/> 2. <input checked="" type="checkbox"/> (H.E.A.L. by K.P) 3. _____ 4. _____	1. <input checked="" type="checkbox"/> 2. <input checked="" type="checkbox"/> (H.E.A.L. by K.P) 3. _____ 4. _____
School Districts: Escalon Unified School District (Farmington, 95230) Knights Ferry Elementary School District (95361) Oakdale Joint Unified School District (95361) Riverbank Unified School District (95367) *J.U.A. with GVHC @ H.S. and gymnasium w/City of Riverbank* Valley Home Joint School District (95361)		1. _____ 2. <input checked="" type="checkbox"/> 3. _____ 4. <input checked="" type="checkbox"/> (prop 10) 5. _____	1. <input checked="" type="checkbox"/> 2. <input checked="" type="checkbox"/> 3. <input checked="" type="checkbox"/> 4. _____ 5. _____	1. _____ 2. <input checked="" type="checkbox"/> 3. _____ 4. _____ 5. _____
Health clinics, hospitals & urgent cares by zip codes: 95367 Riverbank Community Health Center Riverbank Primary Care Valley West Health Care		95361 Oakdale Community Health Center Oak Valley Occupational Health Pathways Health Care		
Health, Nutrition and Tobacco Classes (free of cost)				
95230: Mobile Family Resource Unit - Nutrition education Regular physical activities (dance & aerobic classes + 10,000 Steps Walking Club)	95361: Oakdale Family Resource Center - Nutrition education w/food drive give-away H.E.A.L. (incorporated with all programs) Oakdale WIC - Nutrition classes (prenatal - 5 yrs.)	95367: Casa del Rio Family Resource Center - Nutrition education Dance therapy (bailoterapia) Tobacco education (2 sessions per year)		
Tobacco-Funded Programs:		Zip Codes:		
Stanislaus County Office of Education (SCOE): Protecting Health And Slamming Tobacco (PHAST) Junior High Schools High Schools Tobacco Use Prevention Education (TUPE) Youth Quest→Red Ribbon Week		95361 95361 95361 95361	X X X X	X X X X
Oak Valley District Hospital:		95361	X	X

CONTINUED: Northeast Side: Farmington, Knights Ferry, Riverbank, Oakdale & Valley Home, Zip Codes: 95230, 95361 & 95367

			Support, Involved with and/or Participate		
			Tobacco-Free	Healthy Eating	Active Living
Children & Families Commission (Prop 10): Oakdale Family Resource and Counseling Center 95361 Riverbank Unified School District 95367			X	X	X
Farmers Markets:	Neighborhood Based	EBT Accepted:			
1. Oakdale CFM 3 rd Avenue (between E & F) Oakdale, CA 95361 Open: Thursdays, 5p-7:30p/Jun.- Aug.	Yes	Yes	X	X	
2. Riverbank Farmers Market (Cool Hand Luke's parking lot) 2025 Patterson Road Riverbank, CA 95367 Open: Saturdays, 9a-12p	Yes	Yes	X	X	
3. Riverbank Farmers Market (Riverbank Community Center) 3600 Santa Fe Street Riverbank, CA 95367 Open: Wednesdays, 5p-8p	Yes	Yes	X	X	
<u>Flea Markets that offer fresh produce</u>			<u>EBT:</u>		
Zip Code: None How many: N/A			N/A		
Farm Stands					
Zip Code: 95320 How many: 0					
95361 0				X	
95367 1					
Parks/Recreational Areas by Zip Code:		Total:	How Many		
95230		0			
95361		20		20	20
95367		16		16	16

CONTINUED: South Central Region: Ceres & Keyes, Zip Code: 95307 & 95328

			Support, Involved with and/or Participate		
			Tobacco-Free	Healthy Eating	Active Living
Farmers Markets:	Neighborhood Based	EBT Accepted:			
1. Ceres Certified Farmers Markets (Whitmore Park) Ceres, CA 95307 *Open: Wednesdays, 10a-2p/May-Oct. Tuesdays, 5p-8:30p/Jun.-Jul.	Yes	Yes	X	X	X (C.C.R.O.P)
<u>Flea Markets that offer fresh produce</u>		<u>EBT:</u>		X	
Zip Code: <u>95307</u>	How many: <u>1</u>	<u>Yes</u>			
<u>95328</u>	<u>0</u>	<u>---</u>			
Farm Stands					
Zip Code: None					
How many: N/A					
Parks/Recreational Areas by Zip Code:		Total:	How Many		
95307		13	13 (per City of Ceres)	13 (+1 future)	13
95328		1		1	1
Safe Routes to School: Cycle 10 Elementary Schools Junior High Schools High Schools	Cities Awarded: Ceres (95307) <u>1</u> <u>1</u> <u>0</u>				X

South Side: Turlock, Zip Codes: 95380, 95381 (P.O. Box only) and 95382

		Support, Involved with and/or Participate		
		Tobacco-Free	Healthy Eating	Active Living
Family Resource Centers: Turlock Family Resource Center (95380)		X (prop 10)	—	—
School Districts: Chatom Union School District (95380) Turlock Unified School District (95380 & 95382) *J.U.A with City of Turlock for recreational activities*		1. X 2. X	1. X 2. X	1. X 2. X
Health clinics, hospitals & urgent cares by zip codes: 95380 Sutter Gould Medical Center Turlock Medical Office (HSA) Golden Valley Health Center		95382 Emanuel Medical Center Family Medical Group		
Colleges: California State University Stanislaus	Zip Code: 95382	Nutrition Courses? Yes	X *designated areas	X X X
Health, Nutrition and Tobacco Classes (free of cost)				
95380: Turlock WIC - Nutrition classes (prenatal - 5 yrs.)				
Tobacco-Funded Programs:		Zip Codes:		
Stanislaus County Office of Education (SCOE): Protecting Health And Slamming Tobacco (PHAST)				
Junior High Schools	95380			
High Schools	95380, 95382			
Tobacco Use Prevention Education (TUPE)	95380			
Youth Quest→Red Ribbon Week	95380, 95382			
Emanuel Medical Center (EMC):	95382	X	X	X
Children & Families Commission (Prop 10):		X	X	X
Turlock Family Resource Center	95380			
Turlock Unified School District	95380			

CONTINUED: South Side: Turlock, Zip Codes: 95380, 95381 (P.O. Box only) and 95382

			Support, Involved with and/or Participate		
			Tobacco-Free	Healthy Eating	Active Living
Farmers Markets:	Neighborhood Based	EBT Accepted:			
1. Turlock Certified Farmers Market (Corner of Main St. & Broadway) Open: Fridays, 8a-1p/May 4 th -Oct. 26 th	No	?	X	X	
<u>Flea Markets that offer fresh produce</u>		<u>EBT:</u>		X	
Zip Code: <u>95380</u>	How many: <u>1</u>	<u>Yes</u>			
<u>95382</u>	<u>0</u>	<u>—</u>			
<u>Farm Stands</u>				X	
Zip Code: <u>95380</u>	How many: <u>0</u>				
<u>95382</u>	<u>1</u>				
<u>Parks/Recreational Areas by Zip Code:</u>	<u>Total:</u>		<u>How Many</u>		
95380	13			13	13
95382	12			12	12
Safe Routes to School: Cycle 10	Cities Awarded: Turlock (95382)				X
Elementary Schools	<u>0</u>				
Junior High Schools	<u>1</u>				
High Schools	<u>0</u>				

Southeast Side: Denair, Empire, Hughson, Hickman, La Grange and Waterford, Zip Codes: 95316, 95319, 95323, 95326, 95329, 95386				
		Support, Involved with and/or Participate		
		Tobacco-Free	Healthy Eating	Active Living
Family Resource Centers: Hughson Family Resource Center (95326)		1. <u>X</u> (prop 10)	1. <u>X</u>	1. <u>X</u>
School Districts: Denair Unified School District (95316) *J.U.A. for youth football team.* Empire Union School District (95319) Hickman Community Charter School District (95323) Hughson Unified School District (95326) La Grange Elementary School District (95329)		1. <u>X</u>	1. <u>X</u>	1. <u>X</u>
		2. <u>X</u>	2. <u>X</u>	2. <u>X</u>
		3. _____	3. _____	3. _____
		4. <u>X</u>	4. <u>X</u>	4. <u>X</u>
		5. <u>X</u>	5. <u>X</u>	5. <u>X</u>
Health clinics, hospitals & urgent cares by zip codes: 95326		95386		
Hughson Medical Office (HSA)		Cedar Family Practice		
Health, Nutrition and Tobacco Classes (free of cost)				
95316: (Through) Hughson FRC - Summer Fitness & Nutrition Camp (1 week) CalFresh Nutrition Classes	95319: (Through) Hughson FRC - CalFresh Nutrition Classes	95326: Hughson Family Resource Center - CalFresh Nutrition Classes	95386: (Through) Hughson FRC - Summer Fitness & Nutrition Camp (1 week) CalFresh Nutrition Classes Waterford WIC - Nutrition Classes (prenatal - 5 yrs.)	
Tobacco-Funded Programs:		Zip Codes:		
Stanislaus County Office of Education (SCOE): Protecting Health And Slamming Tobacco (PHAST) Junior High Schools High Schools Tobacco Use Prevention Education (TUPE) Youth Quest → Red Ribbon Week		95316, 95323, 95326, 95329, 95386 95316, 95326, 95386 95316, 95323, 95326, 95329, 95386 95316, 95323, 95326, 95329, 95386		
Children & Families Commission (Prop 10): Hughson Family Resource Center		95326		
		X	X	X
		X	X	X

CONTINUED: Southeast Side: Denair, Empire, Hughson, Hickman, La Grange and Waterford, Zip Codes: 95316, 95319, 95323, 95326, 95329, 95386

			Support, Involved with and/or Participate		
			Tobacco-Free	Healthy Eating	Active Living
Farmers Markets: None	Neighborhood Based	EBT Accepted			
<u>Flea Markets that offer fresh produce</u>					
<u>EBT:</u>					
Zip Code: None	How many: N/A	N/A			
Farm Stands					
Zip Code: <u>95316</u>	How many: <u>1</u>			X	
<u>95319</u>	<u>0</u>				
<u>95323</u>	<u>0</u>			X	
<u>95326</u>	<u>3</u>			X	
<u>95329</u>	<u>1</u>			X	
<u>95386</u>	<u>2</u>				
Parks/Recreational Areas by Zip Code:		Total:	How Many		
95316		0	0	0	0
95319		1		1	1
95323		0	0	0	0
95326		1		1	1
95329		4		4	4
95386		6		6	6
Safe Routes to School: Cycle 10		Cities Awarded:			X
Elementary Schools		Waterford (95386)			
Junior High Schools		<u>2</u>			
High Schools		<u>0</u>			
		<u>1</u>			

CONTINUED:Southwest Central: West Modesto & South Modesto, Zip Code: 95351

			Support, Involved with and/or Participate		
			Tobacco-Free	Healthy Eating	Active Living
Farmers Markets:	Neighborhood Based	EBT Accepted:			
1. Certified Farmers Markets 601 N. Martin Luther King Drive Modesto, CA 95351 *Open:Thursdays & Saturdays, 7a-1p May thru November	Yes	Yes	X	X	X
			*H.E.A.L. by K.P		
<u>Flea Markets that offer fresh produce</u>		<u>EBT:</u>		X	
Zip Code: <u>95351</u>	How many: <u>1</u>	<u>No</u>			
Farm Stands					
Zip Code: None	How many: N/A				
Parks/Recreational Areas by Zip Code:		Total:	How Many		
95351		12		12	12

West Side: Crows Landing, Grayson, Newman, Patterson, Vernalis & Westley, Zip Codes: 95313, 95360, 95363, 95385, 95387			
	Support, Involved with and/or Participate		
	Tobacco-Free	Healthy Eating	Active Living
Family Resource Centers: Newman/Crows Landing Family Resource Center (95360) Patterson Family Resource Center (95363)	1. <input checked="" type="checkbox"/> (prop 10) 2. <input checked="" type="checkbox"/> (prop 10)	1. <input checked="" type="checkbox"/> 2. <input checked="" type="checkbox"/>	1. <input checked="" type="checkbox"/> 2. <input checked="" type="checkbox"/>
School Districts: Gustine Unified School District (schools within 95322 zip code) Livermore Valley Joint Unified School District (schools within 94550 zip code) Newman/Crows Landing Unified School District (95360 & 95313) *J.U.A. with private football team/org. and McConnell Education Center with Salvation Army for Senior Food Program* Patterson Joint Unified School District (95363, 95385 & 95387) *J.U.A. in all sites with the City of Patterson for sports fields; softball, football, etc.+ 1 gymnasium*			
Health clinics, hospitals & urgent cares by zip codes: 95360 Golden Valley Health Center Randhawa Medical Group 95363 Del Puerto Health Center First Care Medical Center (Kaiser) Golden Valley Health Center Sutter Gould Medical Center	95387 Golden Valley Health Center 94550 (parts) Axis Community Health Life Style Rx Livermore Medical Clinic PC VA Health Care System Valley Care Campus		
Health, Nutrition and Tobacco Classes (free of cost)			
95313/95360: Newman/Crows Landing Family Resource Center - Dance Therapy (bailaton) Nutrition Workshop Parent/Teen Education (10 wk. course which includes tobacco ed.)	95363: Patterson Family Resource Center - Nutrition Classes (5+ annually) Exercise Classes Patterson WIC - Nutrition classes (prenatal - 5 yrs.)		

CONTINUED: West Side: Crows Landing, Grayson, Newman, Patterson, Vernalis & Westley, Zip Codes: 95313, 95360, 95363, 95385, 95387

			Support, Involved with and/or Participate		
			Tobacco-Free	Healthy Eating	Active Living
Tobacco-Funded Programs: Zip Codes:					
Stanislaus County Office of Education (SCOE): Protecting Health And Slamming Tobacco (PHAST) Junior High Schools 95360, 95363 High Schools 95360, 95363 Tobacco Use Prevention Education (TUPE) 95360, 95363 Youth Quest→Red Ribbon Week 95360, 95363			X	X	X
Children & Families Commission (Prop 10): Newman Family Resource Center 95360 Patterson Family Resource Center 95363 Patterson Unified School District (Grayson Charter School) 95387			X	X	X
Farmers Markets:	Neighborhood Based	EBT Accepted:			
1. Sunblest Valley CFM 1040 W. Las Palmas Patterson, CA 95363 *Open: Wednesdays, 4p-8p/now thru Oct.	No	In Process	X	X	
2. Livermore Certified Farmer's Market 3rd & J Street (Carnegie Park) Livermore, CA 94550 *Open: Thursdays, 4p-8p/May 17th-Oct. 20th	Yes	Yes	X	X	
3. Livermore Certified Farmer's Market Railroad Ave. & L St. (Historic Train Depot) Livermore, CA 94550 *Open: Sundays, 10a-2p/year round	Yes	Yes	X	X	
<u>Flea Markets that offer fresh produce</u>					
Zip Code: None	How many: N/A	<u>EBT:</u> N/A			

CONTINUED: West Side: Crows Landing, Grayson, Newman, Patterson, Vernalis & Westley, Zip Codes: 95313, 95360, 95363, 95385, 95387

		Support, Involved with and/or Participate		
		Tobacco-Free	Healthy Eating	Active Living
Farm Stands				
Zip Code:	How many:			
<u>94550</u>	<u>0</u>			
<u>95313</u>	<u>0</u>		X	
<u>95322</u>	<u>2</u>			
<u>95360</u>	<u>0</u>			
<u>95363</u>	<u>0</u>			
<u>95385</u>	<u>0</u>			
<u>95387</u>	<u>1</u>		X	
Parks/Recreational Areas by Zip Code:		How Many		
	Total:			
94550	25 (+1 future)		25 (+1 future)	25 (+1 future)
95313	1		1	1
95322	6		6	6
95360	5		5	5
95363	30 (Patterson), 2 (Grayson)		32	32
95385	0?		0?	0?
95387	0?		0?	0?
Safe Routes to School:	Cities Awarded:			X
Cycle 10	Newman (95313)			
Elementary Schools	<u>0</u>			
Junior High Schools	<u>0</u>			
High Schools	<u>1</u>			
Cycle 10	Patterson (95363)			
Elementary Schools	<u>1</u>			
Junior High Schools	<u>1</u>			
High Schools	<u>2</u>			
Private school (Catholic)	<u>1</u>			

