

LIVE WELL

MADERA COUNTY

Community Health Assessment



2017

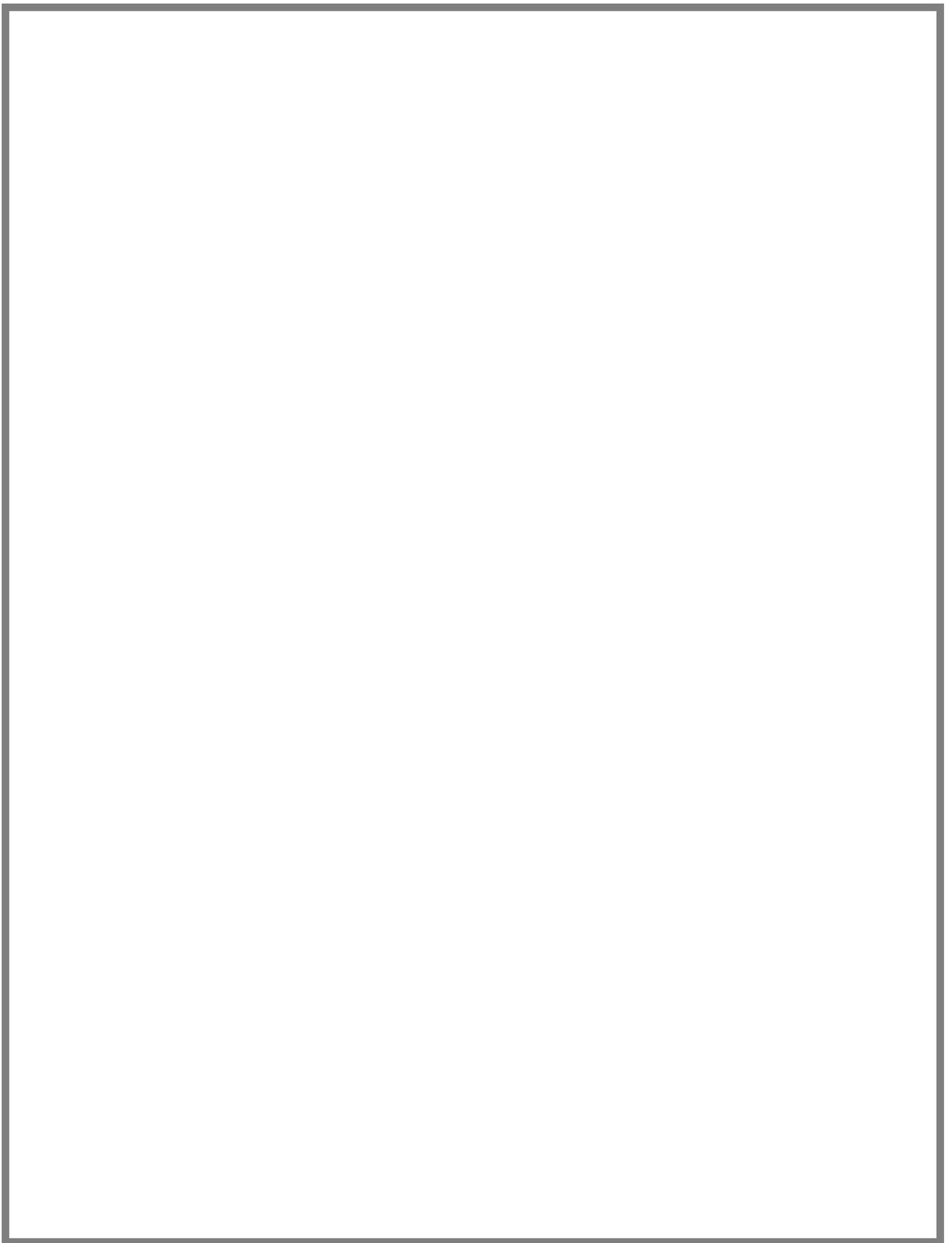


TABLE OF CONTENTS

Acknowledgements	iii
Preface	iv
Executive Summary	v
Madera County Overview	1
Social Determinants of Health	6
Income	6
Education	7
Employment	8
Housing	8
Food Environment	9
Access to Care	10
Physical	11
Dental	11
Health Insurance Coverage	12
Leading Causes of Death	13
Cardiovascular Diseases (CVD)	13
CVD Modifiable Risk Factors	15
Cancer	17
Injury and Violence	21
Respiratory Disease	25
Air Quality	28
Stroke	30
Diabetes Mellitus (DM)	33
DM Modifiable Risk Factors	37
Across the Lifespan	41
Pregnancy and Birth	41
Child and Adolescent Health	46
Aging Populations	51
Alzheimer’s Disease	51
Arthritis	53
Infectious Diseases	54
Sexually Transmitted Infections	54
Coccidioidomycosis	58
Hepatitis B, Chronic	59
Hepatitis C, Chronic	59
Pertussis	60
Tuberculosis	61

Table of Contents, continued...

Mental Health..... 62
 Depression.....62
 Suicide63
 Mental Health Services64
 Community Resources65

Substance Abuse..... 66
 Youth Tobacco, Alcohol and Drug Usage66

References..... 69

Appendix: Community Health Assessment Survey 77
 Part I: Demographics77
 Part II: Influential Factors to Community Health78
 Part III: Barriers to Healthy Environment & Health Care83
 Part IV: Self Evaluation on Health Status85
 Part V: Children’s Health87
 Part VI: Influential Factors to Community Health.....88
 Part VII: Barriers to Healthy Environment90



Acknowledgements

This report is a collaborative effort between the Live Well Madera County Coalition and the Madera County Public Health Department. Thank you for your energy, commitment, vision, and passion. Your time and efforts made this report possible.

Live Well Madera County Steering Committee

Norm Allinder	Community & Economic Development
Chinayera Black-Hardaman	First5 of Madera County
Tim Curley	Valley Children's Hospital
Rick Dupree	Probation
Donald Holley	Madera City Council
Rick Farinelli	Madera County Supervisor (2015- 2016)
Dennis Koch	Behavioral Health Department
Chuck Martin	Chowchilla Elementary School Superintendent
Andy Medellin	Madera City Mayor
Cecilia Massetti	Madera County Office of Education
Mattie Mendez	Community Action Partnership
Nicole Mosqueda	Camarena Health Centers
Karen Paolinelli & Peter Garcia	Madera Community Hospital
Robert Poythress	Madera County Supervisor (2017 to current)
Dave Riviere	Chowchilla Police Department
Harry Turner	Chowchilla Fire Department
Jay Varney	Sheriff's Office
Leoncio Vasquez	Centro Binacional
Kelly Woodard	Department of Social Services

Madera County Public Health Department

- Myriam Alvarez
- Jose Arrezola
- Van Do-Reynoso
- Brian Gamble
- Lori Gardner
- Juli Gregson
- Natalie Stein
- Zhengqi Tan
- Gilda Zarate-Gonzalez

❖ *Cover Photo by Brianna Samuelson*

Preface

This document is the product of collaborative work by a number of stakeholders over the past two years. It describes the participants, process, and outcomes of the 2015 Madera County Community Health Assessment (CHA) by presenting disease distributions, health behaviors, and the complex web of social and environmental determinants that affect health. The goal of this report is to identify community assets and resources that can be activated to promote community health and to engage community members in collaborative efforts to improve the health of all local residents.

Guided by community participants and the Live Well Madera County Coalition, four priority areas have been selected to be addressed in the Community Health Improvement Plan. These four priority areas are:

- Obesity and Diabetes
- Mental Health
- Alcohol and Substance Use
- Child Abuse and Neglect

These priority areas were confirmed in the recent 2017 Madera County Health Rankings Report (45 out of 57), which indicated that the strongest predictors of health status are socioeconomic conditions. The racial differences in socioeconomic status, neighborhood residential conditions, and access to medical care are important contributors to health disparities. The four priority concerns, and the basis for their identification, are discussed at length in the body of this document. The Madera County Department of Public Health, which led the process of the CHA, will continue its efforts to improve the health of our community – through better collaboration with our community partners, policymakers, and other leaders in our community. The action plan for improving these four priority areas will be outlined in the Community Health Improvement Plan due December 2017.

We hope this inaugural report contains baseline data and findings that are useful to our community. Understanding where we are now is critical to implementing changes in our systems, policies, and environment to improve the neighborhoods where we live, work, learn, and play. Together, we can create a healthier Madera County.

In partnership for better health,

A handwritten signature in blue ink, appearing to read "Van Do-Reynoso".

Van Do-Reynoso, MPH, Ph.D.

Madera County Public Health Department

“It is unreasonable to expect that people will change their behavior so easily when so many forces in the social, cultural, and physical environment conspire against change.”

— Institute of Medicine

Executive Summary

Community Assessment Project Overview

This Community Health Assessment (CHA) describes the health of Madera County residents. This project presents disease distribution, health behaviors, and discusses the complex web of the social and environmental factors that contribute to poor health outcomes and health inequities. The goal of this report is to identify community assets and resources that can be activated to promote health equity and to engage local stakeholders in collaborative efforts to improve the health of all Madera County residents.

The Data

In July and August 2015, over 1,720 face-to-face and more than 460 electronic surveys were completed by adult Maderans. The surveys represent respondents from the 5 county districts and more than 15 local community based organizations. Secondary data were collected for health indicators from a variety of sources, including but not limited to: the US Census Bureau, Center for Disease Control and Prevention, California Department of Public Health, National Center for Health Statistics, National Cancer Institute, California Department of Justice, Federal Bureau of Investigation, online databases and the Internet.

County Demographics

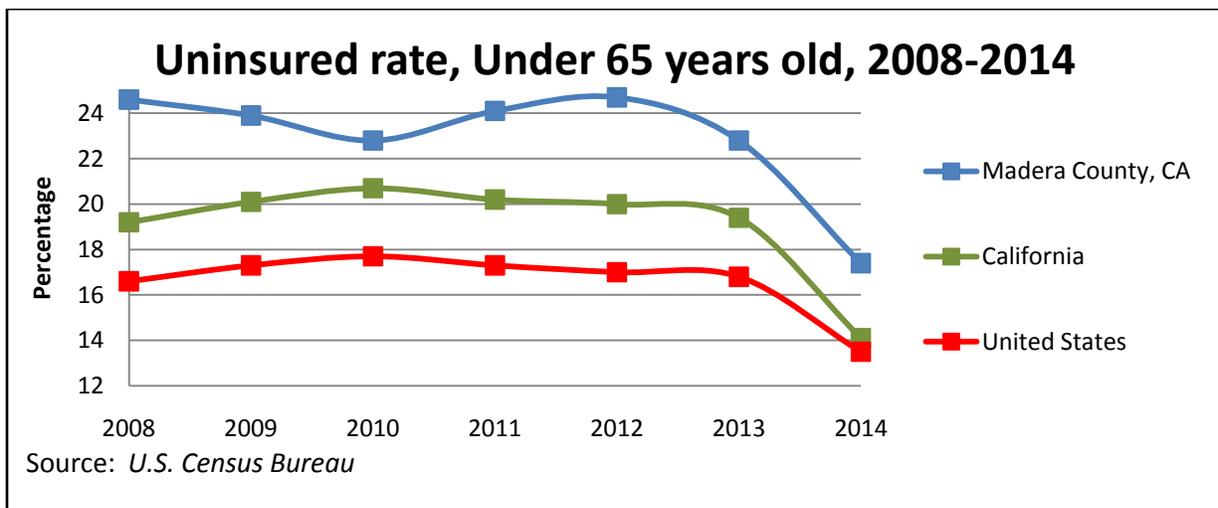
In 2015, Madera County had an estimated population of 154,998, with a median age of 33 years old and a gender ratio of 51.8% female, 48.2% male.¹ Among all county residents, 28% of them are younger than 18 years of age; 12.1% are 65 and older.¹ Madera County features a diverse racial composition. The majority (56.7%) of residents are Hispanic/Latino.¹ For non-Hispanic residents, 35.1% are Caucasian/White, 3.3% are African American, 1.1% are American Indian/Alaska Native, and 2.1% are Asian.¹ Forty-four percent of Madera County residents report speaking a language other than English at home.¹

Housing

Substandard housing is federally defined as having at least one of the following: 1) incomplete plumbing facilities, 2) incomplete kitchen facilities, 3) more than 1.01 occupants per room, 4) selected owner costs of greater than 30% of monthly income, or 5) gross rent of greater than 30% of monthly income. In 2015, forty four percent of Madera County housing units met one or more of these conditions and about ten percent of Madera County housing units are overcrowded (CA: 8.2%).²

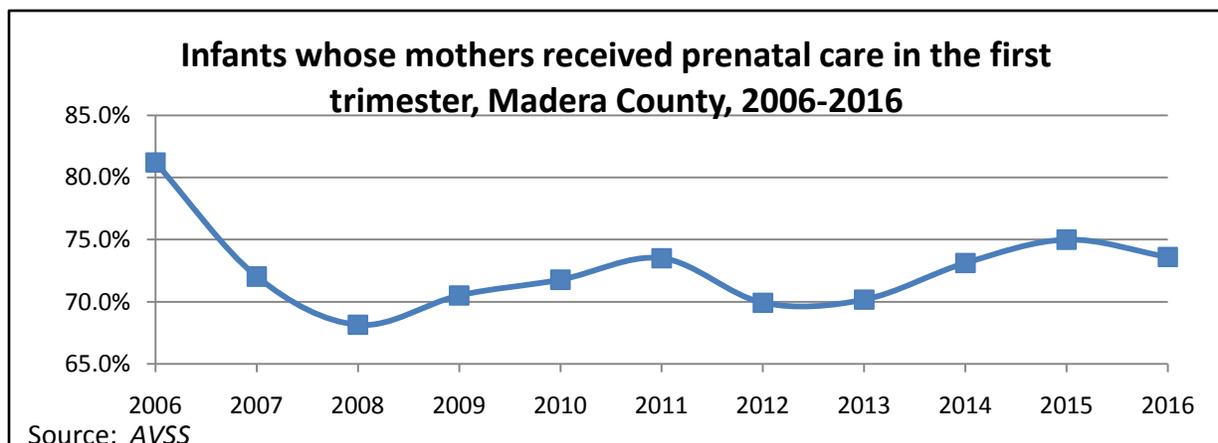
Health Insurance Coverage

Health insurance is crucial to people's access to health care. People with medical insurance are more likely to have access to and use health care resources and to receive adequate preventive care compared to those without insurance. Prevention and early detection of illnesses lead to better health outcomes for residents and monetary savings for the patients, businesses and the government. Most adult residents (75 – 83%) in Madera County reported having health insurance coverage from 2008 to 2014.¹ For children and youth (0 - 19 years), the percentage of coverage was 93.3% in 2014.¹ Additionally, 70% of survey respondents indicated that they had health insurance at the time of the 2015 survey.³



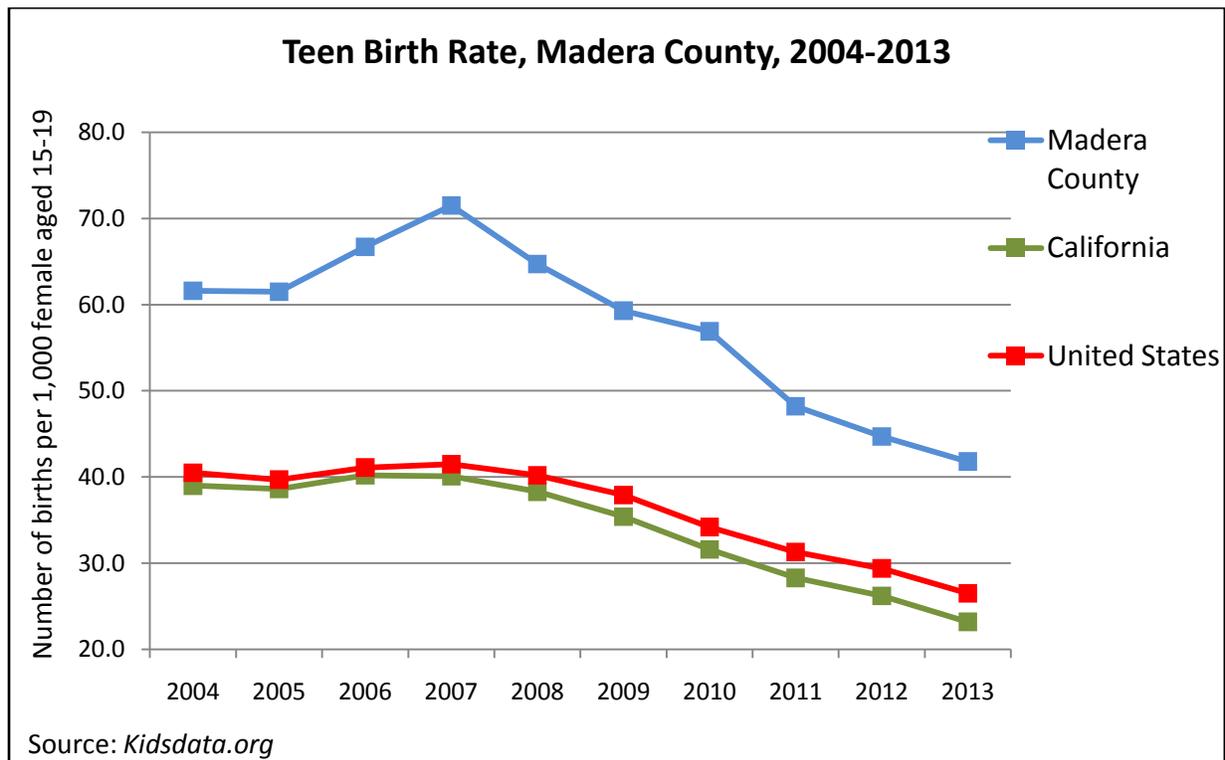
Prenatal Care

Prenatal care is comprehensive medical care provided for the mother and fetus that includes screening and treatment for medical conditions as well as identification and interventions for risky behaviors during pregnancy such as tobacco use, alcohol consumption, and poor eating habits. Women who receive adequate prenatal care are more likely to have full term and normal weight babies. From 2006 to 2016, the percentage of Madera County women receiving first trimester prenatal care was consistently lower than 82%. In 2016, 73% of Madera County mothers received first trimester prenatal care.⁴



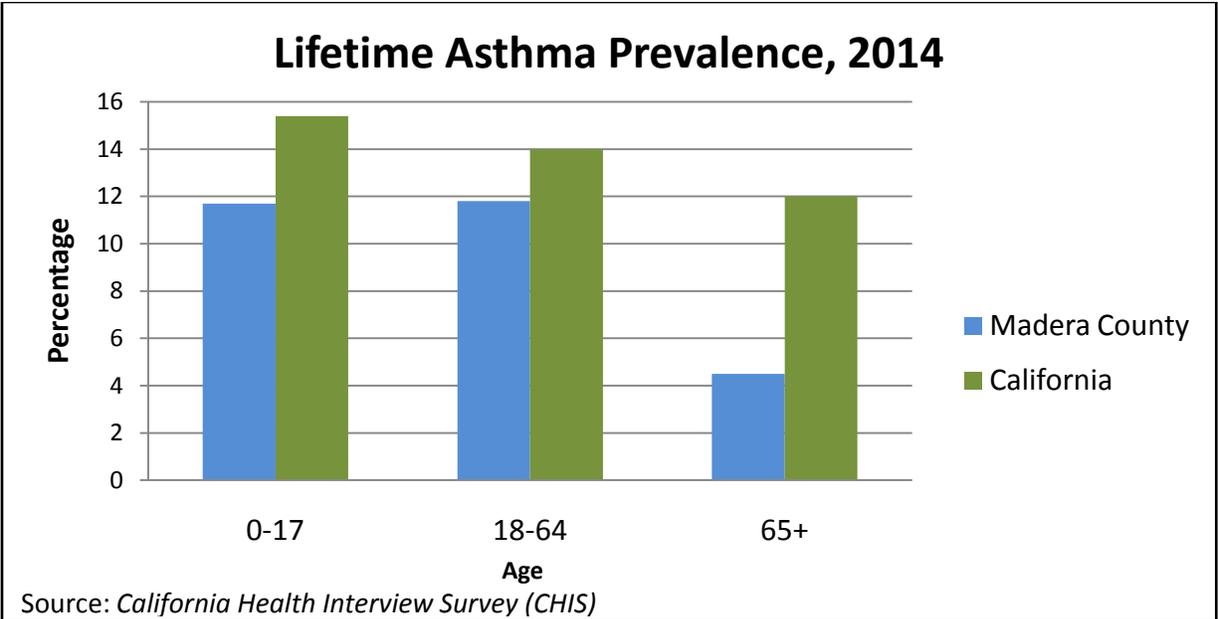
Teen Births

Teenage girls face a greater risk of delivering low birth weight babies than older mothers and their babies have a higher risk of infant mortality. Teen mothers are also less likely to complete high school and go on to college than teens who delay childbirth. Due in part to an interruption in the mother's education, babies born to teen mothers are more likely to live in poverty. Through 2012-2014, teen birth rates in Madera County (43 live births per 1,000 females aged 15-19) ranked fourth out of all 58 counties in California (aggregate 2012-2014), and was 80.2% higher than the state level (41.8 in Madera County vs. 23.2 in California per 1,000 females aged 15-19).⁵ Among all births to mothers aged 15-19 in Madera County, 17% of them have already experienced one or more live births.⁵



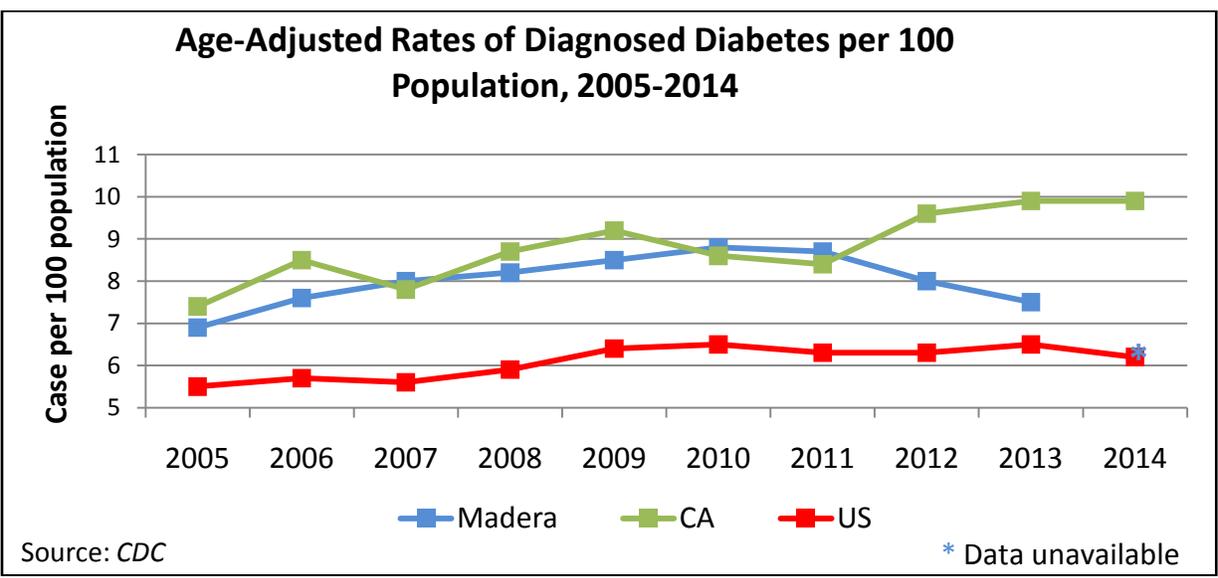
Asthma

Asthma is a chronic respiratory condition characterized by breathlessness, wheezing and chest tightness and has been on the rise in the U.S. over the past 20 years. Asthma is the leading cause of activity restriction among children and is the second most common chronic childhood condition. In 2014, Madera County has a lower prevalence of lifetime asthma than California in children and adults. The statistics for active asthma prevalence indicated Madera County rates to be higher (10.3%) than California (7.6%) among the adult population age 18 to 64.⁶



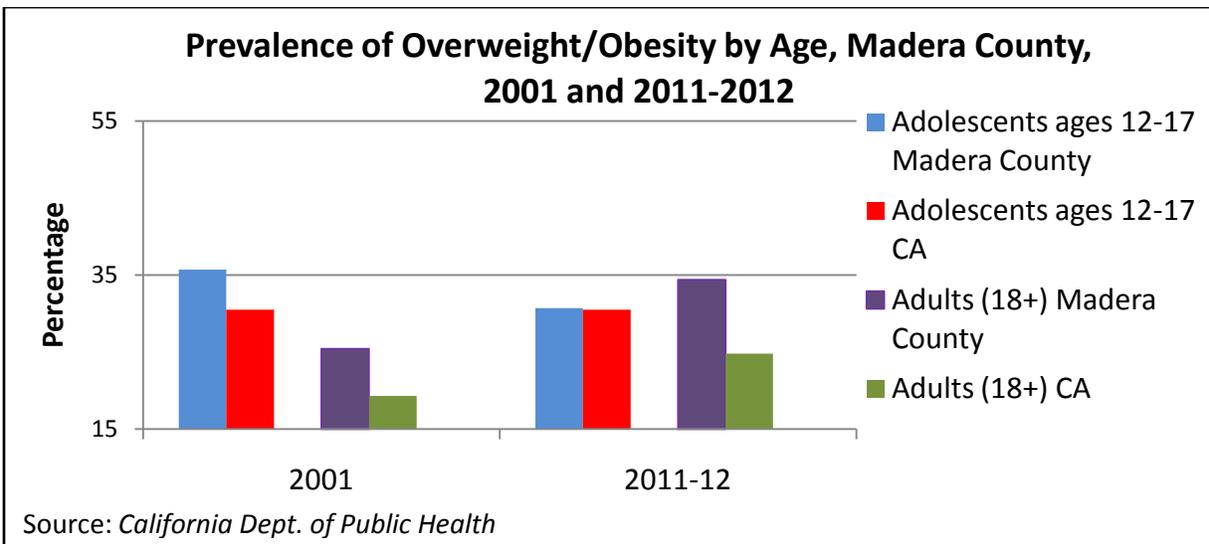
Diabetes

Diabetes is the leading cause of kidney failure, adult blindness, amputation and a leading contributor to strokes and heart attacks. An estimated 29.1 million people, or 9.3% of the population in the United States, had diabetes in 2014. The vast majority of U.S. residents who have been diagnosed with diabetes (90 - 95%) have type II diabetes, previously called adult onset diabetes. The remaining 5 - 10% of U.S. residents have type I diabetes. People with type I diabetes must take insulin daily to survive but good self-management and care help control the disease and prevent complications.⁷ Madera County had a similar increasing trend in the prevalence of diagnosed diabetes compared to California and to the national level since 2005. The prevalence of diagnosed diabetic patients in Madera County started to decrease since 2011, and was lower than the state level (7.5 vs 9.9 per 100 population) in 2013.⁸



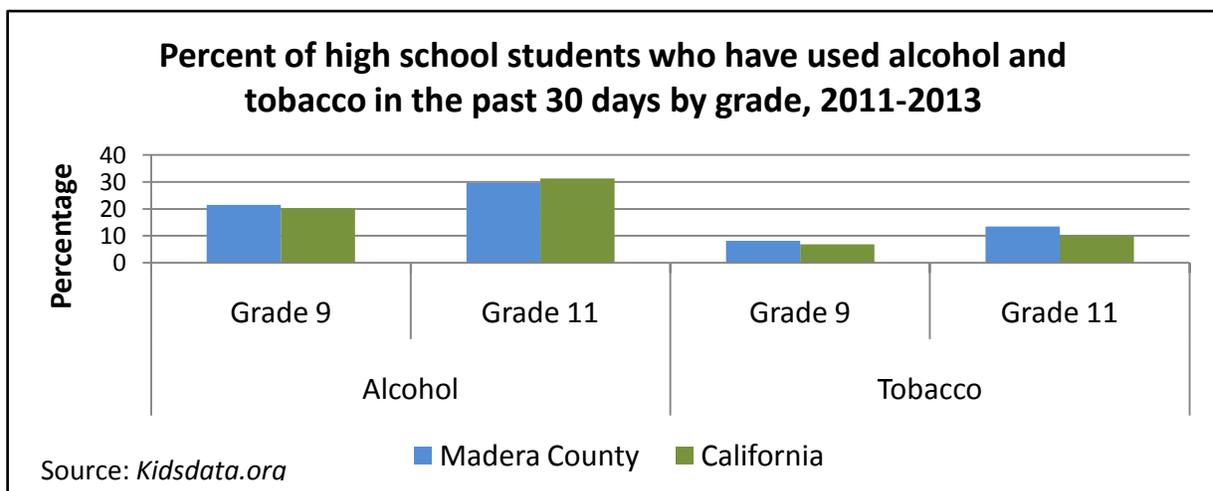
Obesity and Nutrition

Obesity is a growing public health concern in the United States. It is associated with diabetes, high cholesterol, high blood pressure, asthma, arthritis and poor health status. From 2001 to 2011-2012, the prevalence of overweight and obesity in adolescents, age 12-17, of Madera County decreased from 35.7% to 30.7%, closer to the state level (30.5%).⁹ Meanwhile, the prevalence of overweight and obesity in adults of Madera County increased 35.4% in that time and was significantly higher than state prevalence (34.4% vs. 24.8%).⁹

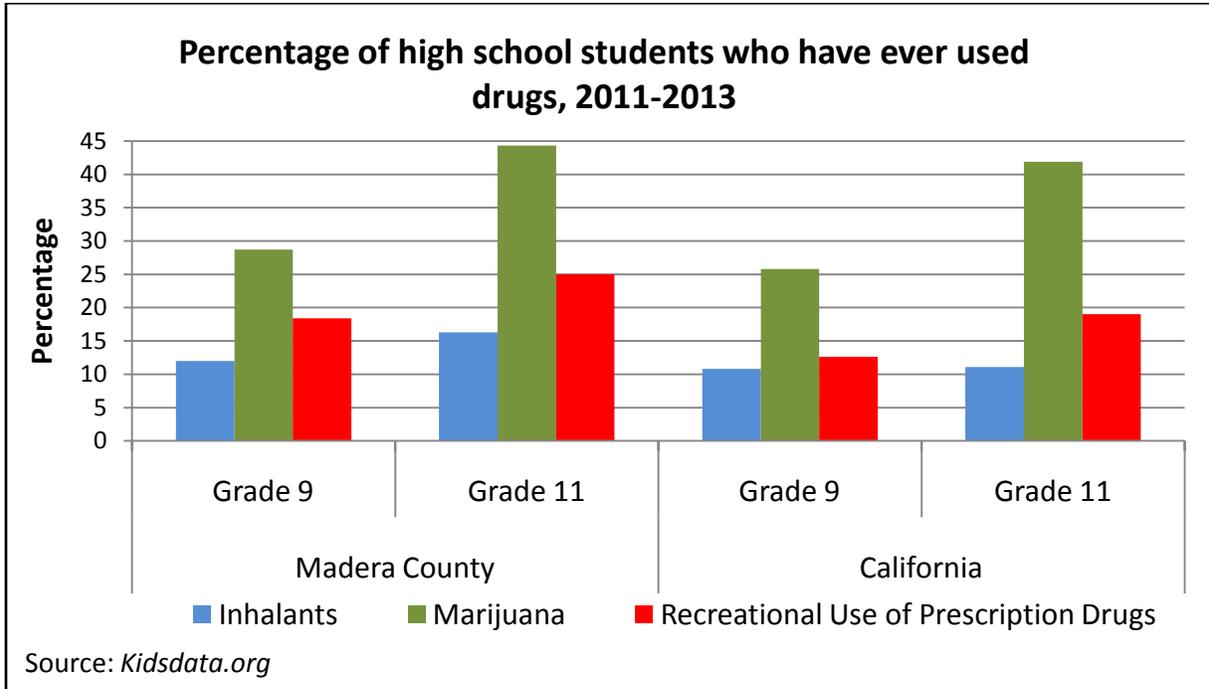


Youth Tobacco, Alcohol and Drug Usage

Smoking and secondary smoke have serious health consequences for people of all ages. However, tobacco use by young people is particularly problematic as earlier use is correlated with higher use later in life. Similarly, the National Center on Addiction and Substance Abuse indicates that teens who experiment with alcohol are “virtually certain” to continue using alcohol in the future. Youth alcohol consumption is also connected to risky sexual activity, school drop outs, overdose deaths and suicides.



Through school year 2011 to 2013, over one-fifth of high school students reported drinking alcohol in the past 30 days. Older students reported drinking at higher percentages (31%) than younger students (20%). Smoking was less prevalent but still a concern. About 10% of high school students reported using tobacco in the past 30 days.¹⁰



Drug use is also linked to educational failure, family and social problems. Unfortunately, drug use is cyclical as children of drug users are more likely to use substances themselves. Through school year 2011 to 2013, 29% and 44% of Madera County youth in 9th and 11th grades reported having used marijuana at some point in their lives. Inhalants had been used by 12 - 16% of high school students while recreational use of prescription drugs had been used by 18 - 25% of 9th and 11th graders. Overall, drug use increased as the youth became older.¹⁰

Summary

Madera County children under age 19 had a high rate of health insurance coverage in 2014 (93.3%). However, only about 83% of adults in the County had health insurance coverage. In 2016, the percentage of Madera County women receiving prenatal care during the first trimester was 73.6%. Through 2012-2014, teen birth rates in Madera County (43 live births per 1,000 females aged 15-19) ranked fourth out of all 58 counties in California and was 80.2% higher than the state level. Some chronic diseases were less prevalent in Madera County than the state of California such as diabetes and asthma; however, active asthma prevalence indicated Madera County rates to be higher (10.3%) than California (7.6%) among the adult population. Additionally, obesity for both children and adults is a particular problem for the County.

References

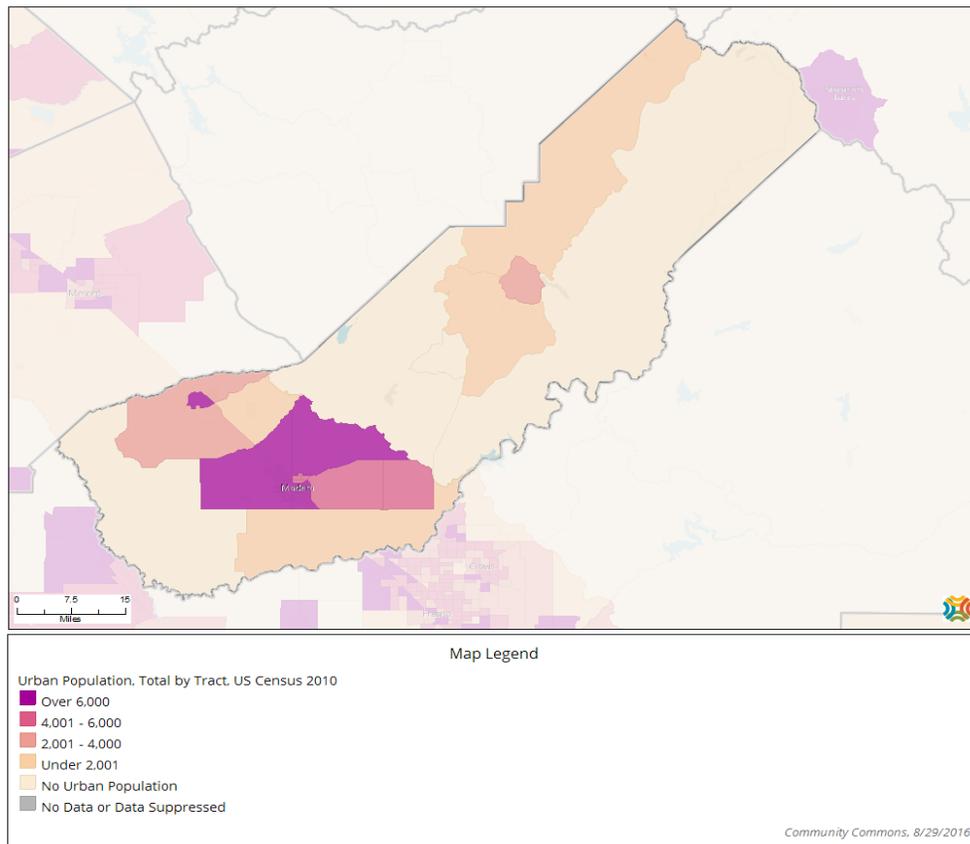
1. *United States Census Bureau.* <http://www.census.gov> Accessed September, 2016.
2. *Community Commons.* www.communitycommons.com Accessed September, 2016.
3. *Madera County Community Health Survey 2016.* Madera County Public Health Department. 2016.
4. *2016 County Vital Statistics Report.* Madera County Public Health Department, Office of Policy and Planning. 2016.
5. *2000-2014 California Adolescent Birth Report.* California Department of Public Health, Center for Family Health, Maternal Child and Adolescent Health Division, Epidemiology, Assessment, and Program Development Branch.
<https://www.cdph.ca.gov/data/statistics/Documents/2014ABRFinalPressReleaseSlides.pdf> Accessed October, 2016.
6. *California Health Interview Survey (CHIS).* UCLA Center for Health Policy Research
<http://healthpolicy.ucla.edu/chis> Accessed October, 2016.
7. *2014 National Diabetes Statistics Report.* Center for Disease Control and Prevention.
<https://www.cdc.gov/diabetes/pubs/statsreport14/national-diabetes-report-web.pdf> Accessed February, 2017.
8. *CDC WONDER Online Query System.* Center for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics, 2012-2014. Accessed October, 2016.
9. *Obesity in California: The weight of the state, 2000-2012.* California Department of Public Health, Nutrition Education and Obesity Prevention Branch, 2014
<https://www.cdph.ca.gov/programs/cpns/Documents/ObesityinCaliforniaReport.pdf> Accessed October, 2016.
10. *Kidsdata.org* Accessed October, 2016.

Madera County Overview

POPULATION CHARACTERISTICS

Madera County is located in the heart of California's Central Valley. Madera County has a rich agricultural tradition and growing industrial base.¹ In 2015, Madera County had an estimated population of 154,998. The city of Madera is the county's seat, with 41% of the total county residents.²

Urban and Rural Population of Madera County



Since 2000, the population of Madera County has grown in all age ranges by almost 32,000 people, or 25.9% in total population.²

Table 1 shows the population by age group and the percentage change between 2000 and 2010. The fastest growing group was adults ages 50-64 years old.²

Table 1. Population in Madera County by Age Group, 2000 and 2010			
<i>Age</i>	<i>2000</i>	<i>2010</i>	<i>Change</i>
Under 18 years	36,467	42,849	17.5%
18 to 24 years	12,127	15,901	31.1%
25 to 49 years	44,158	49,622	12.4%
50 to 64 years	16,761	25,231	50.5%
65 to 74 years	7,671	9,868	28.6%
75 to 84 years	4,537	5,468	20.5%
85 years and over	1,388	1,926	38.8%
Total population	123,109	150,865	22.5%

Source: 2000 and 2010 Decennial U.S. Census

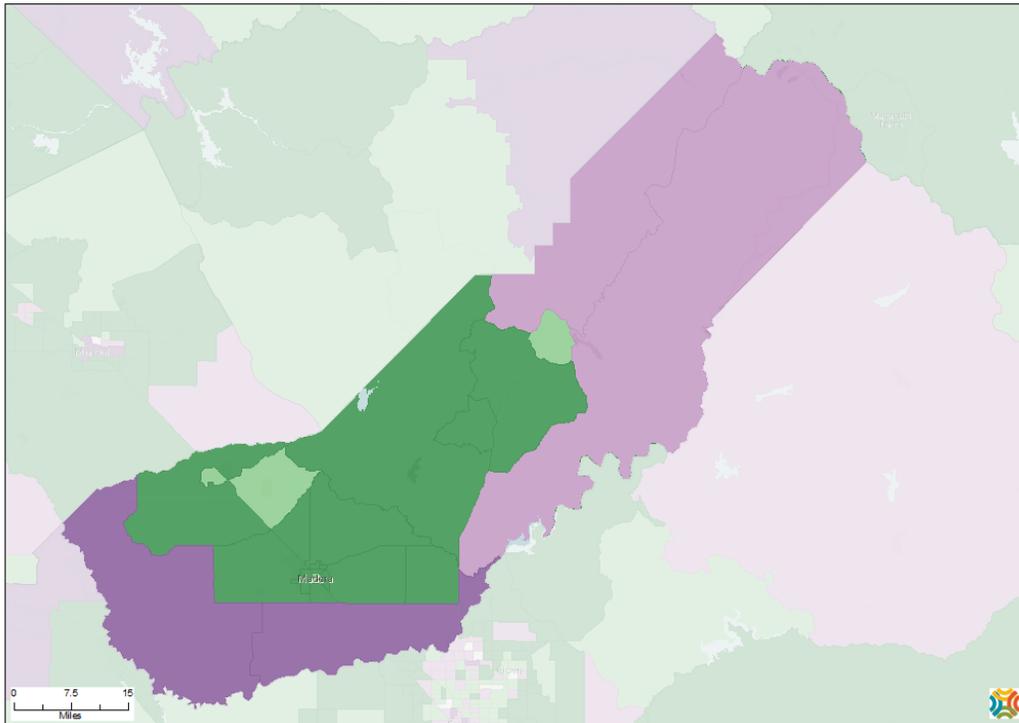
Table 2 shows the population by race/ethnic group and the percentage change between 2000 and 2010. The group with the largest population increase was Hispanic/Latino

Table 2. Population in Madera County by Race/Ethnic Group, 2000 and 2010			
<i>Race/Ethnic</i>	<i>2000</i>	<i>2010</i>	<i>Change</i>
Hispanic/Latino	54515	80992	48.57%
Caucasian/White	57391	57380	-0.02%
African American	5072	5009	-1.24%
American Indian/Alaska Native	3212	1790	-44.27%
Asian	1566	2533	61.75%
Native Hawaiian/OPI	210	107	-49.05%
Other	1143	3054	167.19%
Total population	123,109	150,865	22.5%

Source: 2000 and 2010 Decennial U.S. Census

Compared to the population growth in the central (mostly urban) area in the county, the northeastern and southwestern (mostly rural) area in the county experienced a decrease in population between 2000 and 2010.²

Population Change, Percent by Tract, Madera County 2000-2010



Map Legend

Population Change, Percent by Tract, US Census 2000 - 2010

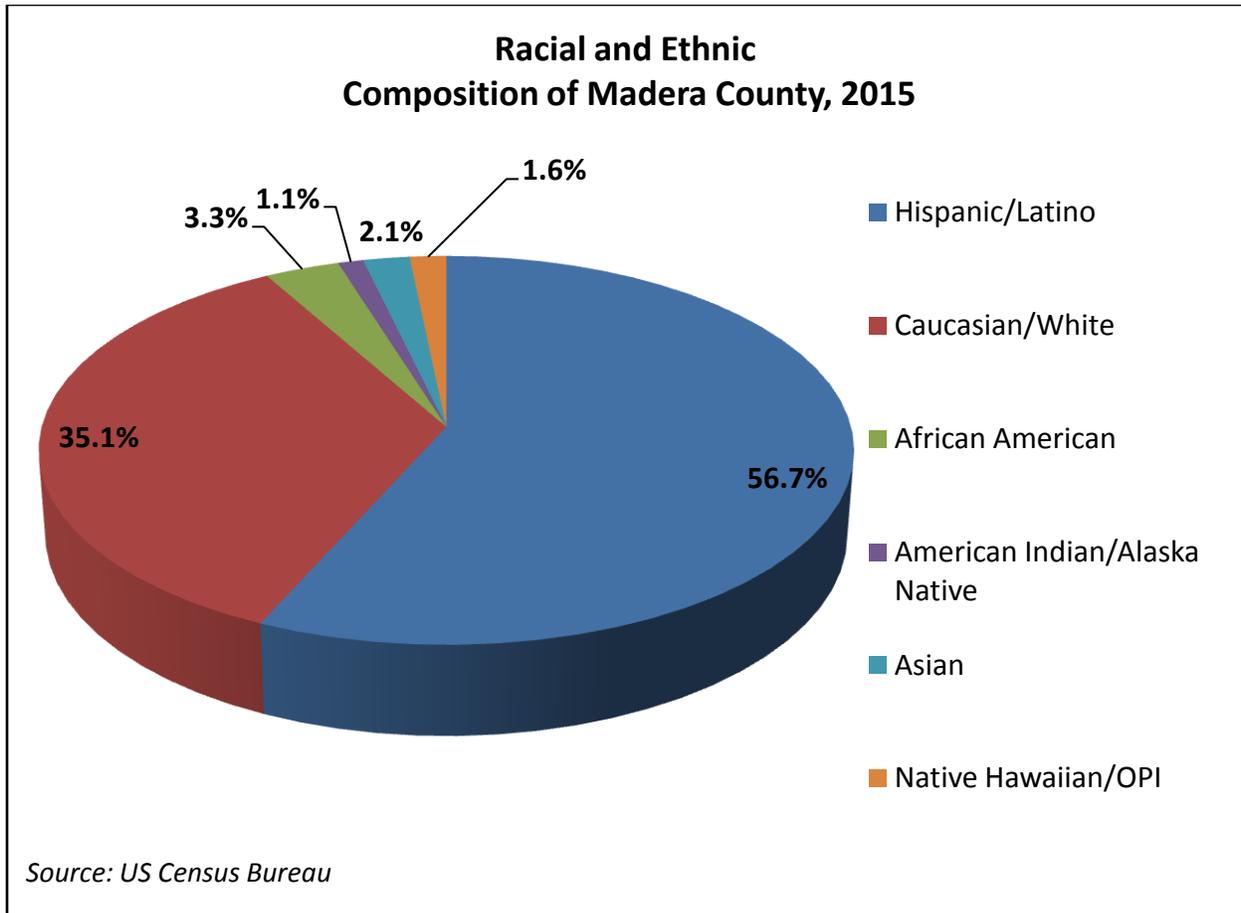
- Over 10.0% Increase (+)
- 1.0 - 10.0% Increase (+)
- Less Than 1.0% Change (+/-)
- 1.0 - 10.0% Decrease (-)
- Over 10.0% Decrease (-)
- No Population or No Data

Community Commons, 9/7/2016

The median age of Madera County residents is 33.3, compared to the State of California of 35.6 and U.S. median of 37.4. About twenty-eight percent of county residents are younger than 18 years of age; 12.1% are 65 and older.²



Madera County residents have a gender ratio of 51.8% female, 48.2% male. Madera County features a diverse racial composition. The majority (56.7%) of residents is Hispanic/Latino. For non-Hispanic residents, 35.1% are Caucasian/White, 3.3% are African American, 1.1% are American Indian/Alaska Native, and 2.1% are Asian. Forty-four percent of Madera County residents report speaking a language other than English at home.²



The Madera County Hispanic/Latino population has grown 48.6% between 2000 and 2010; a faster pace than the general population.²

The majority of Madera County residents live in the area with ZIP codes 93637 and 93638. Among all ZIP code areas in Madera County, the area with ZIP code 93638 has the largest population density.

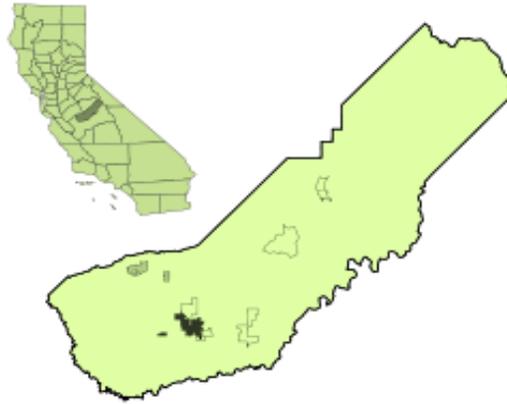


Table 3. Madera County Population by ZIP Code, 2011-2015

<i>Area (ZIP Code)</i>	<i>Population</i>	<i>Population Density (Per Sq. Mile)</i>	<i>Population percentage</i>	<i>Land Area (Square Miles)</i>
93638	50851	536.3	33.2%	94.8
93637	39596	146.4	25.8%	270.5
93610*	23912	87.8	-	272.2
93636	12367	63.2	8.1%	195.6
93614	10785	93.9	7.0%	114.9
93622*	10350	29.2	-	354.5
93644	7702	83.0	5.0%	92.8
93643	2617	21.0	1.7%	124.5
93601*	1917	42.9	-	44.6
93653*	1602	6.8	-	237.4
93626*	1153	11.6	-	99.6
93604	951	6.8	0.6%	140.7
93669	242	35.6	0.2%	6.8
93645	194	3.6	0.1%	53.5
Madera County:	153187	71.7	100.0%	2137.1

Source: American Community Survey 2011-2015, US Census Bureau

* ZIP Code Tabulation Areas (ZCTAs) that exceed county boundary and contain population from another county. Population percentage was not calculated for those ZCTAs.

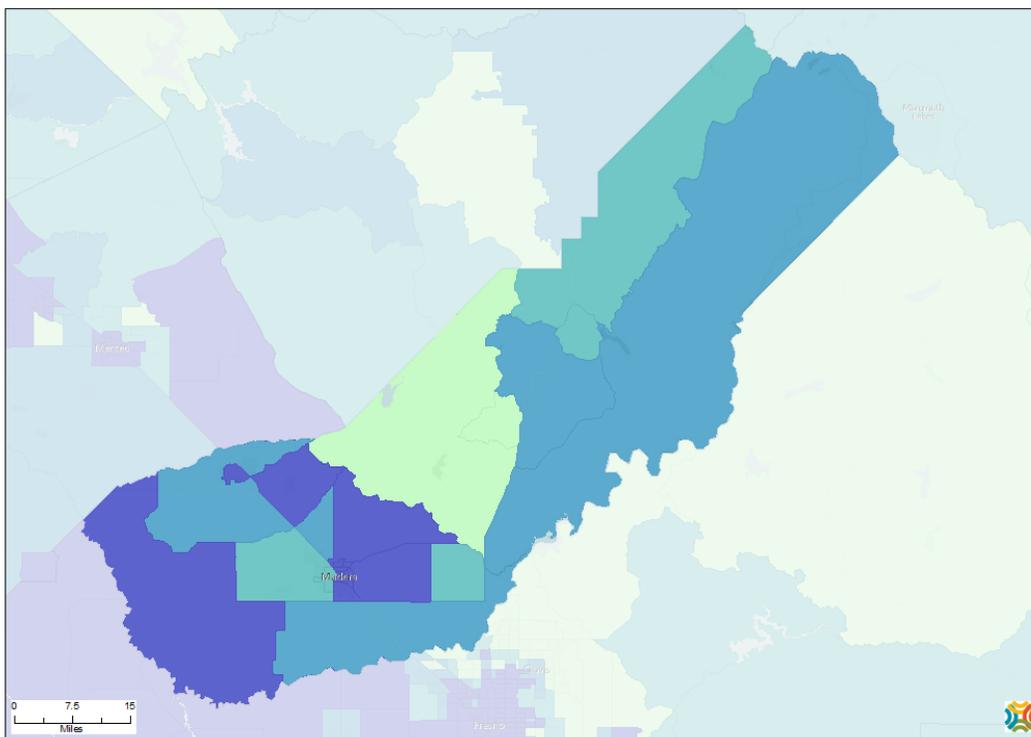
Social Determinants of Health

INCOME, EDUCATION, EMPLOYMENT, HOUSING, FOOD ENVIRONMENT

Income

In Madera County, 51.2% of the people live below the 200% Federal Poverty Level, which is higher than California (36.4%) or the U.S. (34.5%).² Among the population under age 18, the proportion living in poverty is 64.8%, which is higher than 46.4% in California and 44.2% in the United States. The distribution of poverty is not even within the county; 56.9% of the residents in the Firebaugh area and 70.1% in the metropolitan area of 93638 live in poverty.³

Poverty (<200% Federal Poverty Level) percent in Madera County



Map Legend

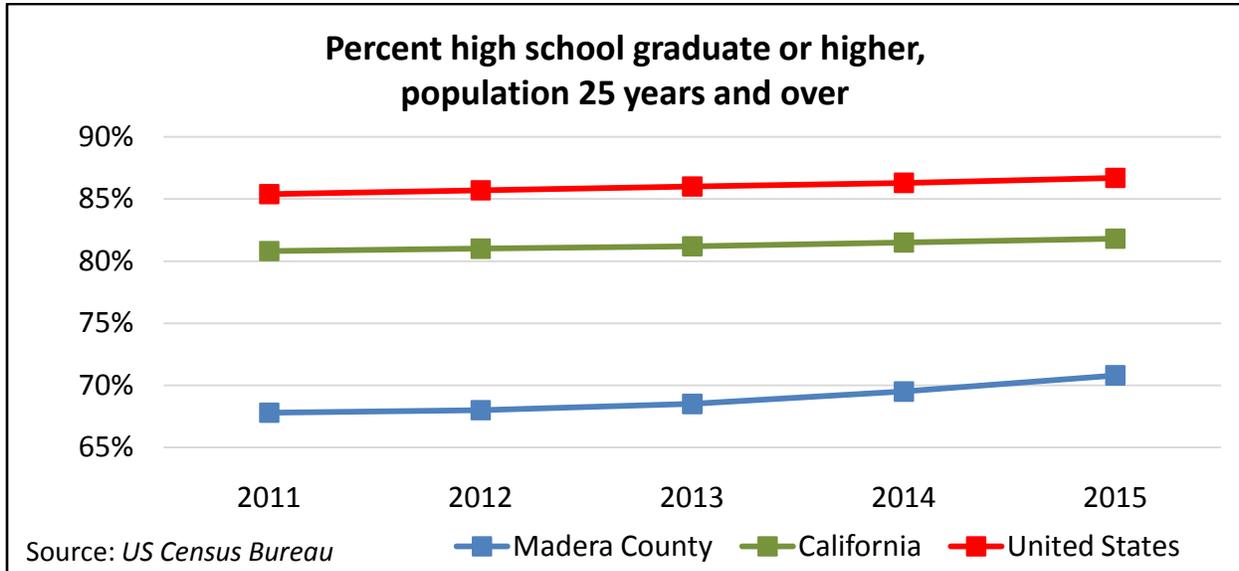
Population Below 200% Poverty Level, Percent by Tract, ACS 2010-14

- Over 50.0%
- 38.1 - 50.0%
- 26.1 - 38.0%
- Under 26.1%
- No Data or Data Suppressed

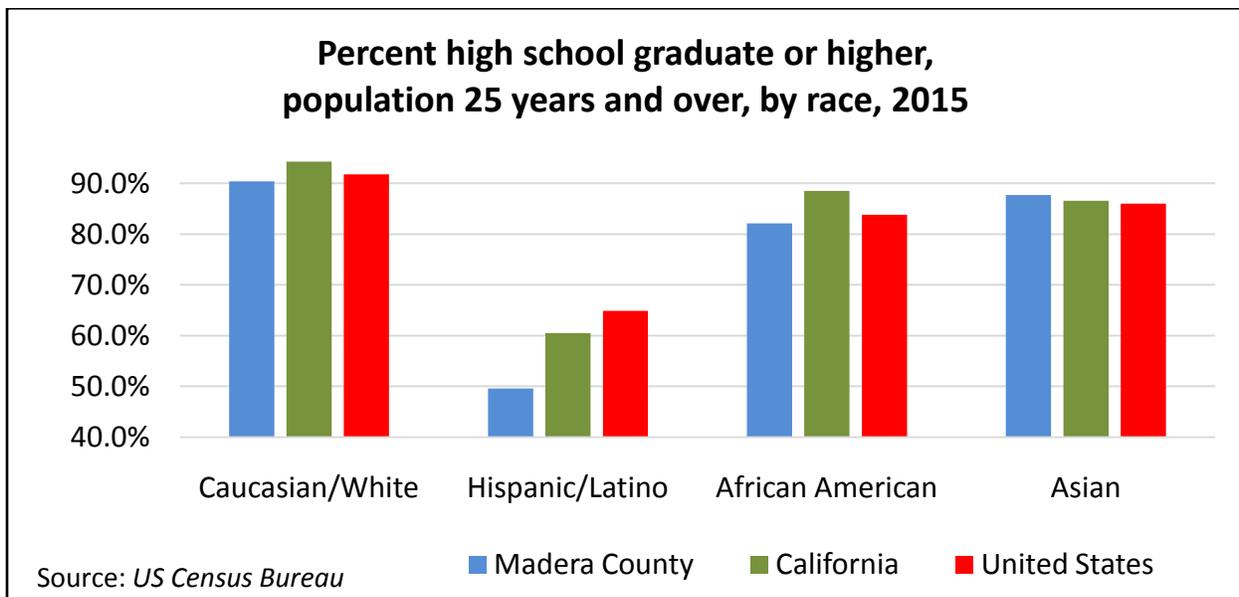
Community Commons, 9/8/2016

Education

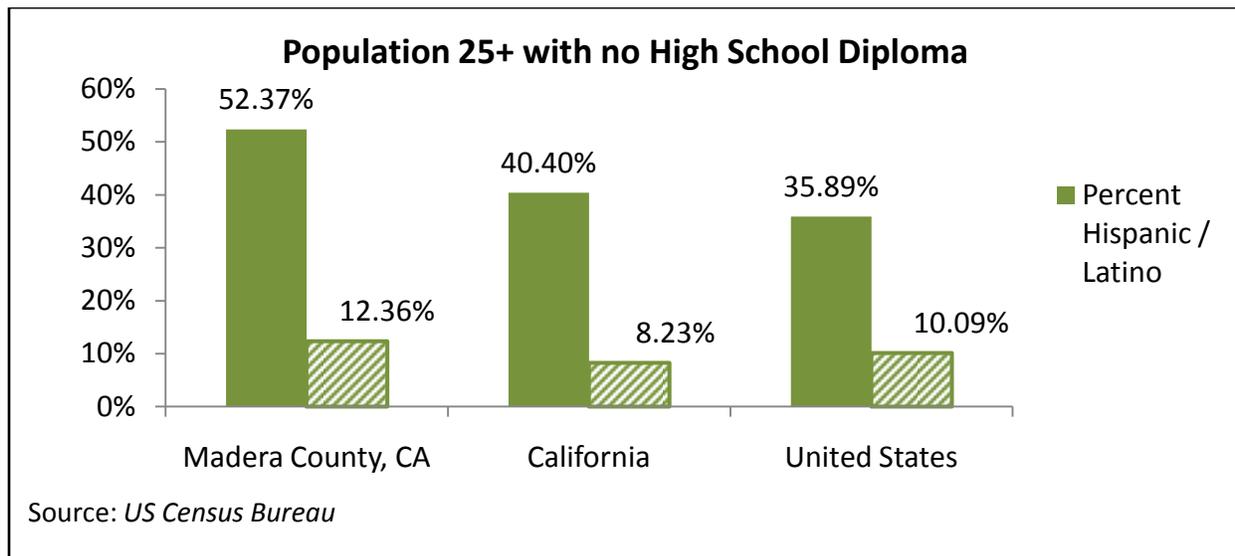
In Madera County 29% of residents age 25 years or older have no high school diploma, in comparison to 18.2% in California, and 13.3% in the United States.²



The Hispanic/Latino population in Madera County has a lower rate of having a high school diploma (49.6%) than non-Hispanic/Latinos (89.1%). Within this Hispanic/Latino population, only 5.4% have a bachelor's degree or higher, compared to 11.4% of their counterparts in California and 14.3% of the U.S.²



Higher education resources in Madera County include a public community college (Madera and Oakhurst Community College Centers), and a private junior college (San Joaquin Valley College, Madera Campus). Early childhood education enrollment is lower in Madera County. 46.8% of children aged 3-5 are not enrolled in either preschool or kindergarten, compared to 38.9% statewide.² The average annual cost of care for an infant at a child care center in Madera County is \$12,328, which equals 27% of the median family income (\$45,490) in the county.²

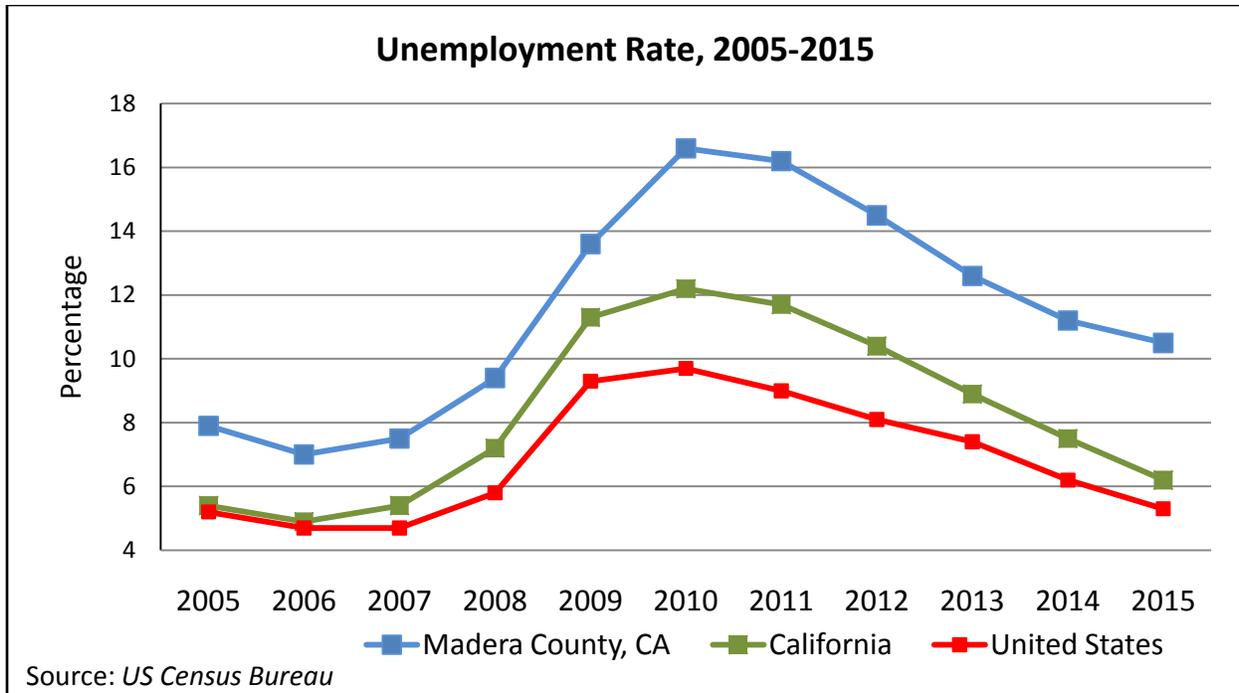


Employment and Housing

Madera County's unemployment rate (10.5%) is higher than the state's rate (6.2%) and is almost twice as large as the national rate (5.3%).² Substandard housing is federally defined as having at least one of the following: 1) incomplete plumbing facilities, 2) incomplete kitchen facilities, 3) more than 1.01 occupants per room, 4) selected owner costs of greater than 30% of monthly income, or 5) gross rent of greater than 30% of monthly income. 46% of Madera County housing units meet one or more of these conditions.³

- **11.9% Madera County housing units are overcrowded (CA 12.2%, U.S. 4.3%).³**
- **13.7% of housing units in Madera County are vacant (CA 8.5%, U.S. 12.5%).³**





Food Environment

Madera County has 51.7 fast food restaurants per 100,000 population, which is lower than that of California (75.9) and the U.S. (73.1). Madera County also has more grocery stores (25.2 per 100,000 population), compared to 21.7 per 100,000 population of California. The food insecurity rate is 13.8% among Madera County residents (CA: 15.0%, US: 15.2%).³ Food insecurity is an economic and social indicator of the health of a community. The U.S. Department of Agriculture (USDA) defines food insecurity as limited or uncertain availability of nutritionally adequate foods or uncertain ability to acquire these foods in socially acceptable ways. Poverty and unemployment are frequently predictors of food insecurity in the United States. A survey commissioned by the Food Research and Action Center (FRAC) found that one in four Americans worry about having enough money to put food on the table in the next year. Food insecurity is associated with chronic health problems in adults including diabetes, heart disease, high blood pressure, hyperlipidemia, obesity, and mental health issues including major depression.⁴

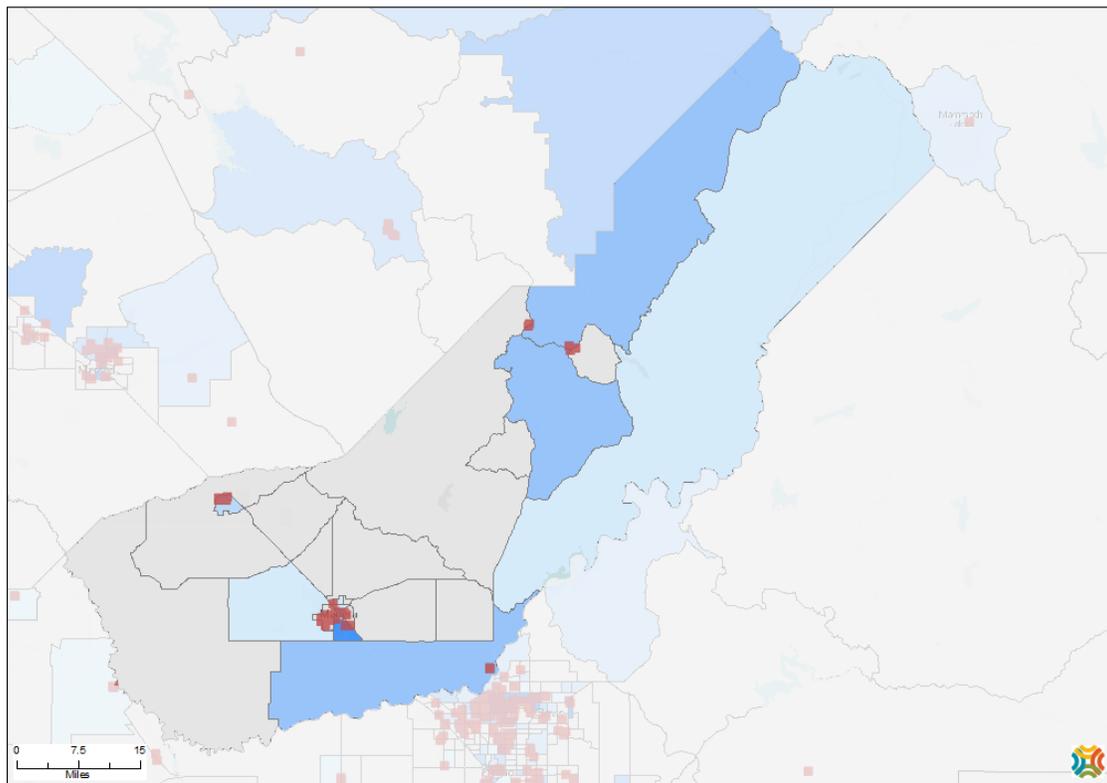


Access to Care

PHYSICAL, DENTAL AND HEALTH INSURANCE COVERAGE

Access to care is an important determinant of a person's health. Inadequate physician supply and accessibility of facilities, lack of health insurance, medical care, financial hardship, transportation barriers and coverage limitation are frequent barriers to access.

Access to primary care providers in Madera County



Map Legend

Access to Primary Care Providers (Including Nurses), Rate per 100,000 Population by County, CMS 2012

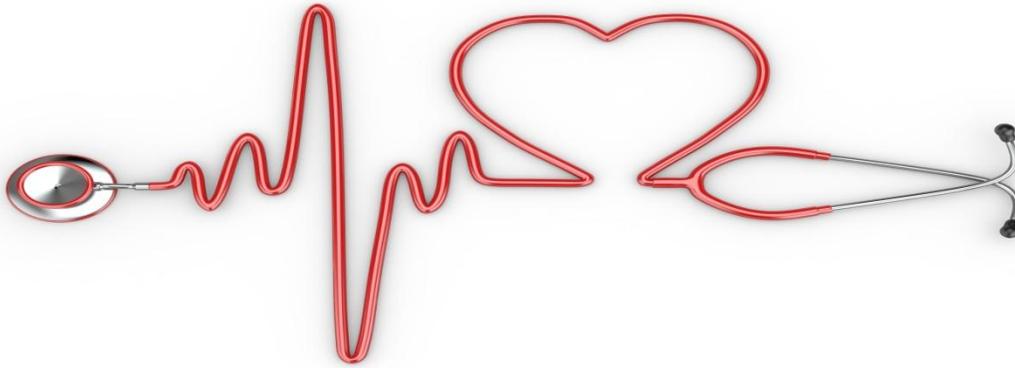
- Over 150.0
- 50.1 - 150.0
- 25.1 - 50.0
- 0.1 - 25.0
- No Providers
- No Population

■ All Providers of Service, POS Jun. 2016

Community Commons, 9/16/2016

Physical

Health Professional Shortage Areas (HPSA) are defined as an area that has a shortage of primary medical care, dental or mental health professionals. 81% of Madera County is considered a HPSA, which is higher than the state's (5.12%) and national (33.13%) rate. There are only 47.2 primary care physicians per 100,000 residents in Madera County. This compares to 78.5 physicians in the state and 75.8 in the U.S.



81% of Madera County is considered a Health Professional Shortage Area (HPSA), compared to California at 5.12% and the U.S. at 33.13%

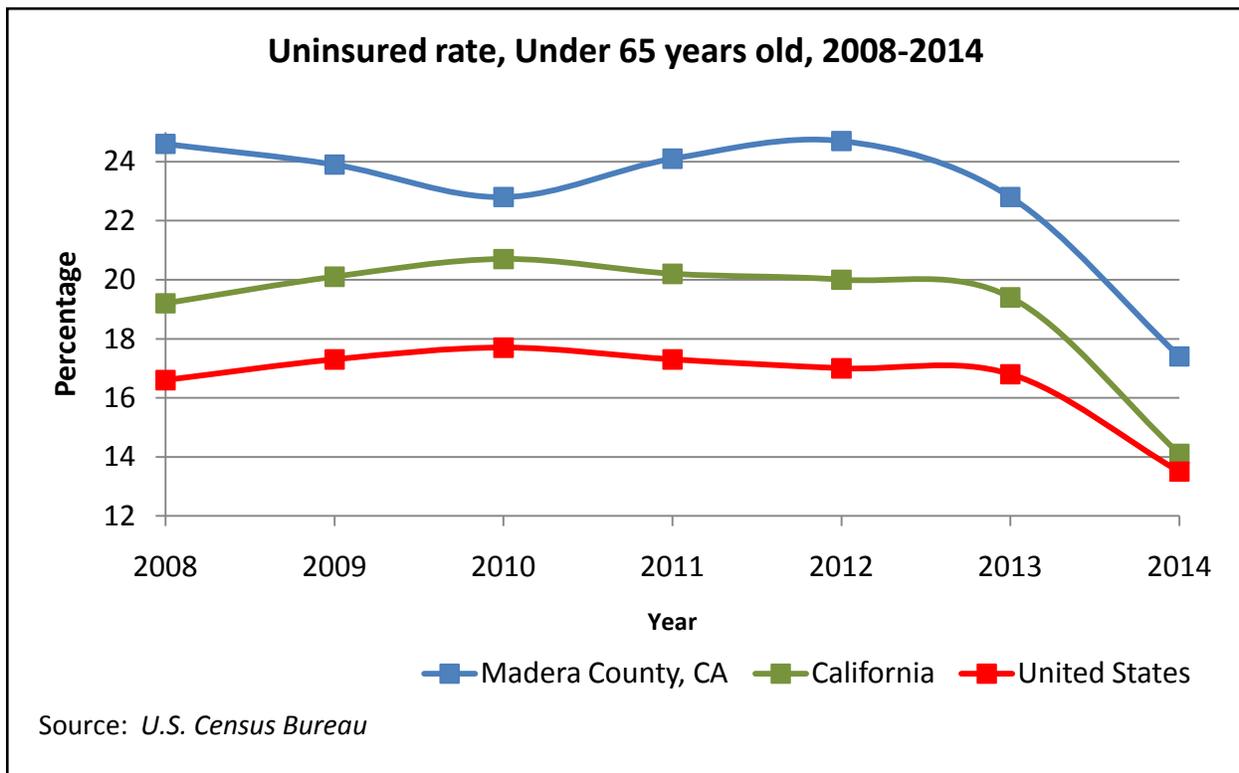
Dental

The number of dentists per 100,000 residents in Madera County is 43.3, compared to 77.5 dentists in California and 63.2 dentists in the U.S. In the same fashion, the number of mental health providers per 100,000 residents is 126.8, compared to 280.6 in California and 202.8 in the U.S. Lack of health care providers may result in barriers to medical care as well as create negative impacts to its quality.³



Health Insurance Coverage

Health insurance is crucial to people's access to health care. People with medical insurance are more likely to have access to and use health care resources and to receive adequate preventive care compared to those without insurance. Prevention and early detection of illnesses lead to better health outcomes for residents and monetary savings for the patients, businesses and the government. Most adult residents (75 – 83%) in Madera County reported having health insurance coverage from 2008 to 2014.² For children and youth (0 - 19 years), the percentage of coverage was 93.3% in 2014.² Additionally, 70% of survey respondents indicated that they had health insurance at the time of the 2015 survey.⁵

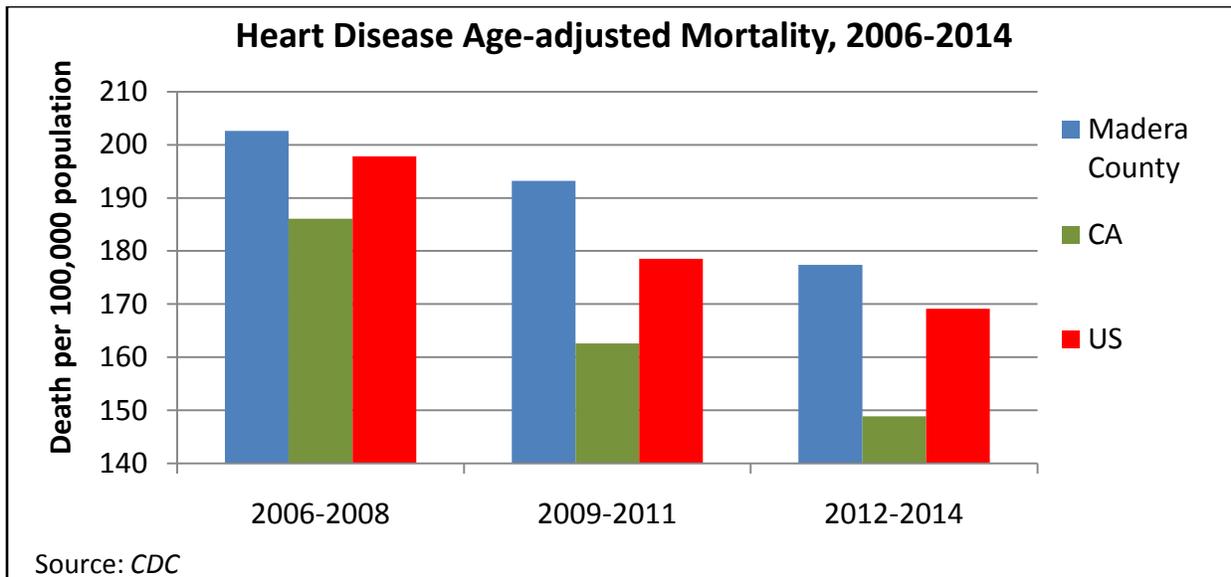


Leading Causes of Death

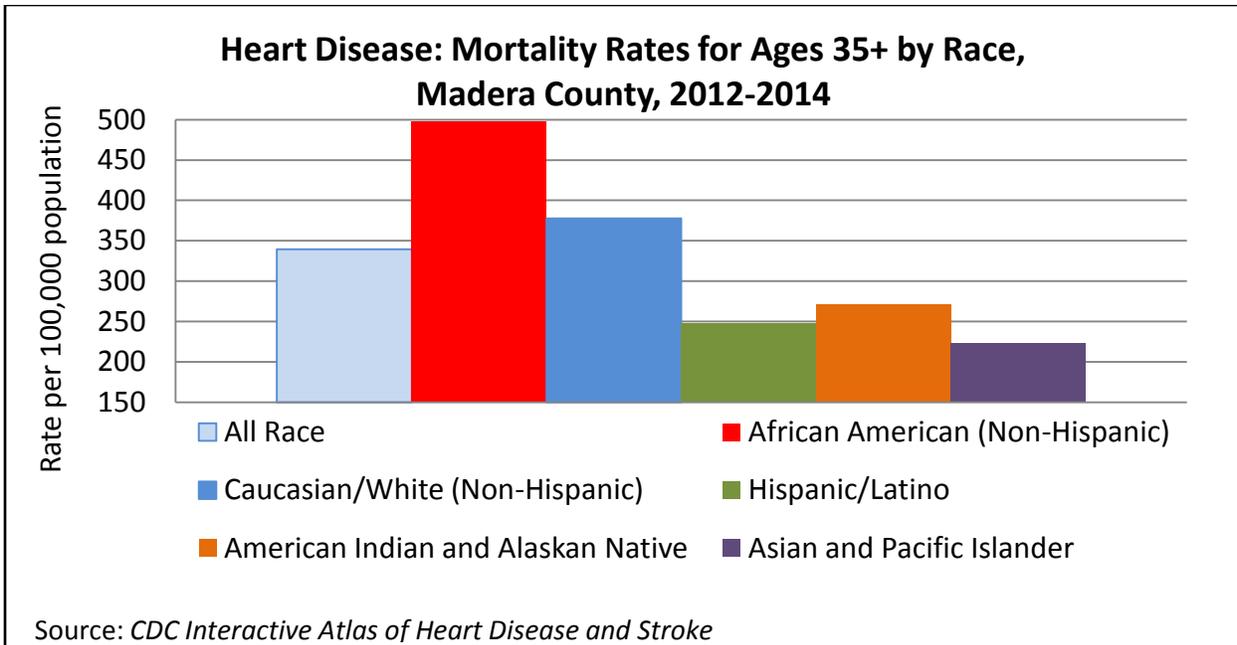
CARDIOVASCULAR DISEASE, CANCER, INJURY & VIOLENCE, RESPIRATORY DISEASE, STROKE AND DIABETES MELLITUS

Cardiovascular Disease (CVD): First Leading Cause of Death

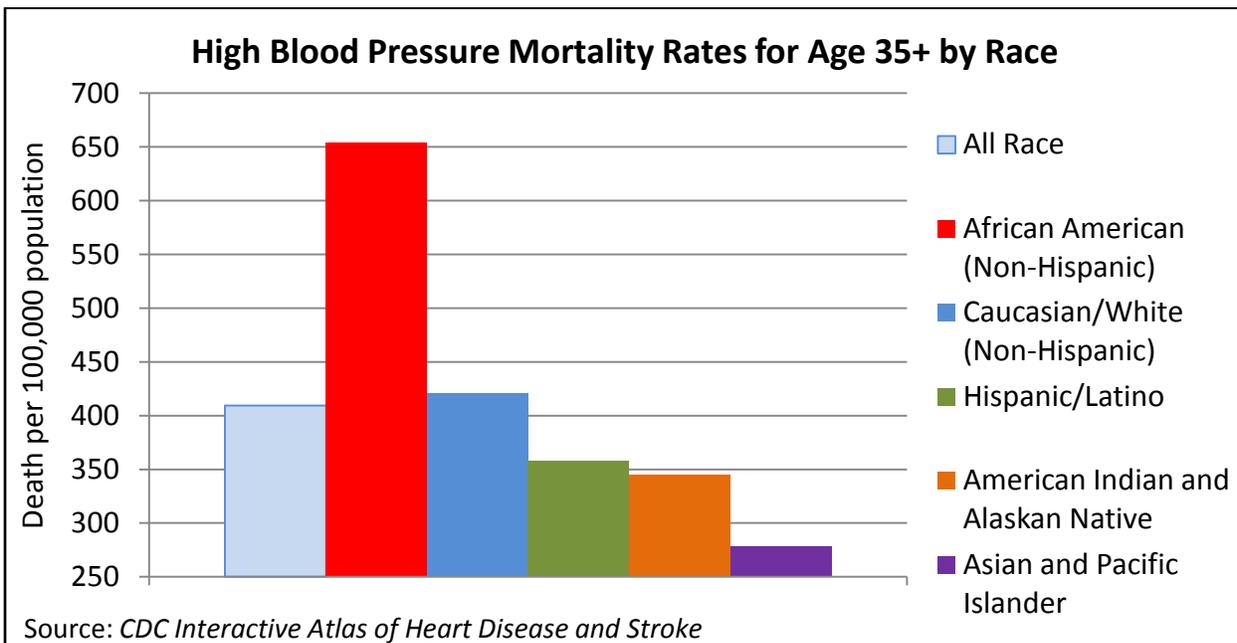
Cardiovascular disease is a range of diseases that affect the heart and blood vessels.¹ Cardiovascular diseases (CVD), also known as heart disease, includes coronary artery diseases (CAD) such as angina and myocardial infarction (commonly known as a heart attack).¹ It is estimated that 90% of CVD is fully preventable² by decreasing risk factors through: healthy eating, physical activity, avoidance of tobacco smoke and limiting alcohol intake.¹ Although, heart disease-related deaths have decreased across the county, state and nation, it still ranks the first among all other causes of death.



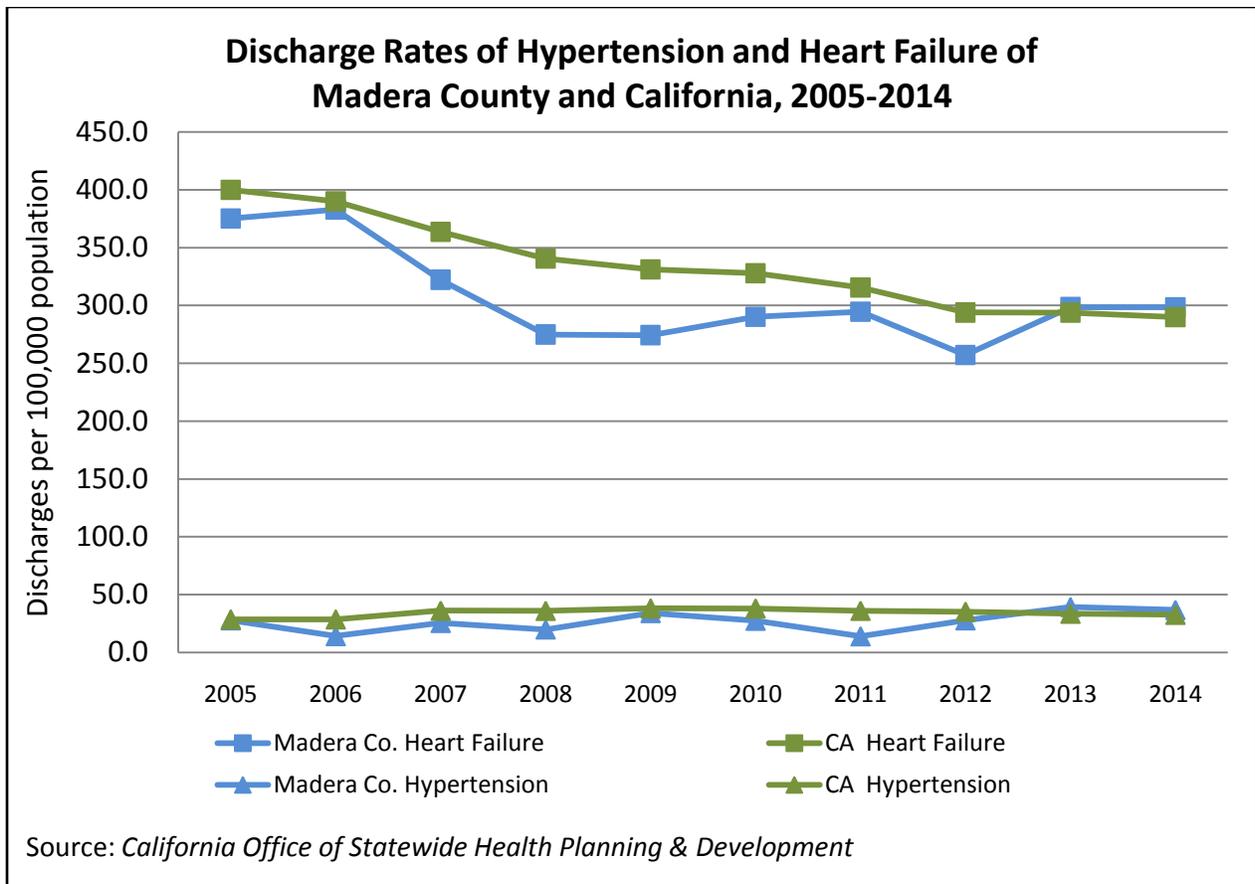
Madera County's mortality rate (124.1) due to coronary heart disease-related deaths (ICD-10 codes I20-I25) is higher than California (97.5) and above the Healthy People 2020 goal rate of 103.4 per 100,000 population.³



Compared to heart disease rates, hypertension related diseases and stroke are increasing nationwide. Both cardiovascular and hypertension diseases affect African Americans in Madera County disproportionately more than any other racial or ethnic group.⁴



Compared to state rates of preventable hospital stays due to hypertension and heart failure, Madera County had relatively lower rates before 2013, and higher rates since 2013.⁵ However, this indicator only represents those hospitals in Madera County, since it does not include other hospitals where residents of the County obtain care. The cost of coronary heart disease and congestive heart failure (including direct medical costs as well as absenteeism from work or school) in Madera County is estimated to be \$69,174,977 annually.⁷



Modifiable Risk Factors: Cardiovascular Disease

Weight Status and Physical Inactivity

Compared to normal weight, being overweight or obese may increase the chance of developing hypertension, diabetes and atherosclerosis. These conditions put people at high risk of cardiovascular diseases.⁸ Adult obesity prevalence in Madera (34.4%) is higher than in California (25.4%). The prevalence of obesity among low-income children in Madera (16.1% in 2-4 years, 24.3% in 5-19 years), is similar to California (17.3% in 2-4 years, 23.3% in 5-19 years).⁹ Leisure-time physical inactivity prevalence is 19.7% (age-adjusted) in adults over 20 years old in Madera County, which is higher than California (17.4%).¹⁰ Healthy eating and physical activity promotion programs are conducted by Nutrition Education and Obesity Prevention teams from Madera County Public Health Department.

OBESITY IS NOW A GLOBAL EPIDEMIC!



Madera County obesity rate is 9% higher than the California average.

Tobacco and Alcohol Use

In 2012, male smoking prevalence was in the median of all U.S. counties at 23.4%, while female smoking was in the 10% of all counties at 15.5%.¹¹ In comparison, the national average was 22.2% for males, 17.9% for females, and 20% for both sexes.¹¹ Madera County is still unprotected from the dangers of tobacco use. Only six recreation areas and one housing authority apartment complex are listed as smoke free and there is no specific county policy on reducing sales of tobacco products.¹¹

The Centers for Disease Control and Prevention (CDC) defines **heavy drinking** as exceeding an average of one drink per day for women and two drinks per day for men over the past month; **binge drinking** is defined as consuming four drinks or more for women and five drinks or more for men on a single occasion at least once during the past month. The prevalence of heavy drinking in Madera County for females was in the middle 50% of all counties at 6.1% and the prevalence of heavy drinking for males was in the middle 50% of all counties at 8.7%.¹¹ The national average was 6.7% for females and 9.9% for males.¹¹

The national averages in heavy drinking from 2005 to 2012 showed an increase of 1.5 percentage points in women and 0.9 percentage points for men.¹¹ During this same timeframe, for Madera County, female heavy drinking increased by 0.4 percentage points while the change in male heavy drinking decreased by 1.5 percentage points. These changes in female and male heavy drinking patterns placed Madera County in the top 10% of the best performing counties in the nation.

The prevalence of binge drinking in Madera County for females was in the middle-performing 50% for all counties with 9.9% of females engaging in binge drinking, while the prevalence of binge drinking in 2012 for males was in the middle-performing 50% for all counties with 22% of males engaging in binge drinking. The national average in 2012 was 12.4% for females and 24.5% for males.¹¹ The change from 2002 to 2012 for females was in the middle-performing 50% of all counties while the change for males was in the middle-performing 50%, with females experiencing an increase of 1 percentage point and males experiencing an increase of 1.2 percentage points. To compare with the national average, women had an increase of 1.6 percentage points and men had an increase of 0.4 percentage points.

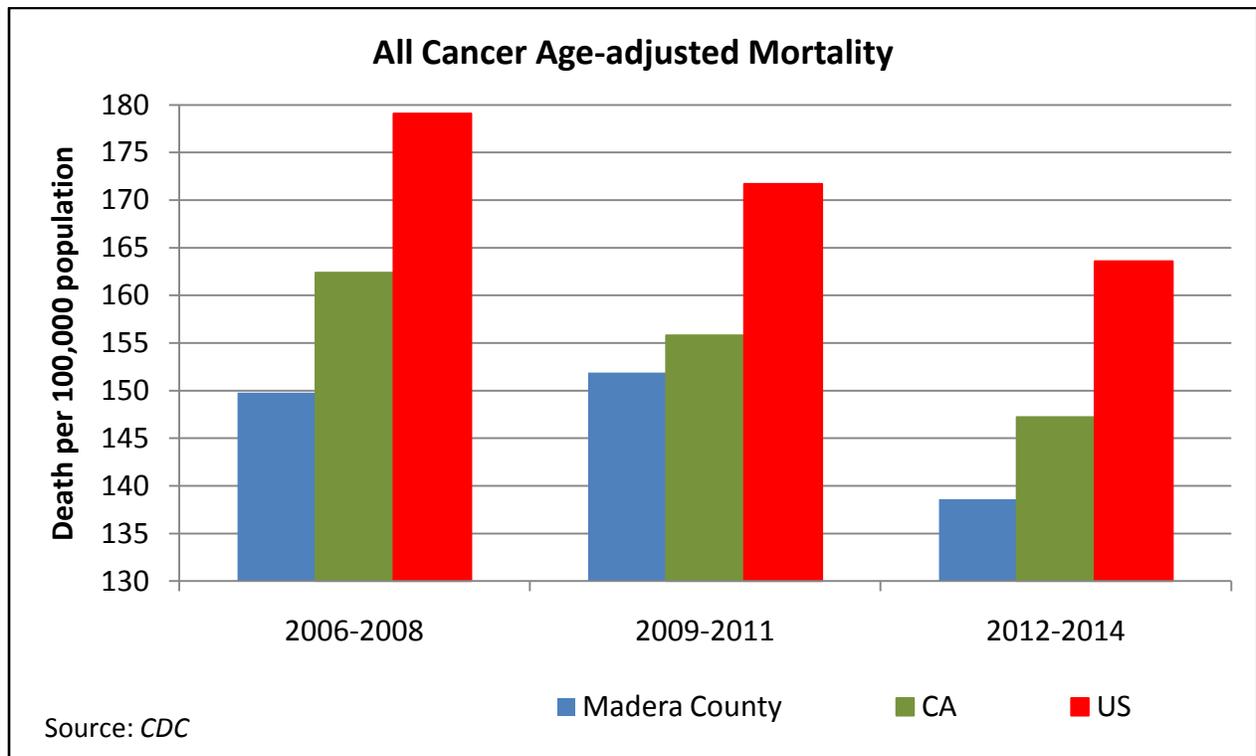
Community Resources

- ✓ American Heart Association (209) 723-2974 - <http://www.heart.org/HEARTORG/>
- ✓ American Cancer Society (559) 451-0163 - <https://www.cancer.org/>
- ✓ Madera County Behavioral Health (559) 673-3508
- ✓ Madera Counseling Center (559) 675-7850
- ✓ Chowchilla Counseling Center (559) 665-2947
- ✓ Oakhurst Counseling Center (559) 683-4809
- ✓ 1-800-879-2772 Or Visit: www.adp.ca.gov



Cancer: Second Leading Cause of Death in Madera County

Cancer is a group of diseases involving abnormal cell growth with the potential to invade other tissues. Cancer cells can spread to other parts of the body through the blood and lymph systems.¹ Many cancers can be prevented by adopting a healthy lifestyle, such as to avoid smoking, maintaining a healthy weight, not drinking too much alcohol, eating plenty of vegetables, fruits and whole grains, vaccination against certain infectious diseases, not eating too much processed and red meat, and avoiding too much sunlight exposure.¹

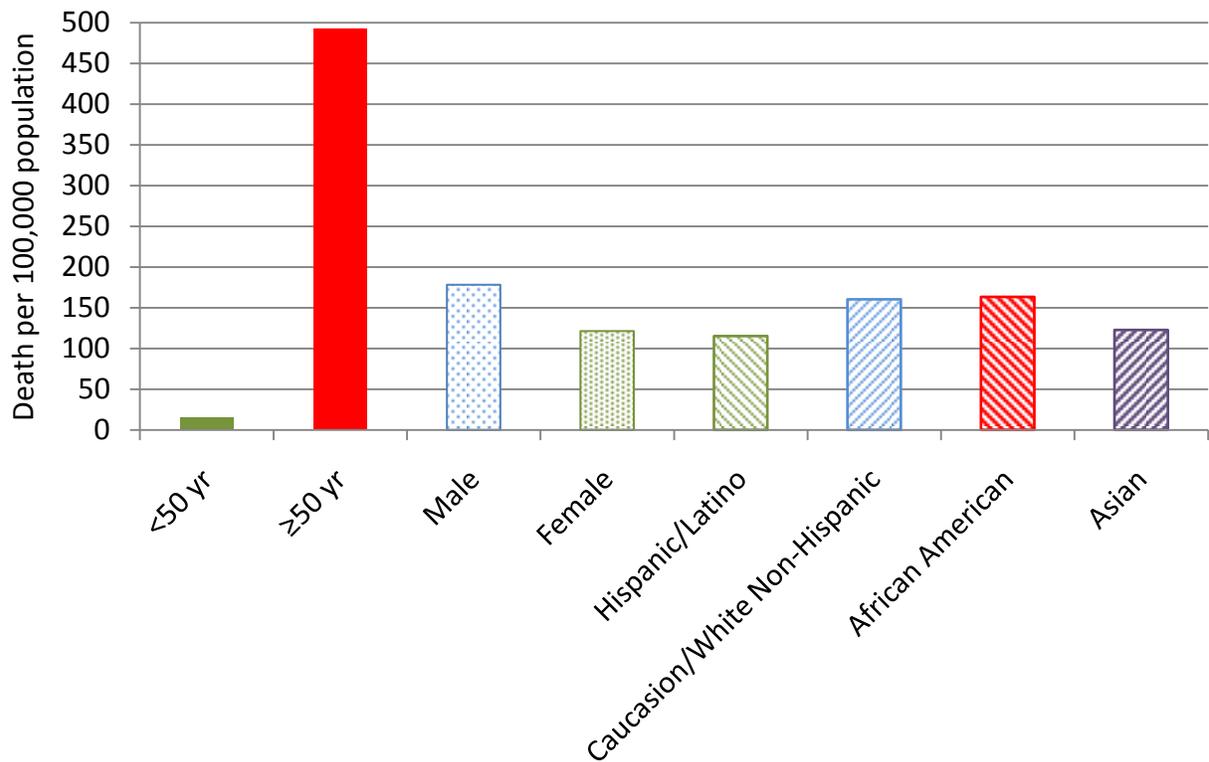


Madera County has lower age-adjusted cancer-related mortality rates (138.6 per 100,000 population) than California (147.2) and the U.S. (163.6). Although 2009-2011 county cancer mortality (151.9) is higher than 2006-2008 mortality (149.8), cancer related mortality in Madera County has been consistently lower than state and national rate over the past ten years.²

Madera County residents younger than 50 years old have much lower mortality rates (15.7 per 100,000 population) than residents 50 years and older (492.7). Males have higher cancer mortality rates (178.2) compared to females (121.3).

African American residents have the highest mortality rates (163.3), followed by Caucasian/White non-Hispanics (160.3), Asians (122.7) and Hispanic/Latinos (115.2).²

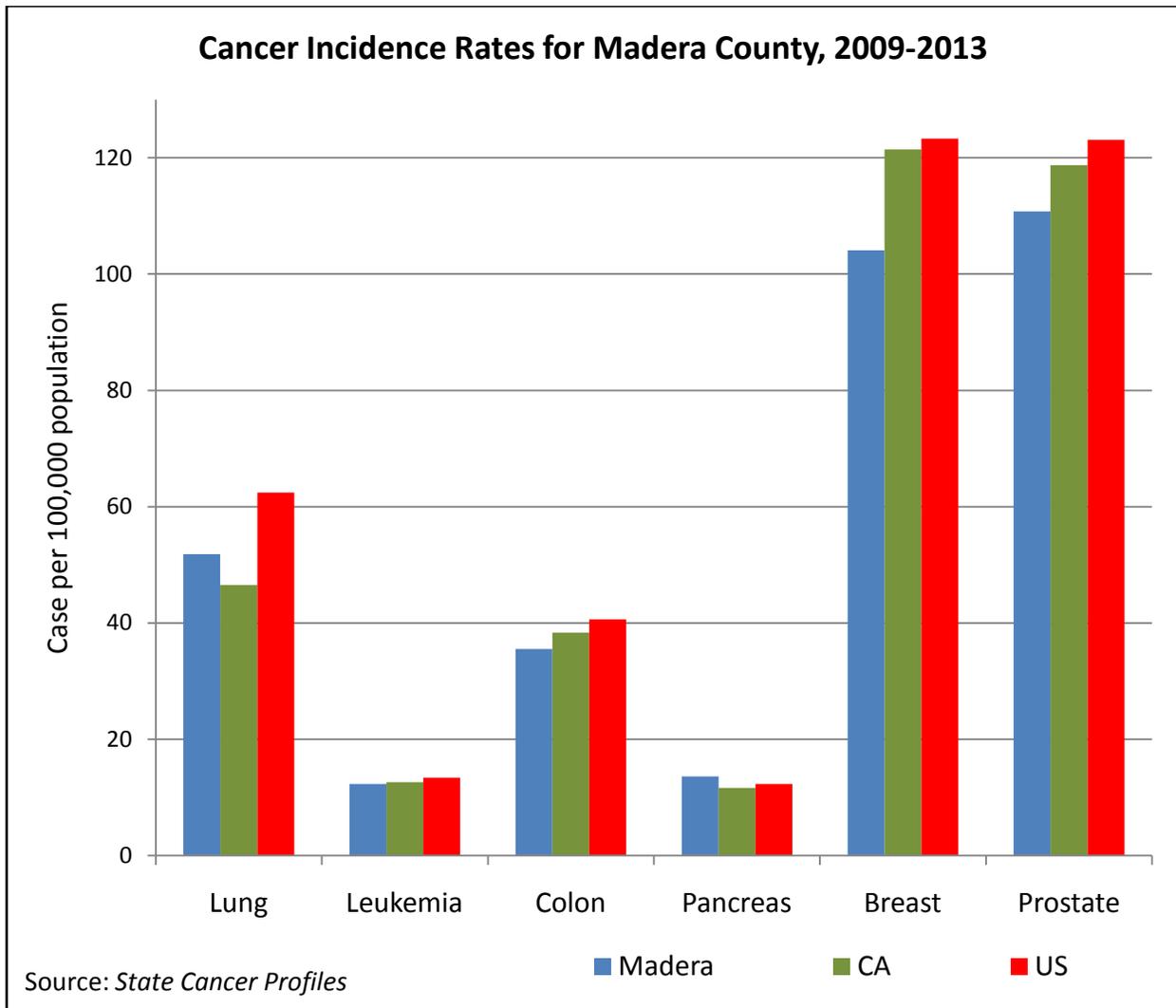
Cancer Mortality for Madera County by Age, Sex and Ethnicity, 2009-2013



Source: State Cancer Profiles

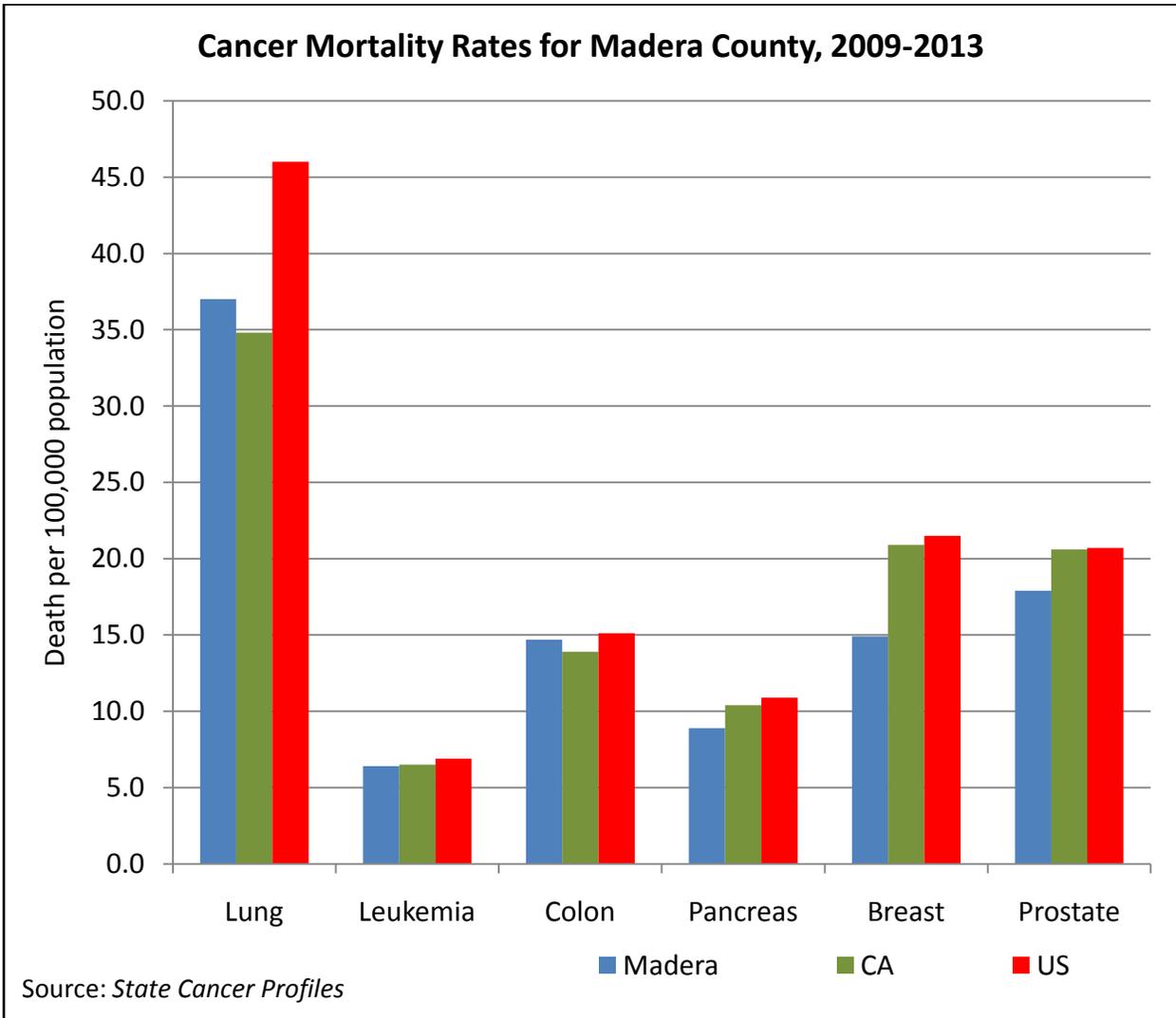


Madera County has higher incidence (51.8 per 100,000 population) and mortality rates (37.0) of lung cancer than the state (incidence: 46.5, death: 34.8). However compared to the national rate the incidence is lower (incidence: 62.4, death: 46.0). Madera County also has lower incidence and mortality rates in female breast cancer, male prostate cancer, and leukemia than California and the U.S. Madera County mortality rates for colorectal cancer (14.7) are higher than California (13.9) and lower than the U.S. (15.1). Incidence rate for pancreatic cancer (13.6) are higher compared to the state and national rates (CA 11.6, U.S. 12.3).²



60% of female patients received cervical cancer screening at one of the five Madera County Central Valley Health Network clinics in 2015.³

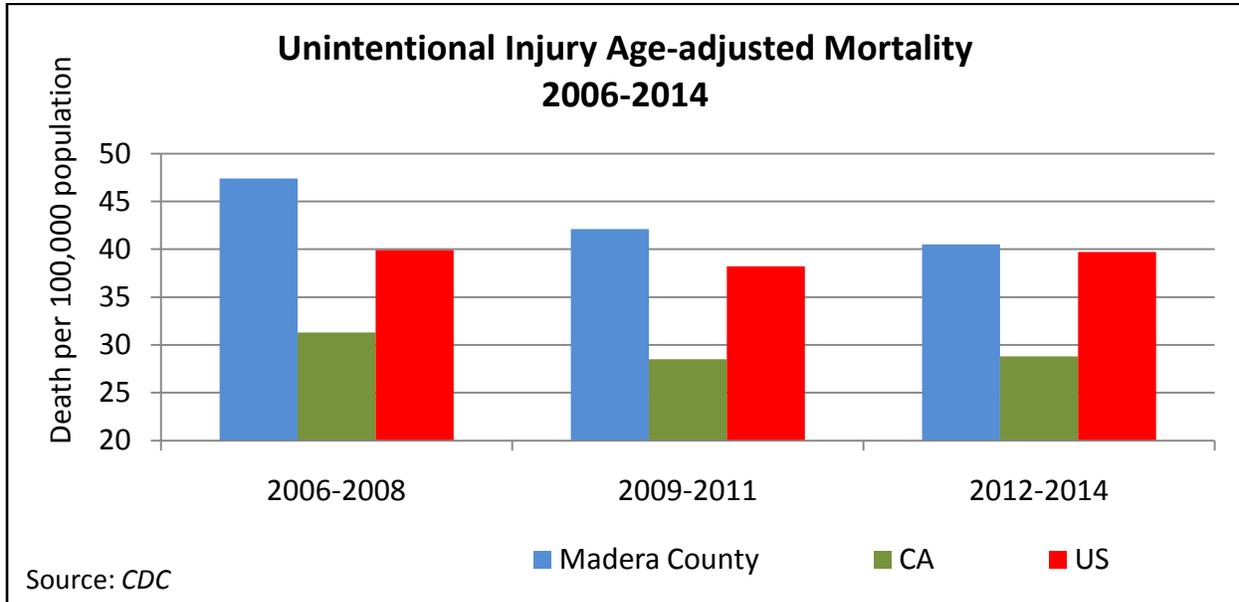
About 46% of patients received colorectal cancer screening at one of the five Madera County Central Valley Health Network clinics in 2015.³



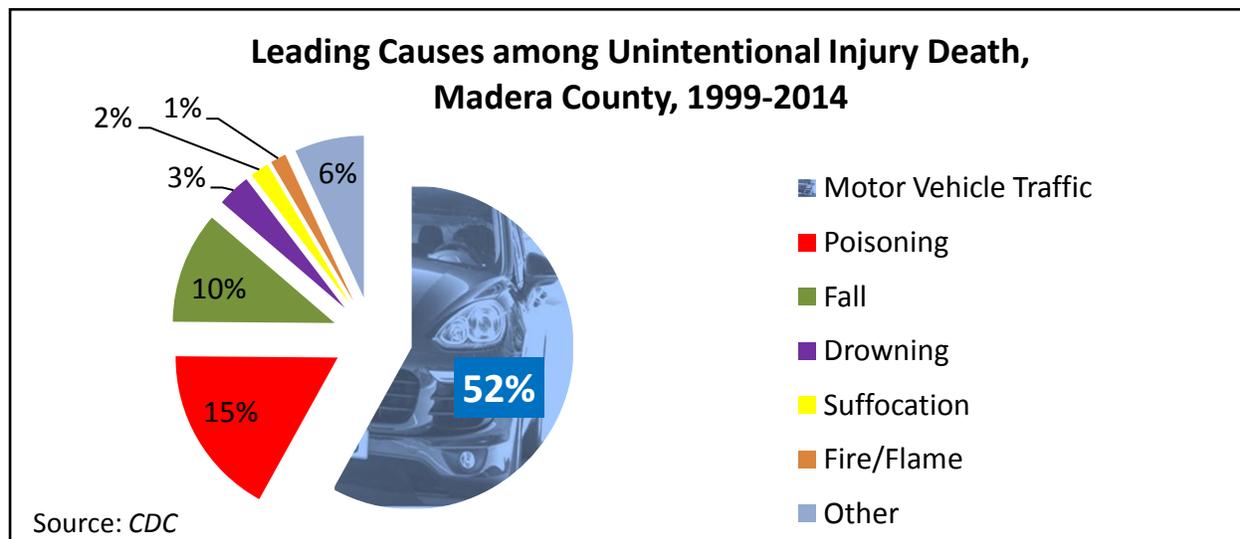
The cost of cancer in Madera County is estimated to be \$ 47,496,467 annually. These costs include direct medical costs as well as absenteeism from work or school⁴

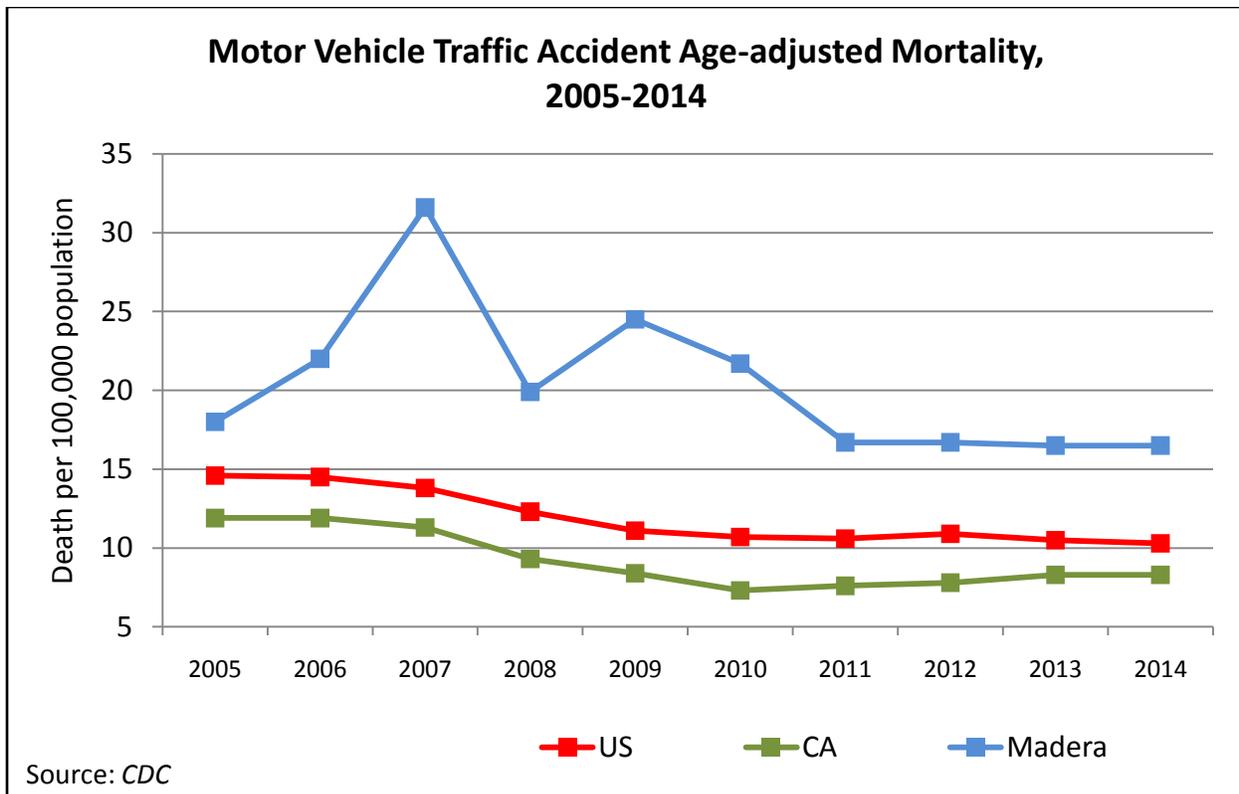
Injury and Violence: Third Leading Cause of Death in Madera County

Injury and violence are significant public health issues that are predictable and preventable causes of death. The leading cause of death due to unintentional injuries in Madera County is motor vehicle traffic incidents. Motor vehicle collision mortality decreased dramatically after 2000, but Madera County's mortalities have consistently remained higher than either California or U.S. rates. Currently, the County's rate (16.5) is almost double that of California (8.3) and higher than the U.S. (10.3).¹



Although Madera County's unintentional injury mortality rate of 40.5 per 100,000 population is higher than both California (28.8) and the U.S. (39.7), this health disparity has decreased over time. The difference between Madera County and California in 2006-2008 was 16.1, and in 2012-2014, it was 11.7. Over the past ten years, unintentional injury mortality in Madera has been reduced by 10.7%, while California reduced 7.9% and the U.S. increased 2.5%.¹





The second most common cause of death due to unintentional injuries in Madera County is poisoning followed by fall and then drowning. All other causes of accidental death are 3% or less (each) of the total accidental deaths.¹

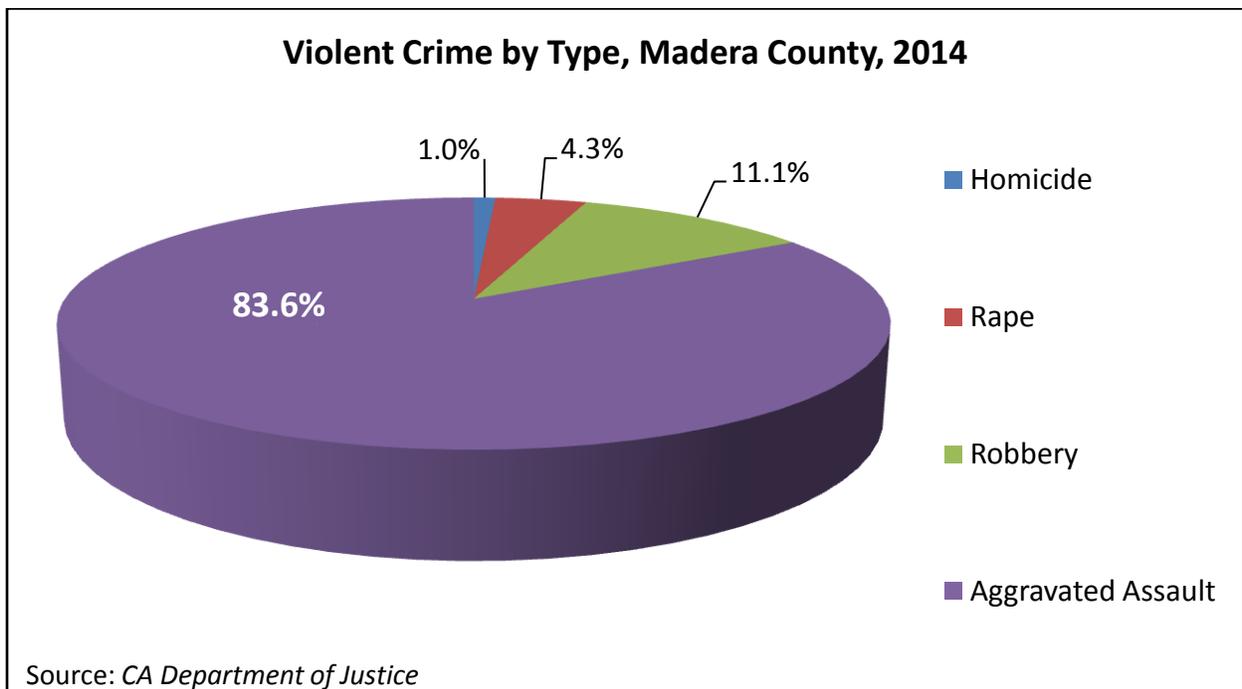
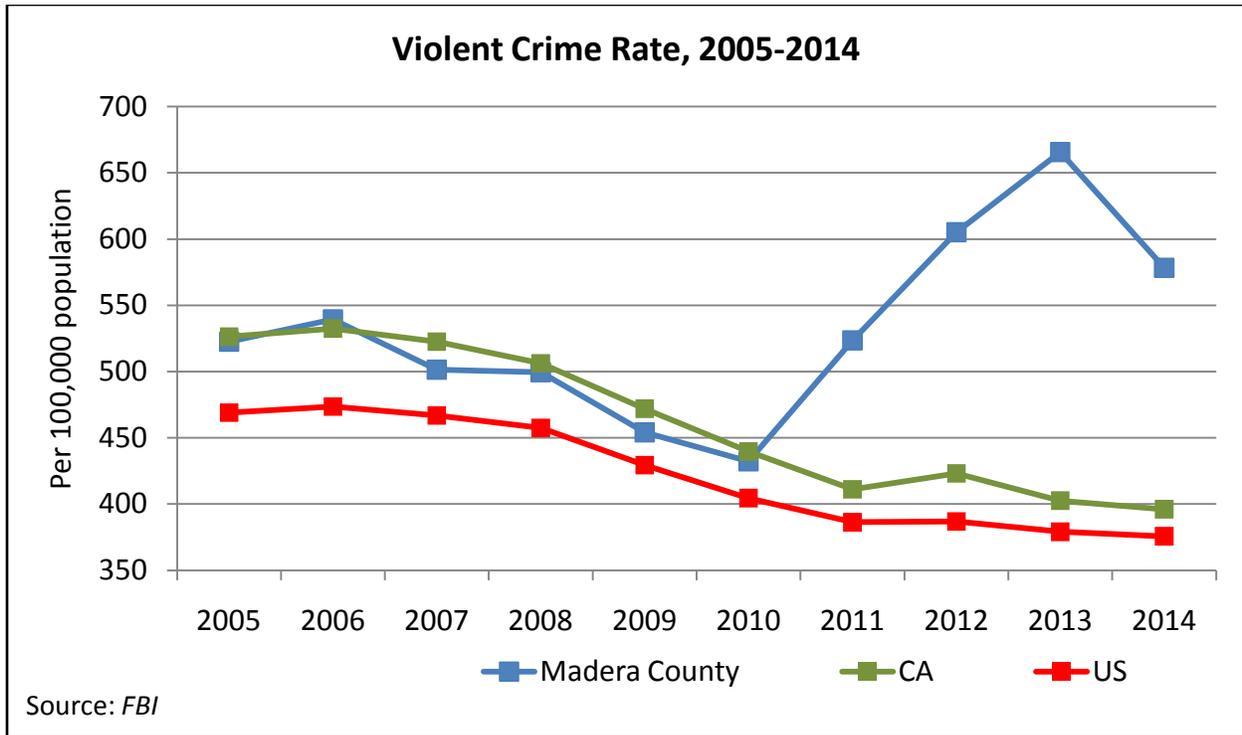
What Does Poisoning Mean?

Poisoning here is defined using ICD-10 code: X40-X49 (Accidental poisoning by and exposure to noxious substances), which includes: accidental overdose of drug, wrong drug given or taken in error, and drug taken inadvertently accidents in the use of drugs, medicaments and biological substances in medical and surgical procedures poisoning, when not specified whether accidental or with intent to harm, but excludes: administration with suicidal or homicidal intent, or intent to harm, or in other circumstances classifiable to X60-X69, X85-X90, Y10-Y19 correct drug properly administered in therapeutic or prophylactic dosage as the cause of any adverse effect.

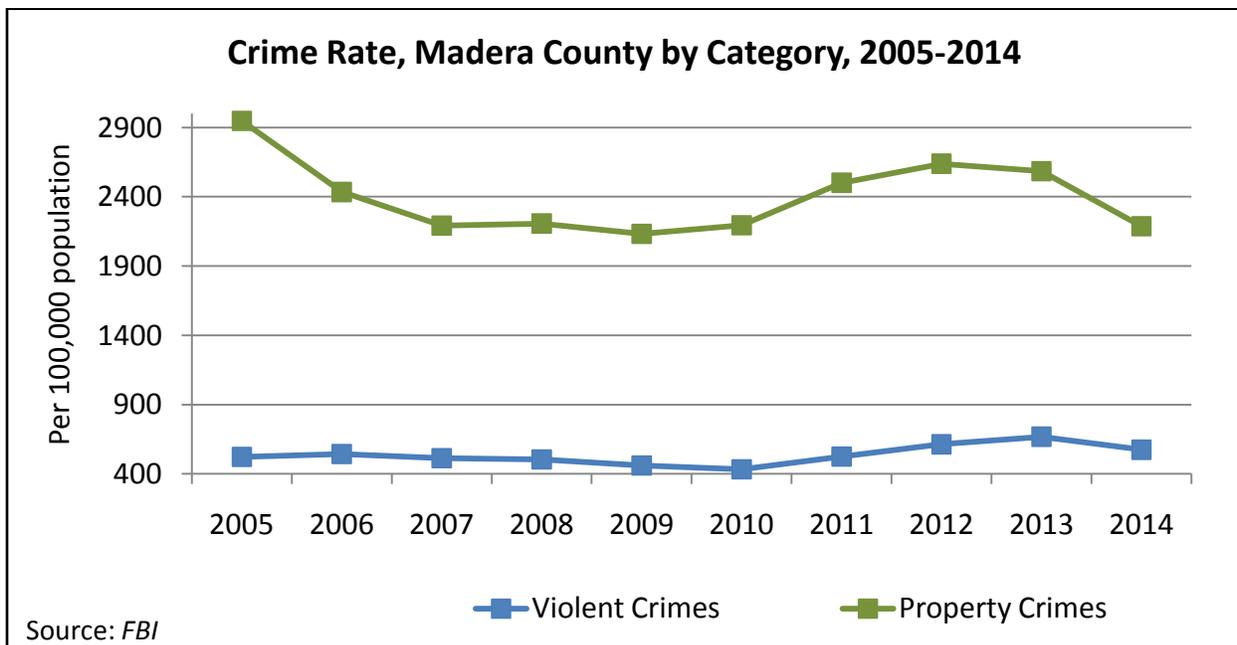
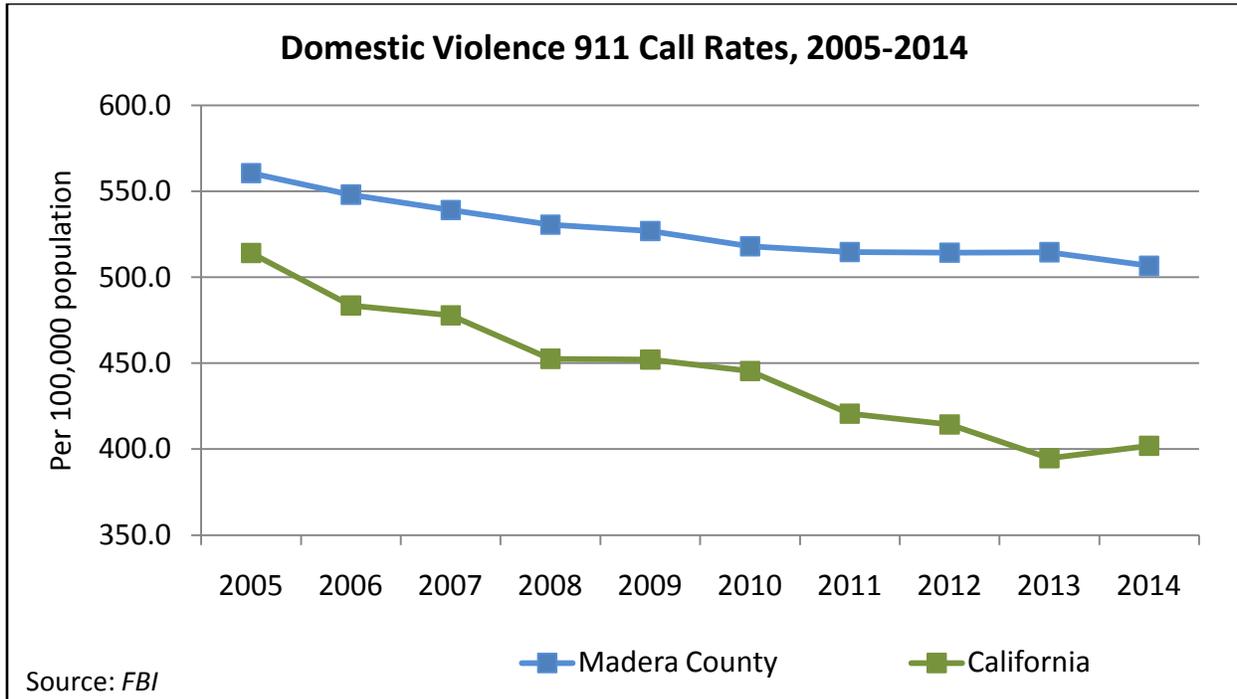
RESOURCES

POISON CONTROL – National Capital Poison Center 1-800-222-1222

Violent crime rates have decreased steadily in California and in the U.S. in the past ten years. The rate in Madera County followed this trend until 2011. In 2013, Madera County had a 5-year increase 46.6% in violent crime rate, from 454.1 (2009) to 665.7 (2013) per 100,000 population. In 2014, the rate in Madera County dropped to 578.3 per 100,000 population, but still was higher than California (396.1) and the U.S. (375.7).²

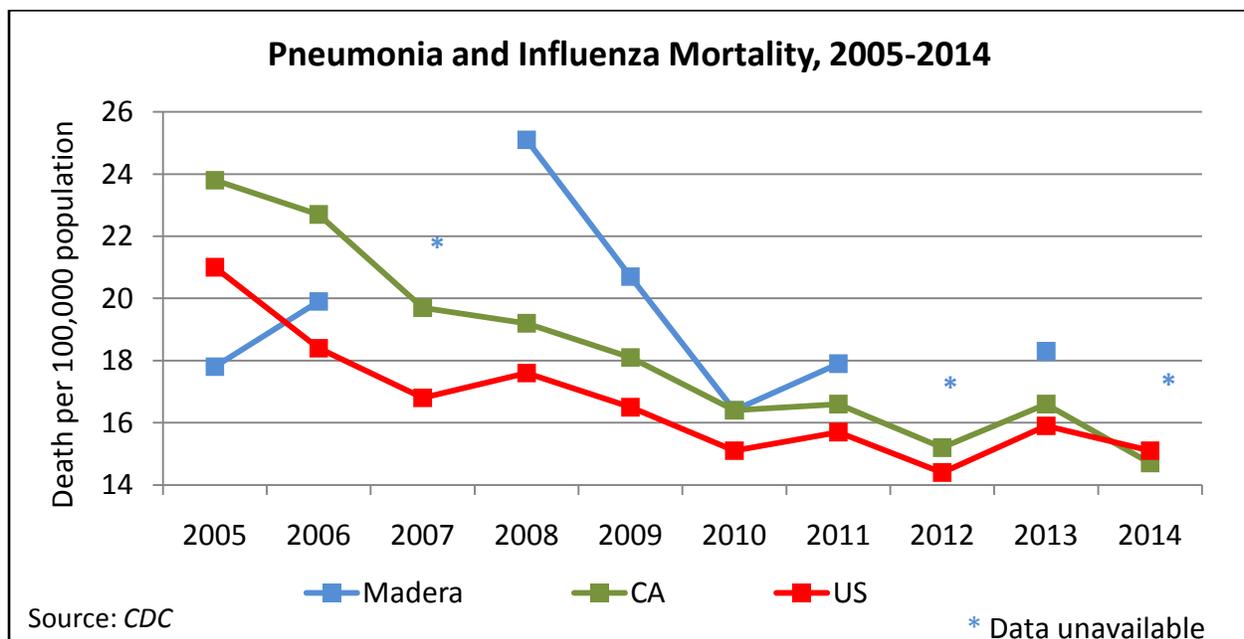
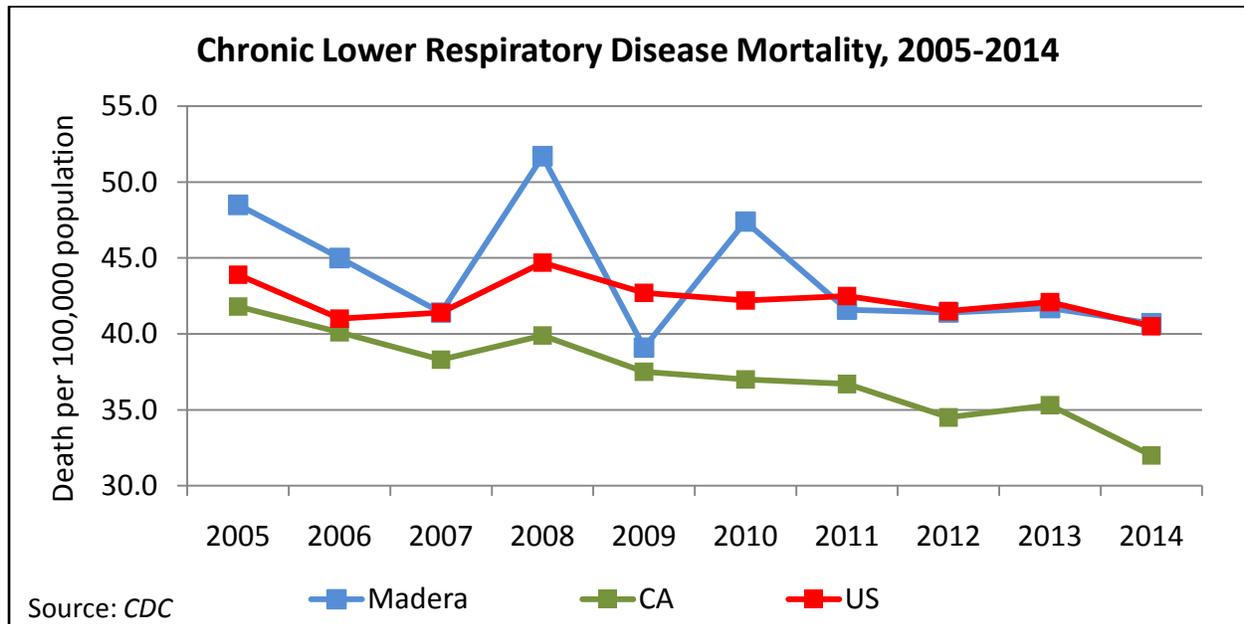


Aggravated assault is defined as assault typically enacted with a deadly or dangerous weapon. This type of assault was the majority (83.6%) of the violent crimes in Madera County. Robbery was the second most common type of violent crime.³ Madera County has consistently higher rates of domestic violence-related 911 calls than California.³ Property crimes in Madera County, overall, have been decreasing in the past ten years. Violent crimes have remained relatively stable.³

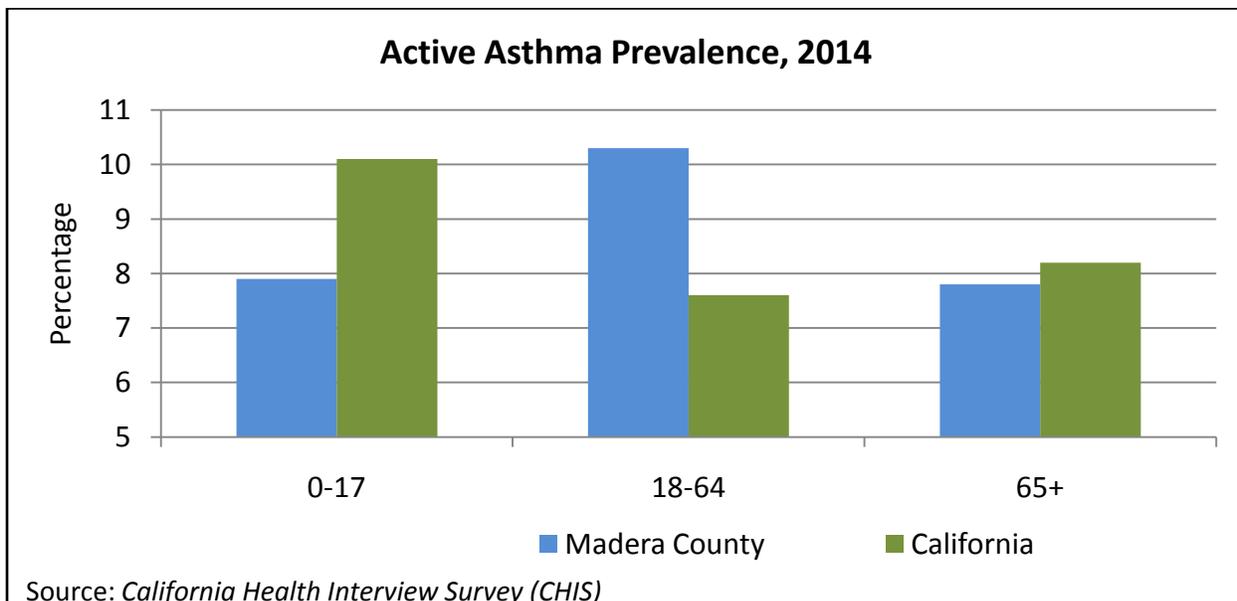
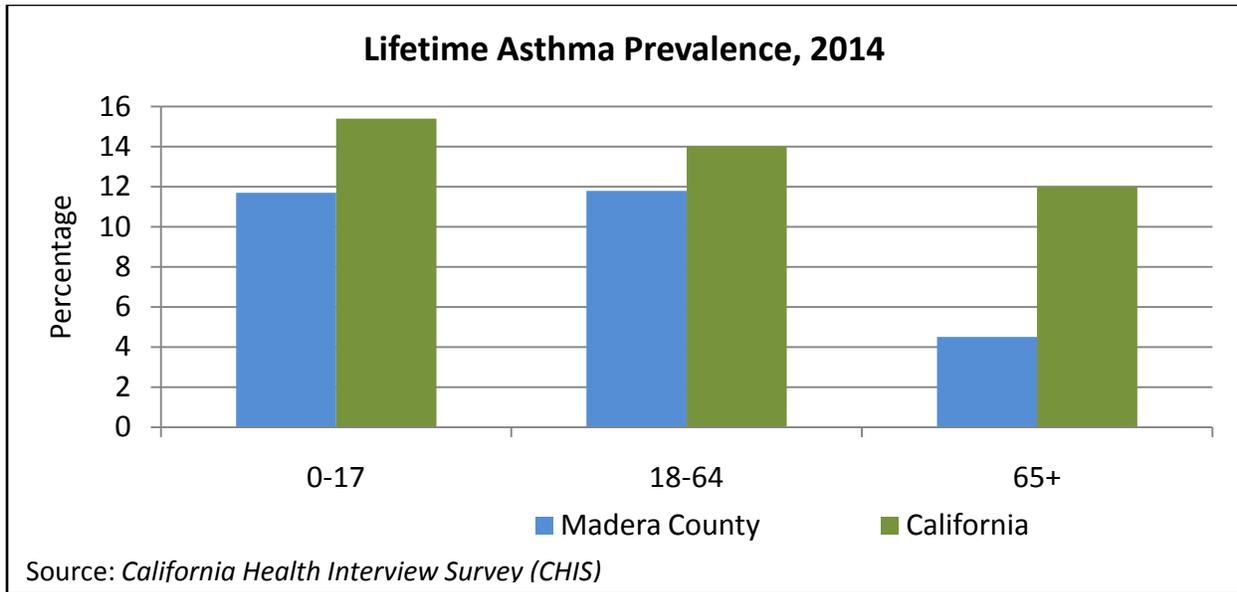


Respiratory Disease: Fourth Leading Cause of Death in Madera County

Respiratory disease is a group of diseases that prevent the lungs from working properly, including airway diseases, lung tissue diseases, and lung circulation diseases. Many respiratory diseases can be prevented by adopting healthy dietary habits, exercising regularly, and NOT smoking.¹ Madera County's mortality rates of chronic lower respiratory disease (CLRD) are higher than the state and relatively similar to the U.S. rates. Available data for Madera County's pneumonia and influenza death rates show a very similar pattern of fluctuation as the state and national trend.²

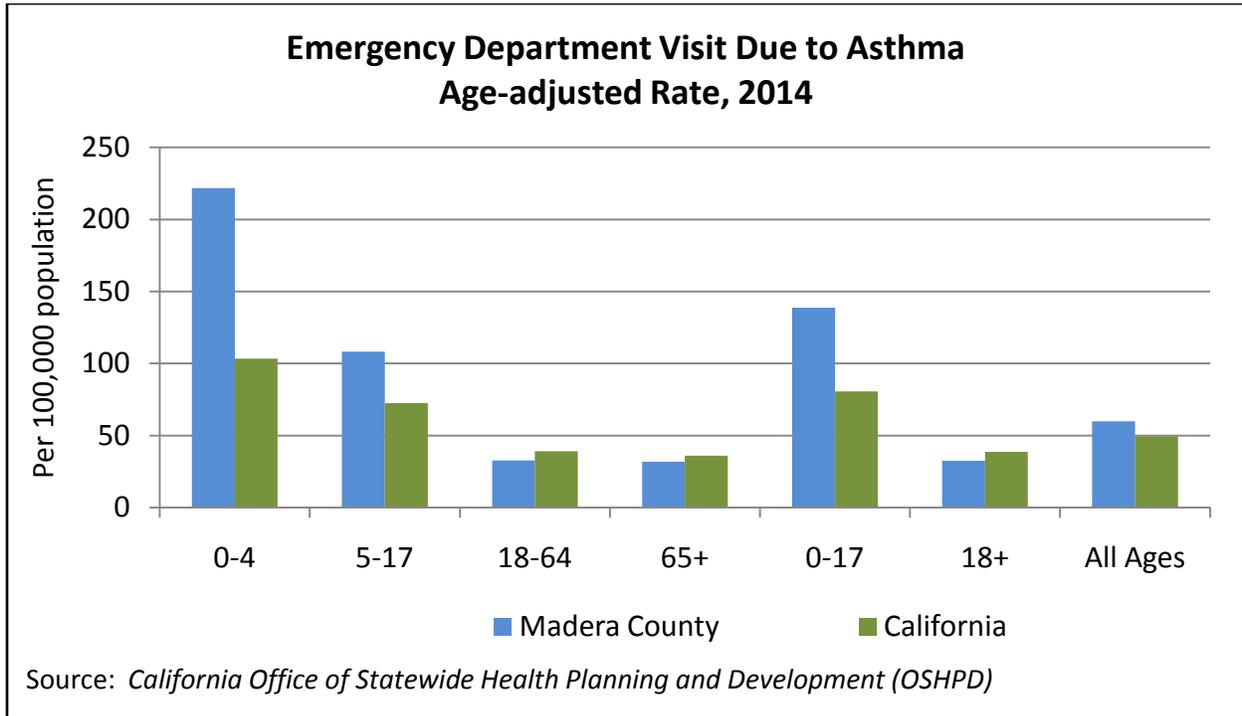


The statistics for active asthma prevalence indicate Madera County rates to be higher (10.3%) than California (7.6%) among the adult population age 18 to 64.³ Madera County has a lower prevalence of lifetime asthma than California in children and adults. National guidelines recommend that health care providers provide all patients with asthma a written self-management plan.⁴



In Madera County, 93.7% of residents with asthma have not received a written asthma management plan from a health care provider.³

Compared to California’s rate of asthma-related emergency department visits among all age ranges, Madera County has a higher rate among children ages 0 to 17 years of age. In children age 0-4 years, the rate of asthma-related emergency department visits is more than double the California state rate. Although the rate of emergency department visits among the adult population is lower than the state rate (32.5 vs. 38.6 per 100,000 population), the overall rate is still higher than the state (59.9 vs. 49.5 per 100,000 population).⁵



Air Quality: Ozone and Particulate Matter

Ozone

Ozone (O₃) is a gas molecule composed of three oxygen atoms. Often called “smog,” ozone is harmful to breathe. Ozone aggressively attacks lung tissue by reacting chemically with it. The ozone layer found high in the upper atmosphere (the stratosphere) shields us from much of the sun’s ultraviolet radiation. However, ozone air pollution at ground level where we can breathe it (in the troposphere) causes serious health problems.⁶ Ozone develops in the atmosphere from gases that come out of tailpipes, smokestacks and many other sources. When these gases come in contact with sunlight, they react and form ozone smog. The essential raw ingredients for ozone come from nitrogen oxides (NO_x), hydrocarbons, also called volatile organic compounds (VOCs), and carbon monoxide (CO). They are produced primarily when fossil fuels like gasoline, oil or coal are burned or when some chemicals, like solvents, evaporate. NO_x is emitted from power plants, motor vehicles and other sources of high-heat combustion. VOCs are emitted from motor vehicles, chemical plants, refineries, factories, gas stations, paint and other sources. CO is also primarily emitted from motor vehicles.⁷

If the ingredients are present under the right conditions, they react to form ozone. And because the reaction takes place in the atmosphere, the ozone often shows up downwind of the sources of the original gases. In addition, winds can carry ozone far from where it began. The Fresno-Madera area is the fourth (4th) most ozone polluted city/area in the country.⁶ Ozone levels in Madera have decreased since the early 2000 but still exceed healthy levels.⁶ Data from 2012-2014, indicated Madera County had an annual average of 58 high ozone days in unhealthy ranges (ozone concentration is equal to or higher than 70 parts per billion (ppb) measured over eight hours/day).⁶

Particulate Matter 2.5

Particle pollution refers to a mix of very tiny solid and liquid particles that are in the air people breathe. Fine particles are 2.5 microns in diameter or smaller are called PM_{2.5}.⁶

Short-term Particulate Matter (24-hour PM_{2.5})

The Fresno-Madera area is the second (2nd) most short-term (24-hour PM_{2.5}) polluted metropolitan statistical area in the country.⁶

Using 2012-2014 data, Madera has an annual average of 26 high PM 2.5 days in unhealthy ranges (24-hour PM_{2.5} concentration is higher than 35.4 mg/m³). This indicator ranks Madera County as the 6th worst area in the U.S.⁶

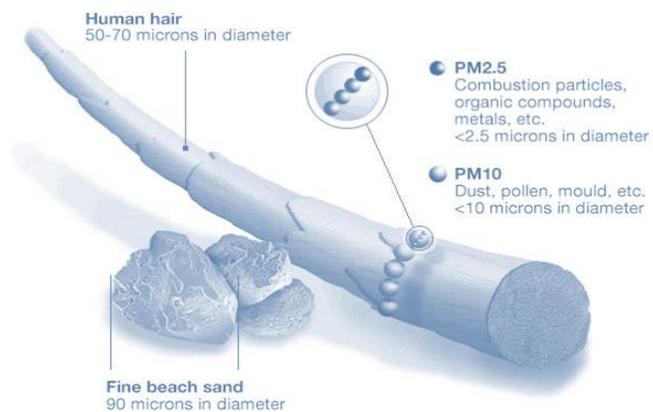
Long-term Particulate Matter (Annual PM_{2.5})

The Fresno-Madera area is the third (3rd) most polluted metropolitan statistical area polluted by year-round PM_{2.5} in the country.⁶ Madera County is the fourth (4th) worst county in the U.S. on this measure.⁶

Where Does Particle Pollution Come From?

Particle pollution is produced through two separate processes—mechanical and chemical. **Mechanical processes** break down bigger bits into smaller bits with the material remaining essentially the same, only becoming smaller. Mechanical processes primarily create coarse particles. ⁶ Dust storms, construction and demolition, mining operations, and agriculture are among the activities that produce coarse particles. Tire, brake pad and road wear can also create coarse particles. Bacteria, pollen, mold, and plant and animal debris are also included as coarse particles. ⁶

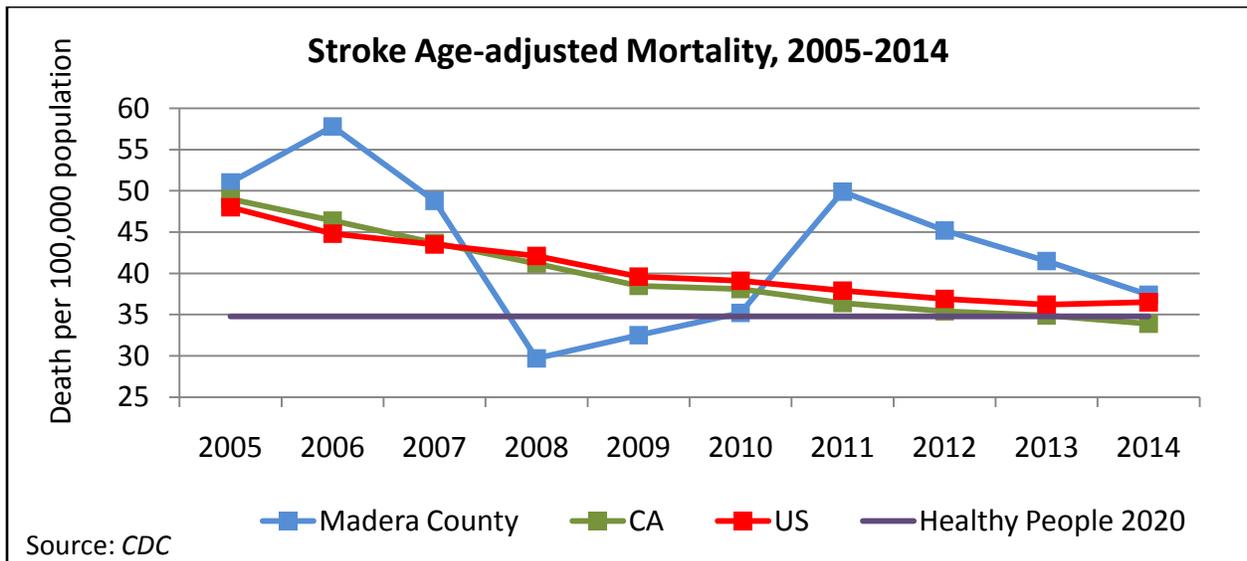
Chemical processes, by contrast, create most of the tiniest fine and ultrafine particles in the atmosphere. Combustion sources burn fuels and emit gases. These gases can vaporize and then condense to become a particle of the same chemical compound. Or, they can react with other gases or particles in the atmosphere to form a particle of a different chemical compound. Particles formed by this latter process come from the reaction of elemental carbon (soot), heavy metals, sulfur dioxide (SO₂), nitrogen oxides (NO_x) and volatile organic compounds with water and other compounds in the atmosphere. ⁶ Burning fossil fuels in factories, power plants, steel mills, smelters, diesel- and gasoline-powered motor vehicles (cars and trucks) and equipment generate a large part of the raw materials for fine particles. So does burning wood in residential fireplaces and wood stoves or burning agricultural fields or forests.



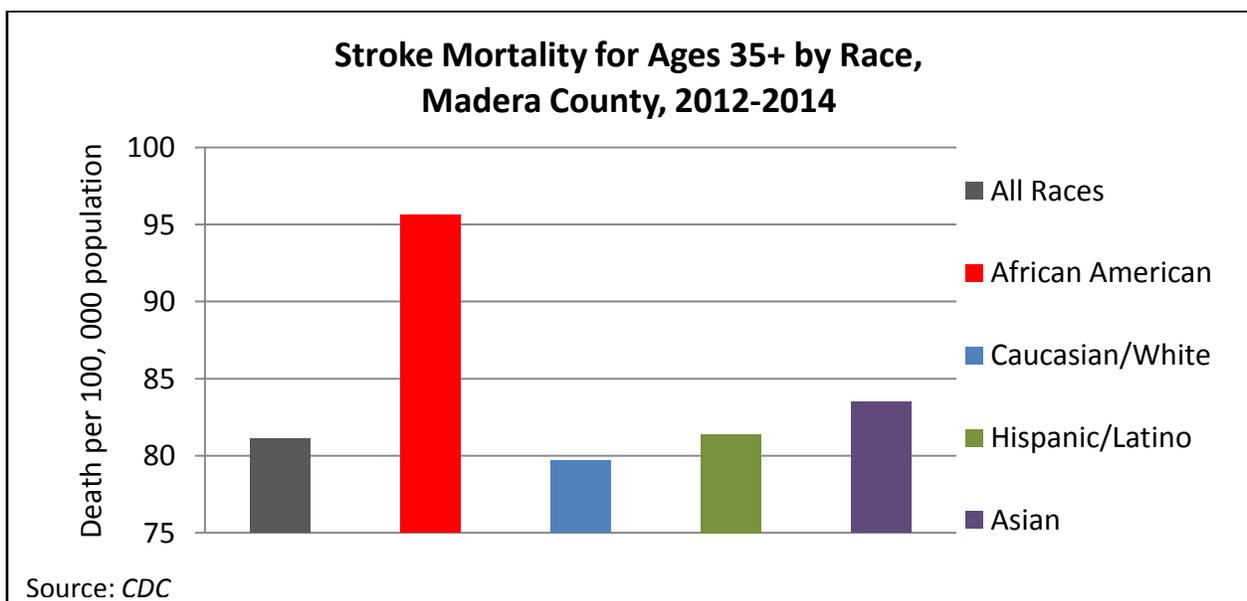
Source: *United States Environmental Protection Agency*

Stroke: Fifth Leading Cause of Death in Madera County

Stroke occurs when there is poor blood flow to the brain resulting in cell death. There are two main types of stroke: 1) ischemic, due to lack of blood flow, and 2) hemorrhagic, due to bleeding.¹ Stroke can be prevented by adopting a healthy lifestyle, that includes being physically active, not smoking, maintaining a healthy weight, and managing stress.²

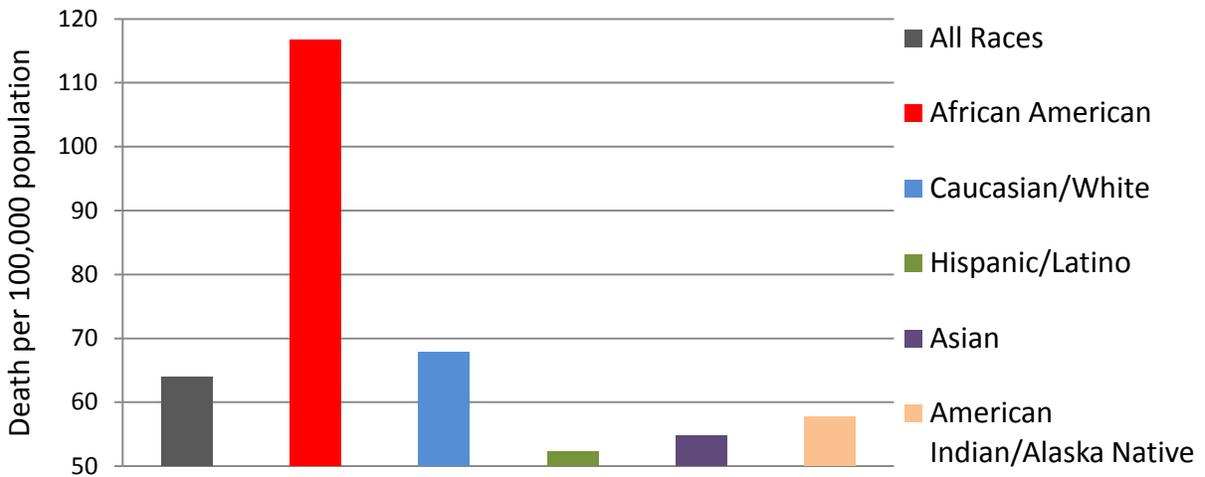


Cerebrovascular disease mortalities are steadily decreasing nationwide and state wide. While Madera County experienced a dramatic increase in mortalities due to cerebrovascular disease during 2008-2010, recent trends demonstrate a continuous reduction of cerebrovascular deaths since 2011. In 2014, Madera County's stroke mortality (37.4 per 100,000 population) is comparable to the US (36.5), but both are above the Healthy People goal rate of 34.8 and higher than California's (33.9).³



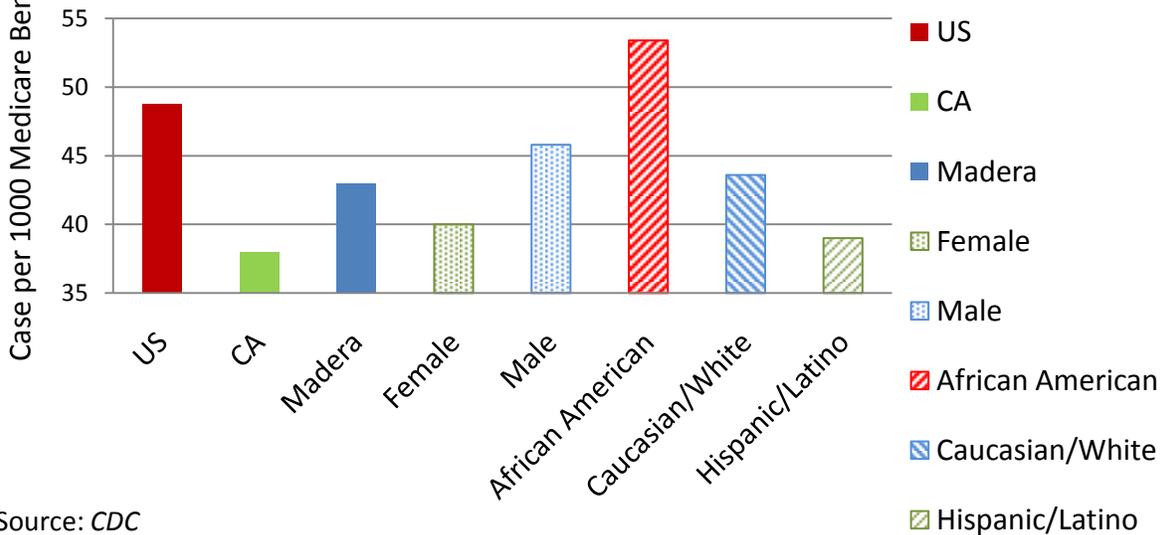
Stroke deaths affect African-Americans in Madera County disproportionately more than any other racial/ethnic group.³

Avoidable Heart Disease and Stroke Mortality, Madera County, 2012-2014



Source: CDC

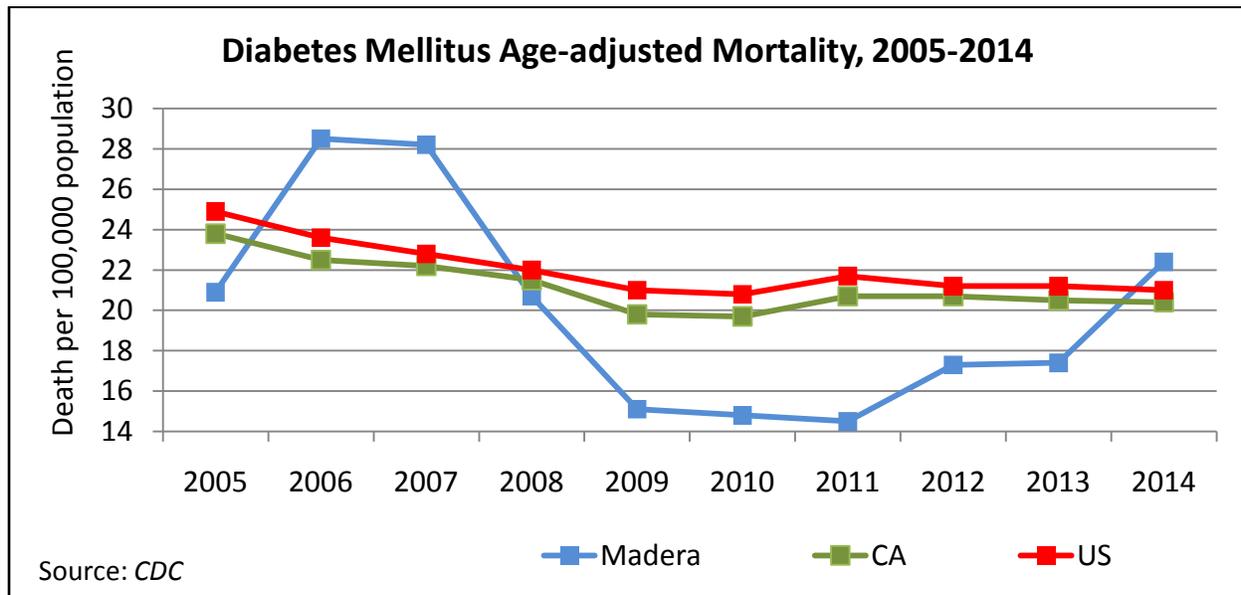
Heart Disease Hospitalization Rate per 1,000 Medicare Beneficiaries, 65+, 2011-2013



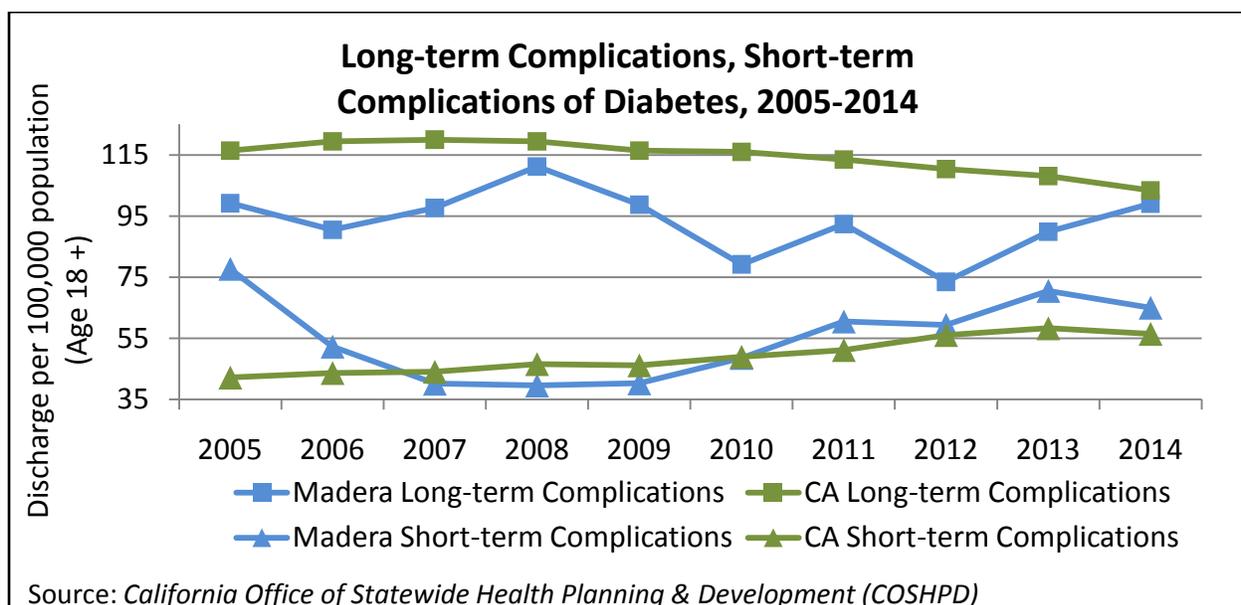
Source: CDC

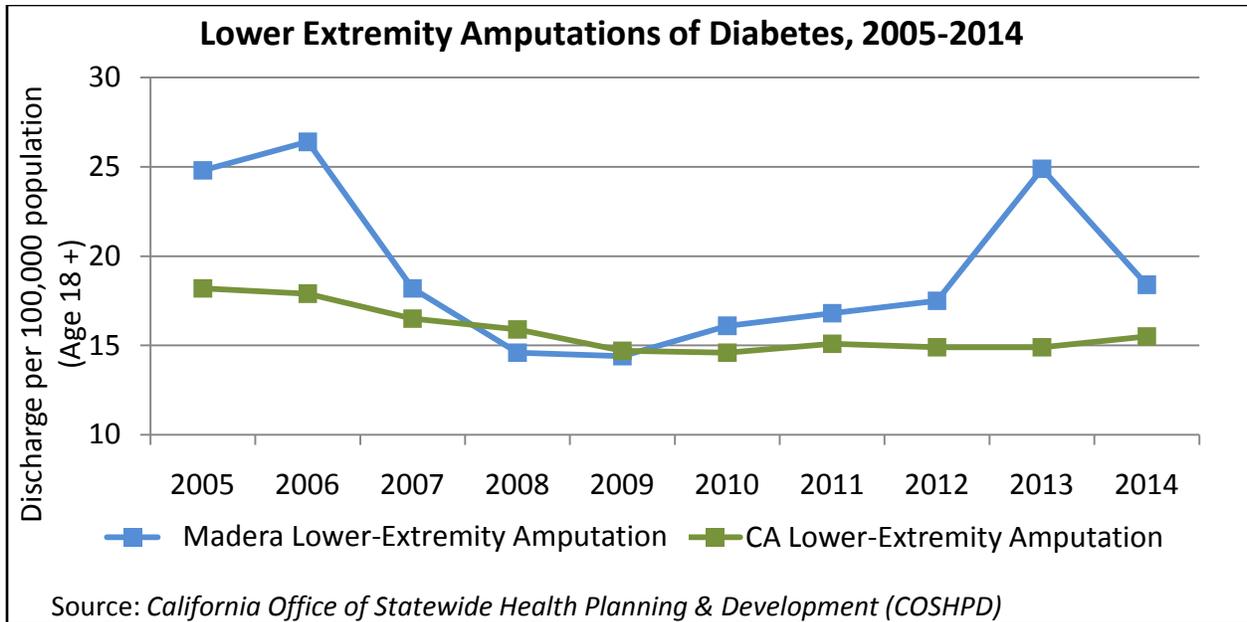
Diabetes Mellitus: Sixth Leading Cause of Death in Madera County

Diabetes is a condition whereby the body has a shortage of insulin, a decreased ability to use insulin, or both. Insulin is a hormone that allows glucose (sugar) to enter cells and be converted to energy. When diabetes is not controlled, glucose and fat remain in the blood and, over time, can cause blindness, amputation and kidney failure, and is a major contributor to heart attacks and strokes.¹

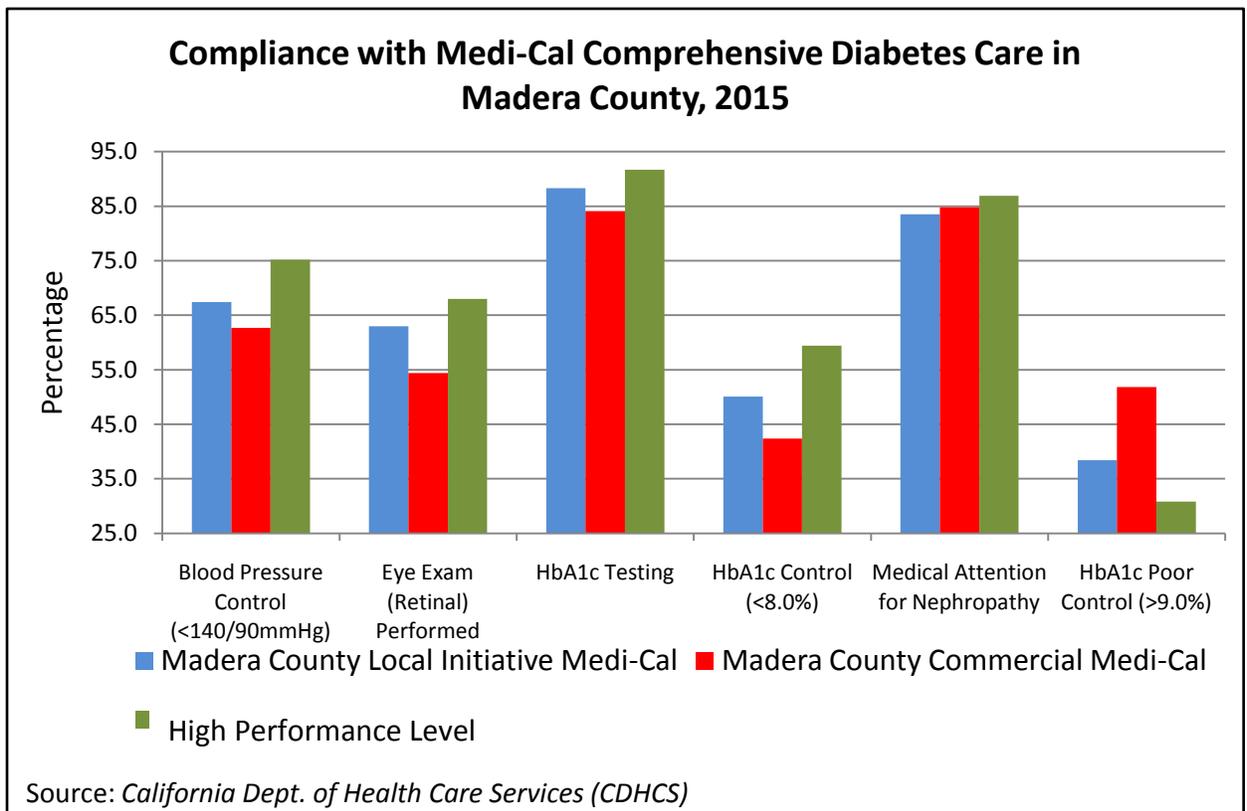


Madera County diabetes related mortality was below state and national rates during 2008-2013, but has increased 54.5% since 2011, and is now higher (22.4) than both state (20.4) and national (21.0) rates. Despite increased mortality, the prevalence of diabetes in Madera County has continuously decreased since 2010.²

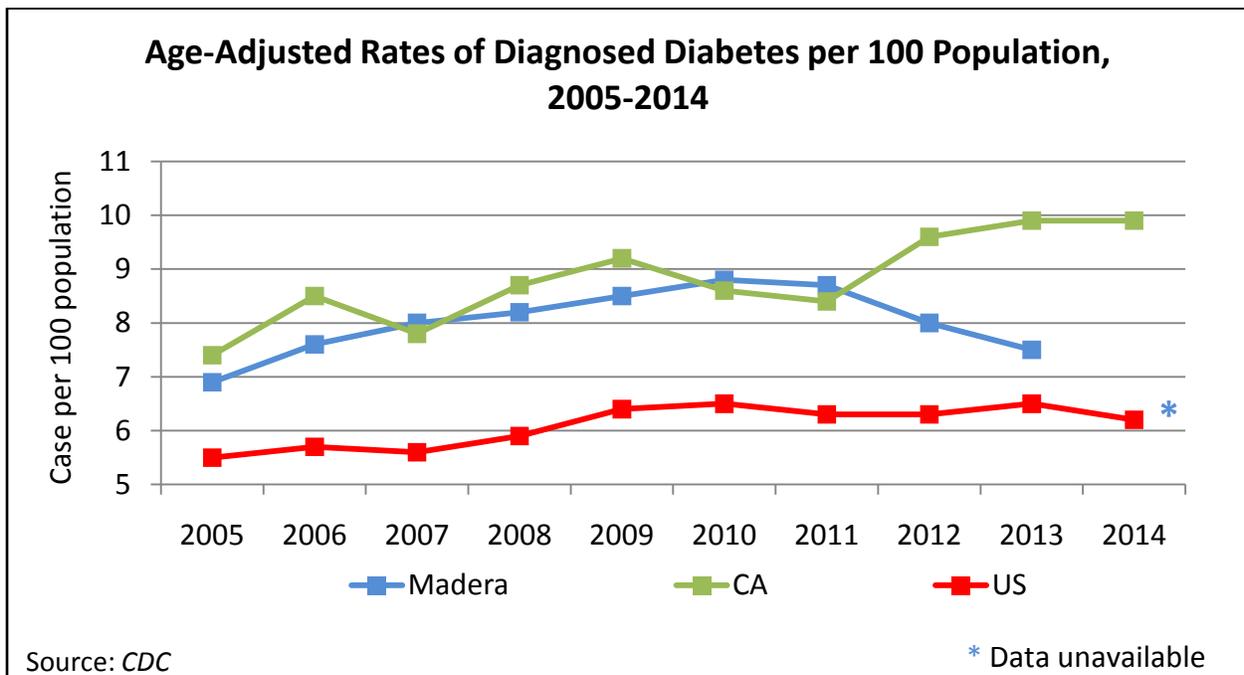




As stated earlier, Madera County is considered a Health Professional Shortage Area (HPSA) in California.³ The hospitalization data demonstrates the impact of the county's lack of access to primary care. Many patients are hospitalized for preventable conditions; Madera County has higher rates than the state of preventable hospital stays related to diabetes' short term complications, and lower extremity amputation. However, hospitalization due to long term complications is lower in Madera County than the state indicator.⁴



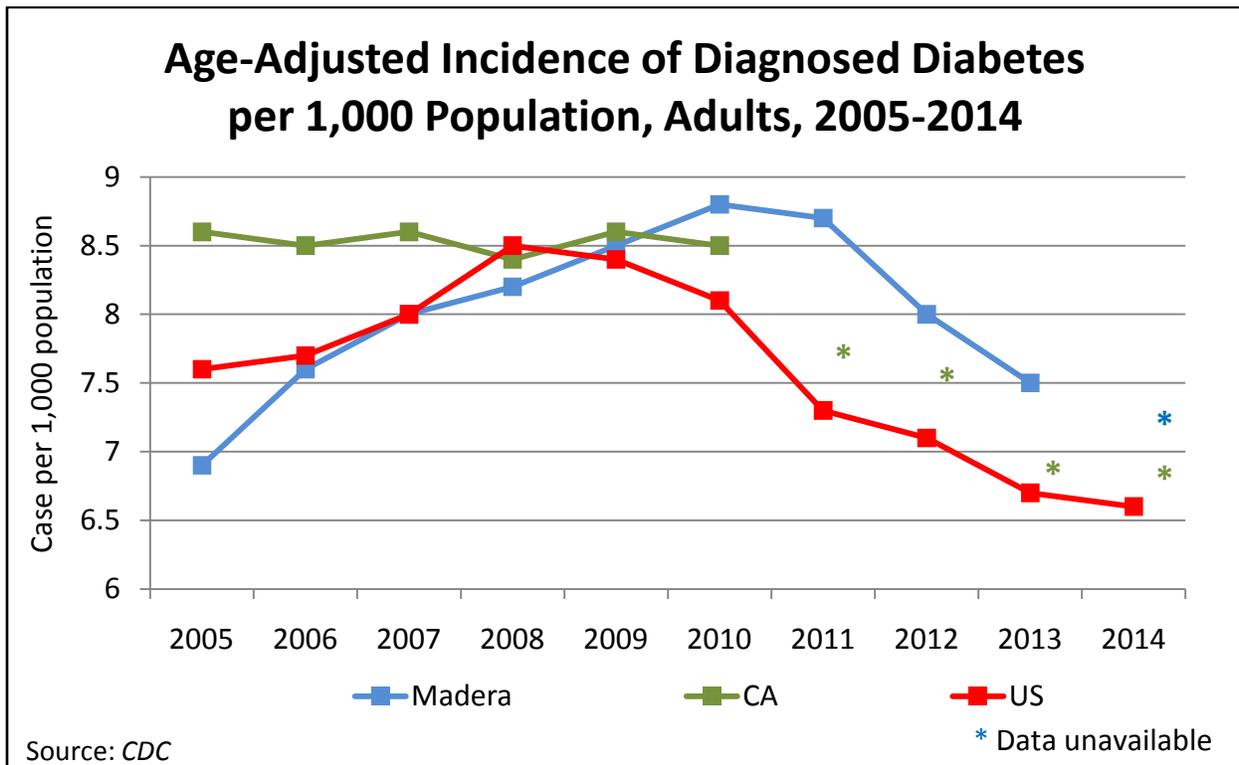
In Madera County, Medi-Cal Managed Care operates using a Two-Plan Model specifically using both a local initiative (LI) and a managed Medi-Cal plan (CP). Both health plans are monitored on a yearly basis using indicators established by the National Committee on Quality Assurance (NCQA), an organization committed to improving the quality of health care. To ensure consistency and quality among health plans, the NCQA established national health indicators to measure the delivery of quality care. These indicators, named the Healthcare Effectiveness Data Information Sets (HEDIS), is a tool used by more than 90 percent of America's health plans to measure performance on important dimensions of care and service. Altogether, HEDIS consists of 81 measures across 5 domains of care. Because so many plans collect HEDIS data, and because the measures are so specifically defined, HEDIS makes it possible to compare the performance of health plans on an "apples-to-apples" basis.⁵ Data from both, the local initiative and managed Medi-Cal health plans indicate a lapse in diabetes management and preventative care. According to HEDIS 2015 data, the rate of Madera MediCal patients on comprehensive diabetes control measures is below high performance level (HPL).



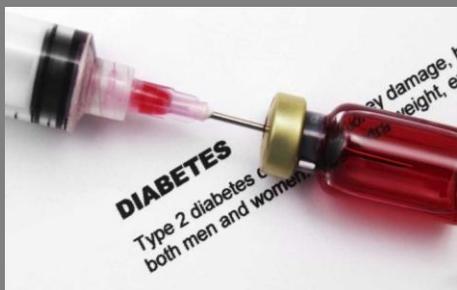
Among all performance measures, Hemoglobin A1c (HbA1c) testing (88.3%[LI] compared to the HPL 91.7%), the most severe diabetes-related side effect tracked, received medical attention for nephropathy, or kidney disease (84.8%[CP] vs. the HPL 86.9%) and eye exam (retinal) (63.0%[LI] vs. the HPL 68.0%) are the best performed diabetes care in Madera County. Except on medical attention for nephropathy, the local initiative scored better on all other diabetes care compliance indicators than the managed Medi-Cal plan.⁶ HbA1c control in Madera County is below the national high performance level. The local initiative of 50.1% and managed care plan is 42.4%. Data indicates that Madera County Medi-Cal recipients who have the condition of diabetes are able to control their HbA1c (< 8.0%, HPL: 59.4%), however, 38.4% (LI) and 51.8% (CP) have poor HbA1C control (>9.0%, HPL: 30.8%). Blood pressure control (67.4% [LI], 62.7% [CP] vs. HPL: 75.2%) was also performed below HPL.⁶

The cost of diabetes (including direct medical costs as well as absenteeism from work or school) in Madera County was estimated to be \$ 63,306,667.00 annually.⁷

Since 2005, Madera County has had a similar increasing trend in the prevalence of diagnosed diabetes compared to California and to the national level. The prevalence of diagnosed diabetic patients in Madera County has been decreasing since 2011, and was lower than the state level (7.5 vs. 9.9 per 100 population) in 2013.²



In 2015, the five Madera County Central Valley Health Network clinics served 4,035 patients with diabetes (14.8% of all patients). Health insurance eligible patients (24.7%) received uncontrolled diabetes management care at these clinics.⁶

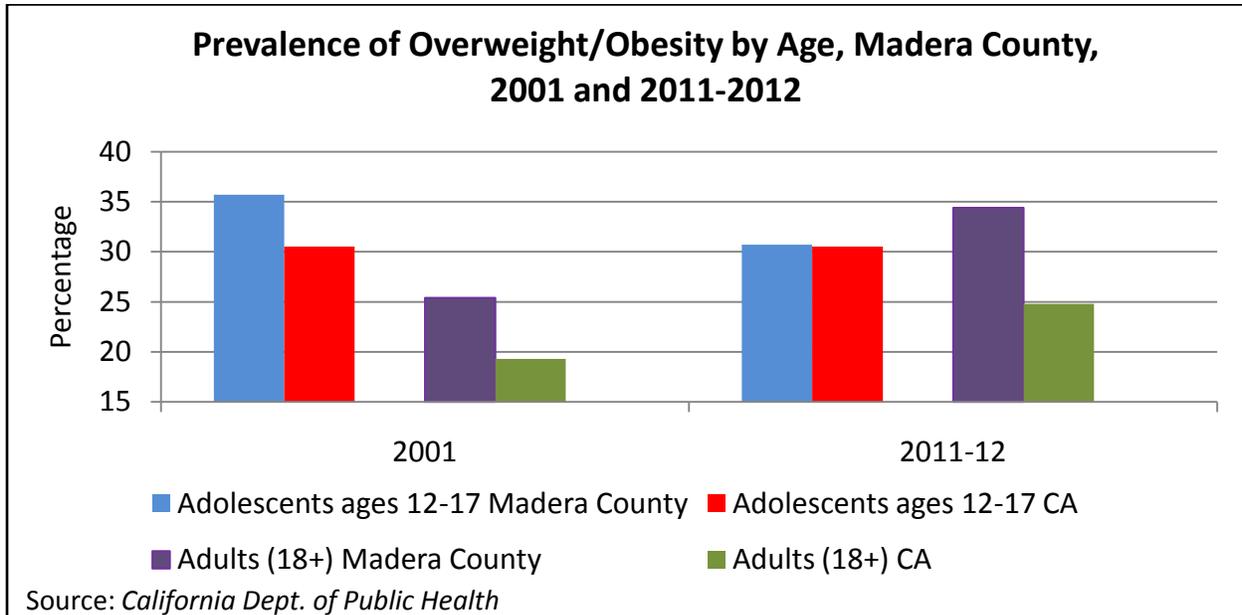


The incidence of people diagnosed with diabetes in Madera County also has decreased since 2011, but is still higher than the national level.²

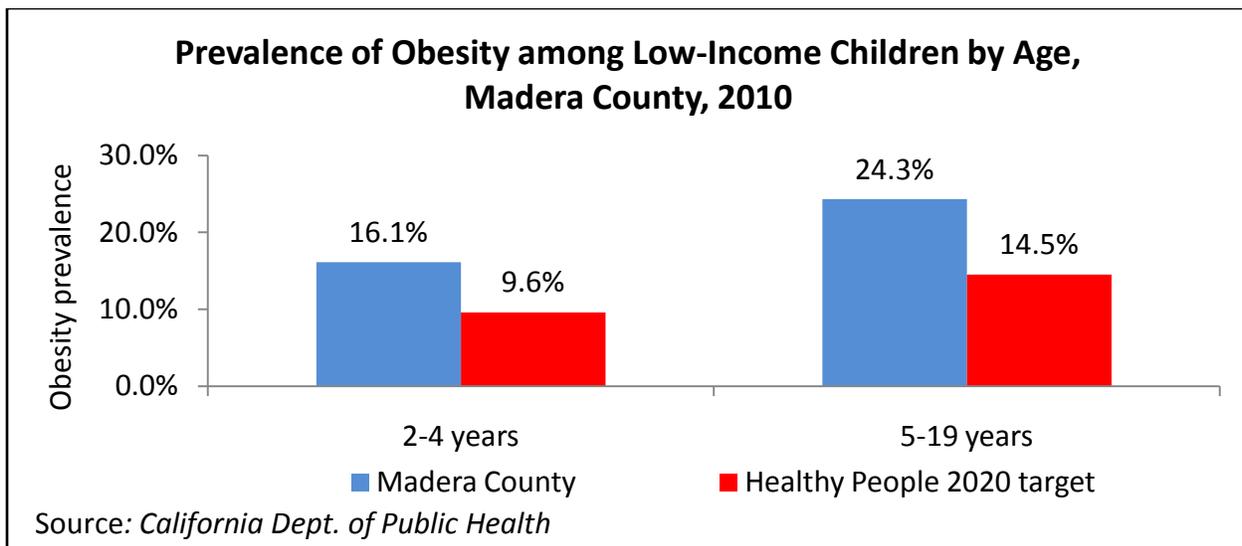
Modifiable Risk Factors: Diabetes Mellitus (DM)

Obesity – A Prevalent Modifiable Health Risk in Madera County

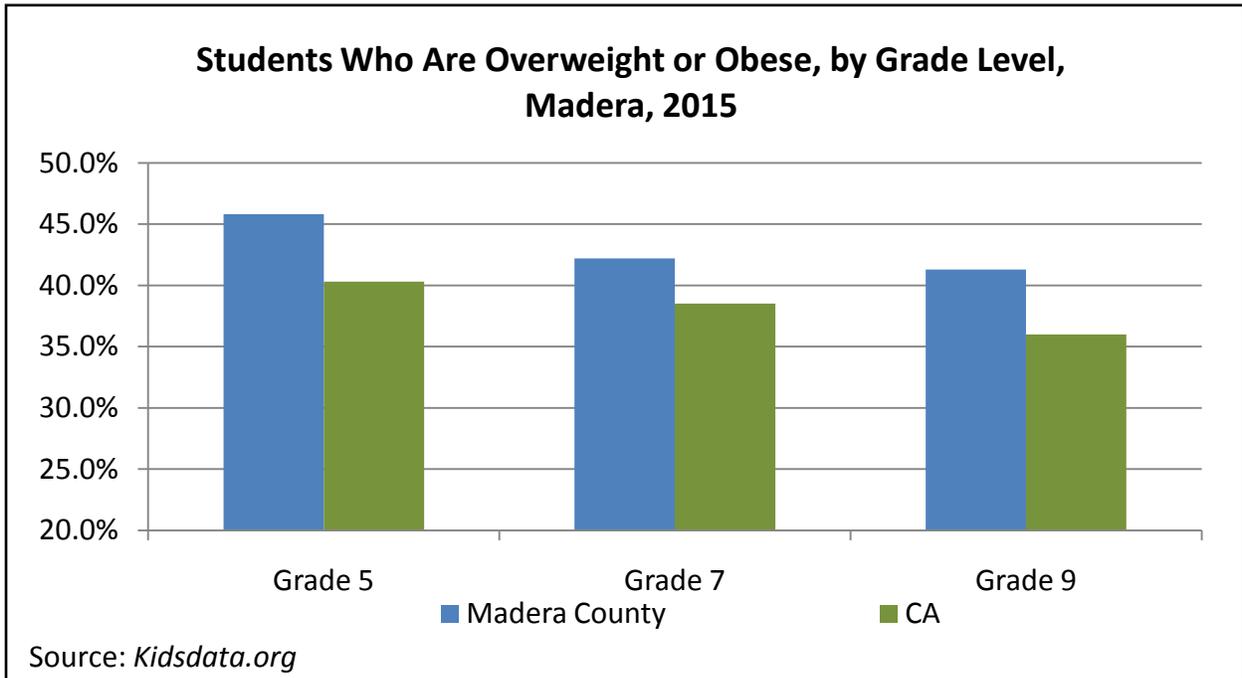
From 2001 to 2011-2012, the prevalence of overweight and obesity in adolescents, age 12 – 17, in Madera County decreased from 35.7% to 30.7%, closer to the state level (30.5%). Meanwhile, the prevalence of overweight and obesity in adults of Madera County increased 35.4% in that time and was significantly higher than the state prevalence (34.4% vs. 24.8%).¹



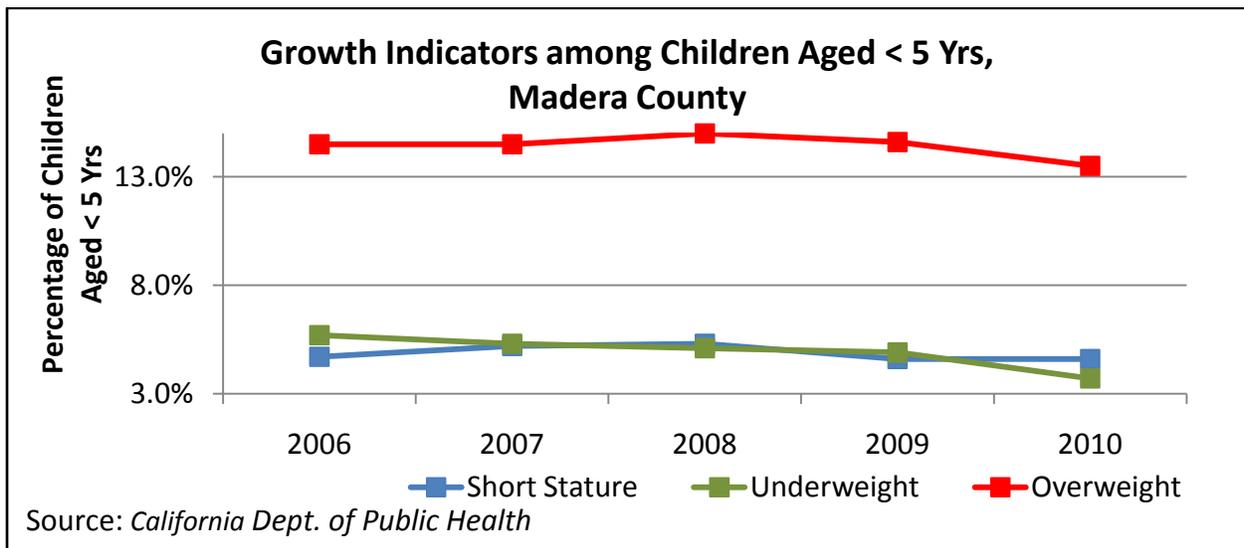
Among low-income families, the prevalence of obesity in children is still higher than the Healthy People 2020 target.¹



In 2015, overweight or obesity were more prevalent among students (Grade 5, 7 and 9) in Madera County than in California. The rate was higher among younger students.²

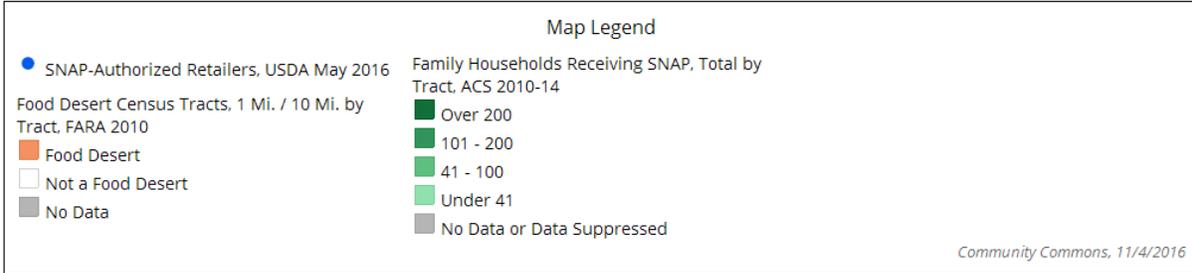
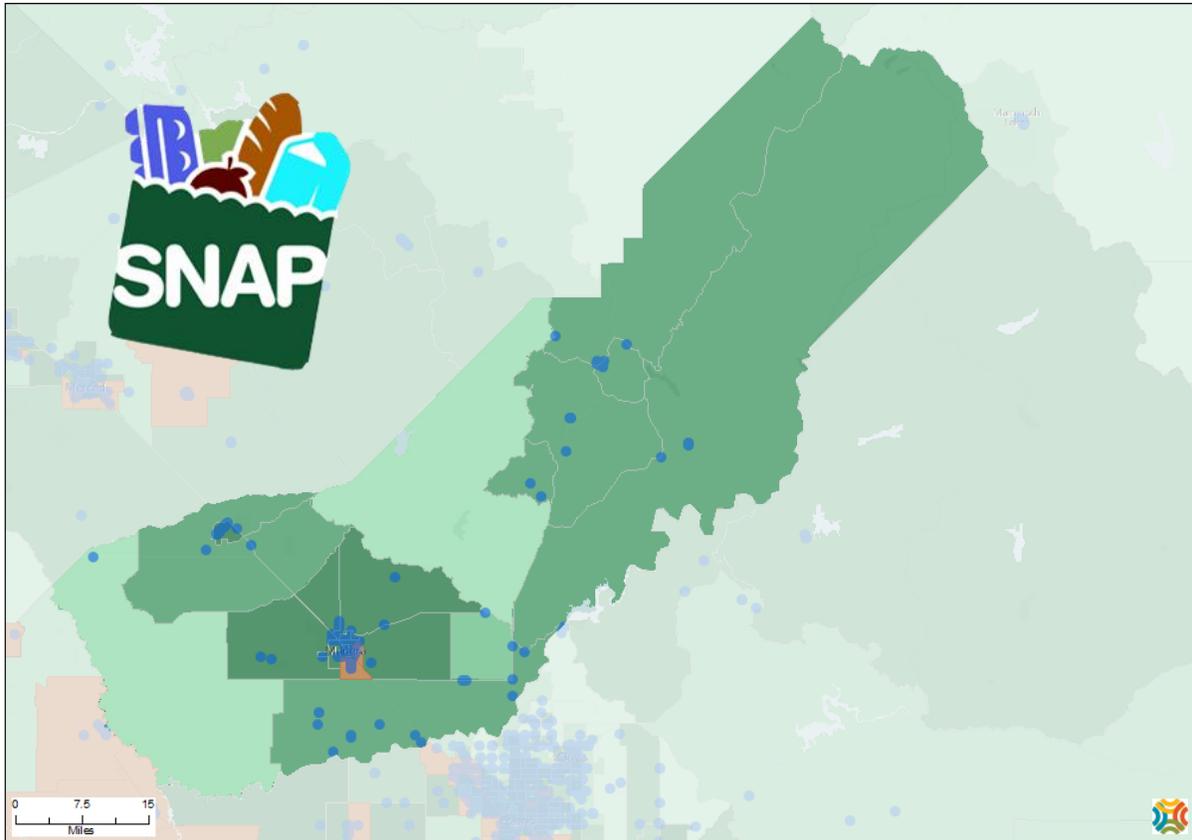


The short stature rate among children aged less than 5 years decreased 13.6% from 2008 through 2010 in Madera County. The underweight rate among children aged less than 5 years decreased 35% from 2006 through 2010 in Madera County. The overweight rate among children aged less than 5 years decreased 11.1% from 2008 through 2010 in Madera County.³



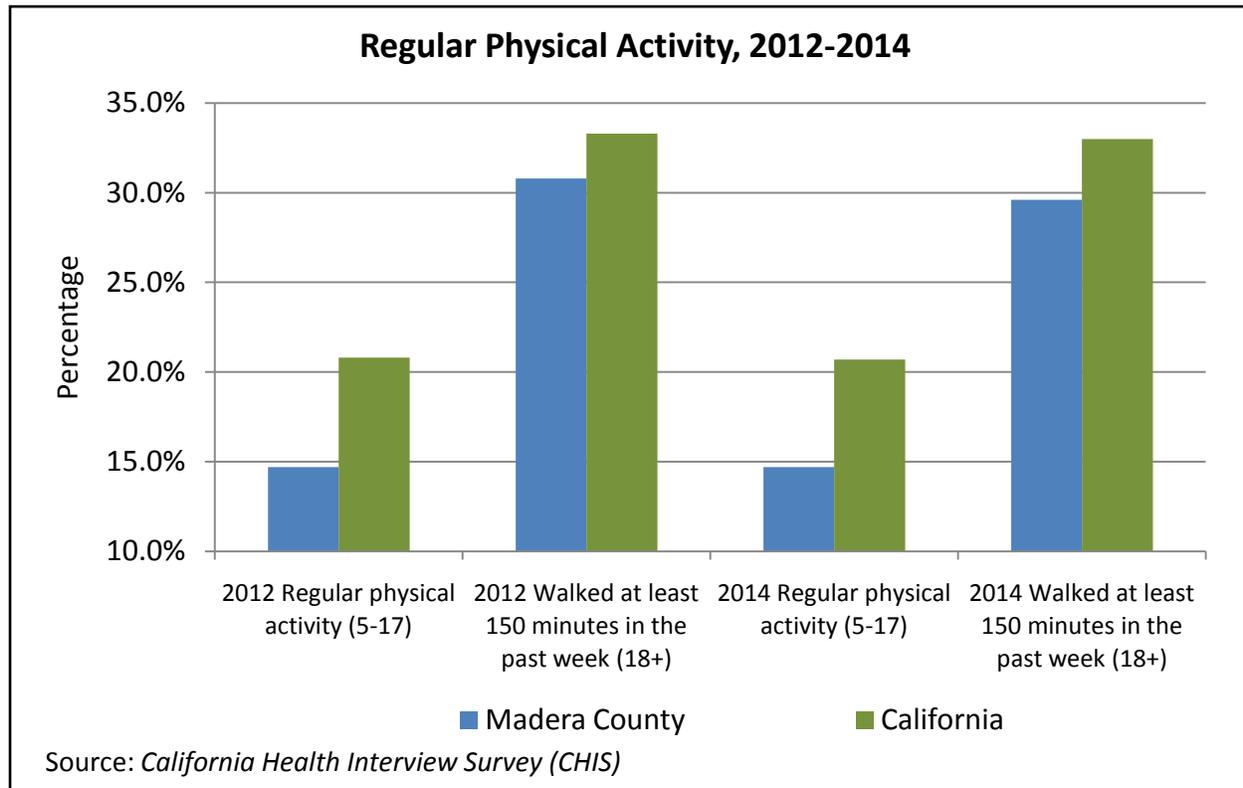
23.5% of Madera County adults (age 18+) reported eating 5 or more servings of fruits and vegetables per day (compared to 28.7% statewide and 28.5% nationally).⁴

Food Desert and SNAP Coverage in Madera County



Census tracts with high numbers of households receiving Supplemental Nutrition Assistance Program (SNAP) benefits also have high numbers of SNAP-authorized retailers (which have regulations requiring the stocking of certain healthy foods).⁵ SNAP-authorized retailers in Madera County mainly gather in major cities (Madera, Chowchilla and Oakhurst) and near highways (CA41 and CA99).

When asked about weekly physical activity levels, nearly 15% of Madera County children and adolescents (age 5-17), reported that they had engaged in at least 60 minutes of physical activity, excluding school physical education programs, which is lower than the state level (21%). Among Madera County adults (age 18+), nearly 30% reported that they walked for transportation or leisure at least 150 minutes during the week, which is slightly lower than the state level (33%).⁶



What counts as moderate physical activity

Any physical activity is better than none. Activities could include:

<p>walking</p> 	<p>gardening</p> 	<p>hiking</p> 	<p>dancing</p> 
 <p>cycling</p>	 <p>active recreation</p>	 <p>swimming</p>	

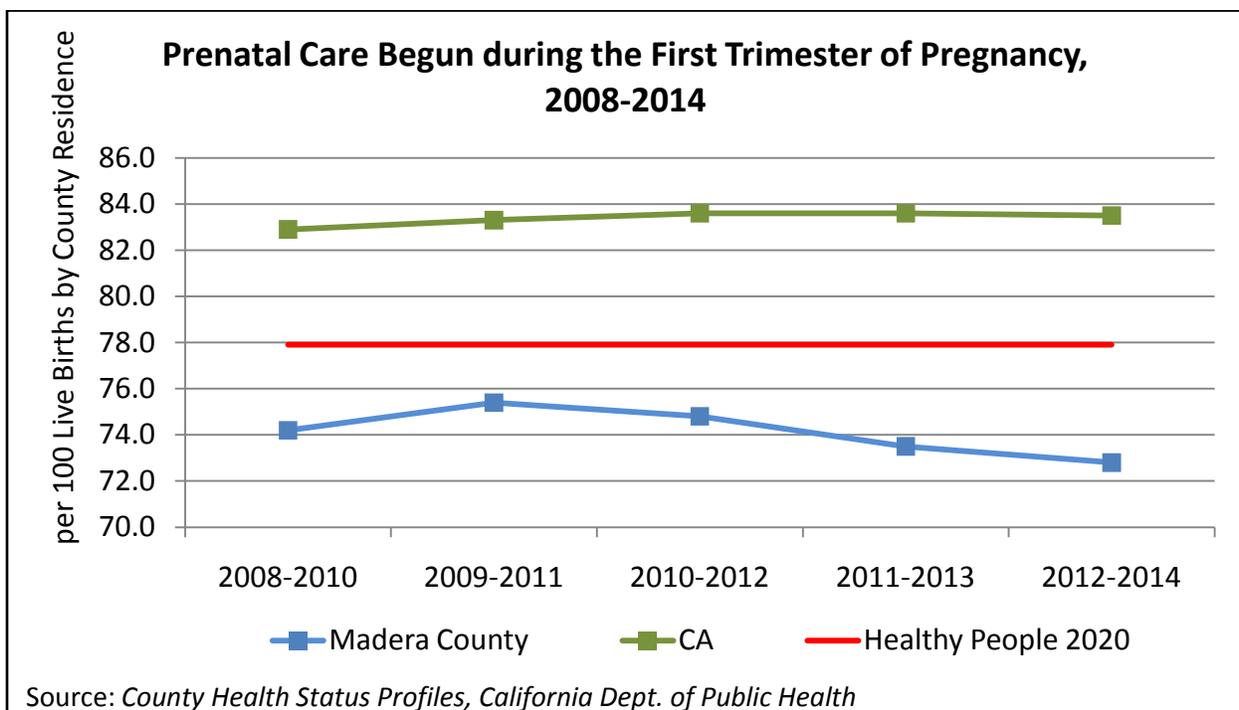
Across the Lifespan

PREGNANCY AND BIRTH - CHILD AND ADOLESCENT HEALTH

Pregnancy and Birth

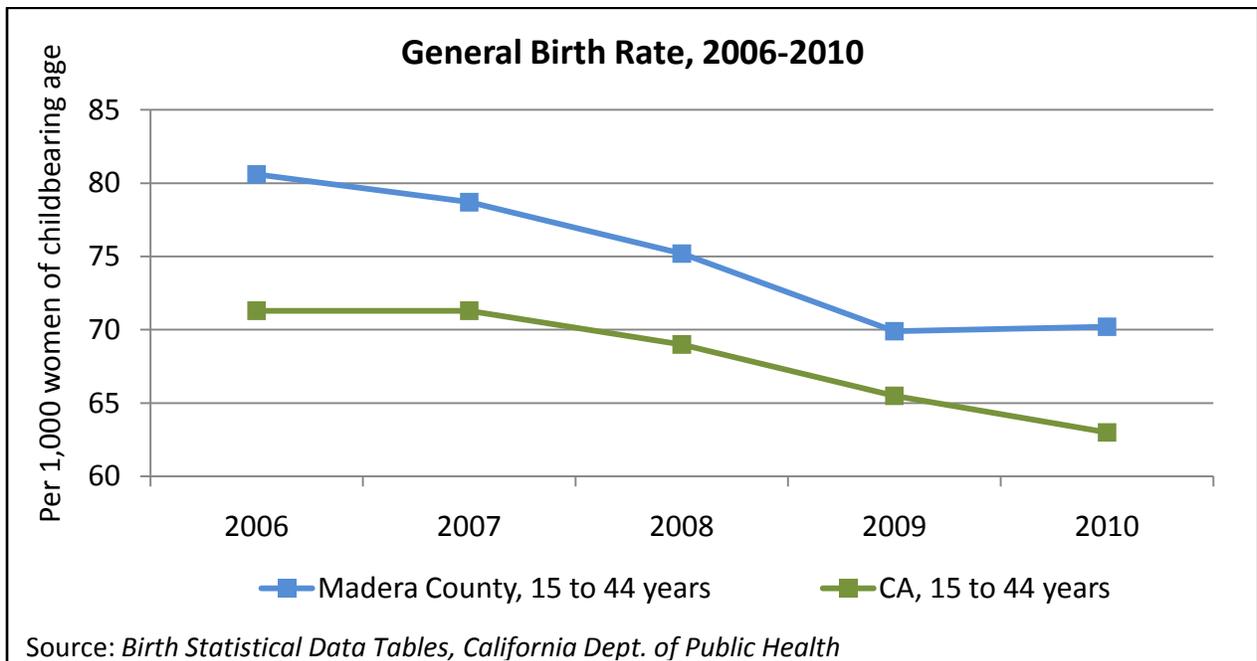
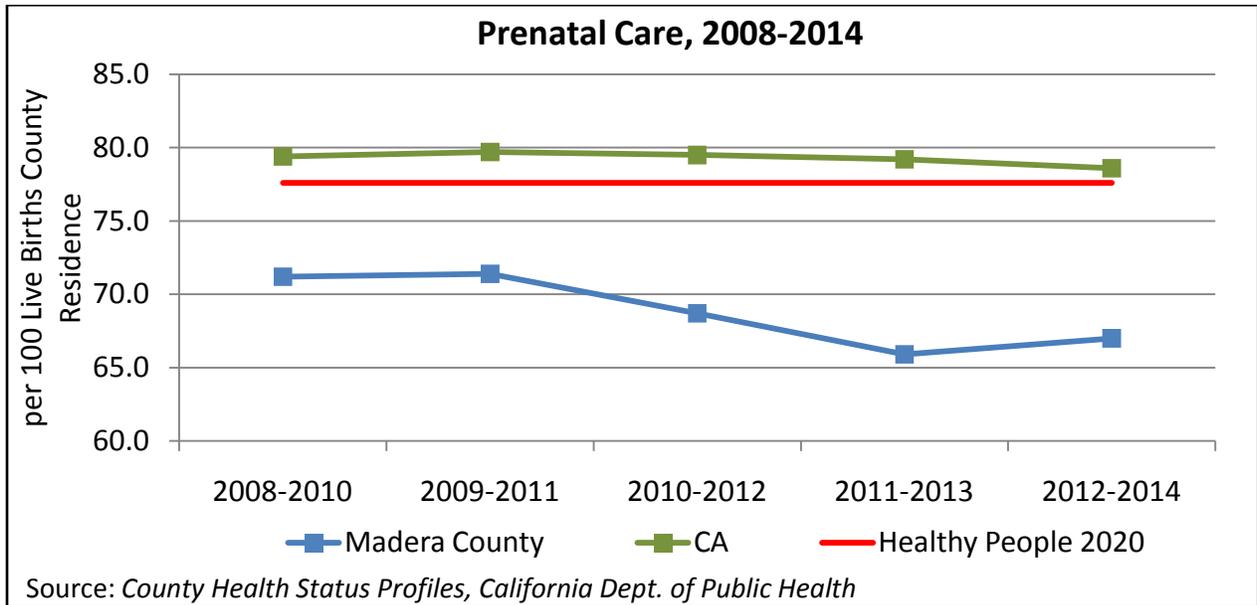
Pregnancy, Birth Outcomes, and Breastfeeding

Quality care for infants is an essential start for children to reach their full potential. Excellence in child care and early environmental impacts can have lasting lifelong effects. Data demonstrates that obtaining prenatal care impacts birth outcomes.

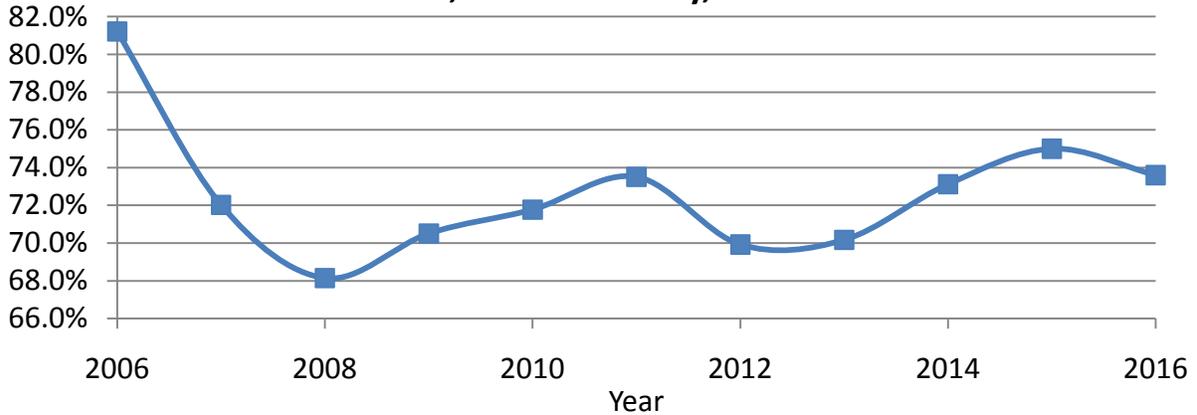


Compared to California state level and Healthy People 2020 target, Madera County has a lower rate of prenatal care begun during the first trimester of pregnancy and it decreased slightly since 2009.¹

Women that receive prenatal care during pregnancy are more likely to have a healthy birth. In Madera County, the trend of women receiving prenatal care has been improving over the past five years; however, it is still lower than state or national averages. This indicator shows the percentage of births to mothers who received adequate or adequate plus prenatal care according to the adequacy of prenatal care utilization index. Care is determined adequate if it began within the first trimester and included an average of at least one or two additional prenatal visits per month of gestation, depending on the length of gestation. Madera County has a lower rate than the state and Healthy People 2020 on this indicator.¹ Improvement plan on prenatal care promotion, sustainability and clients' compliance can be considered.



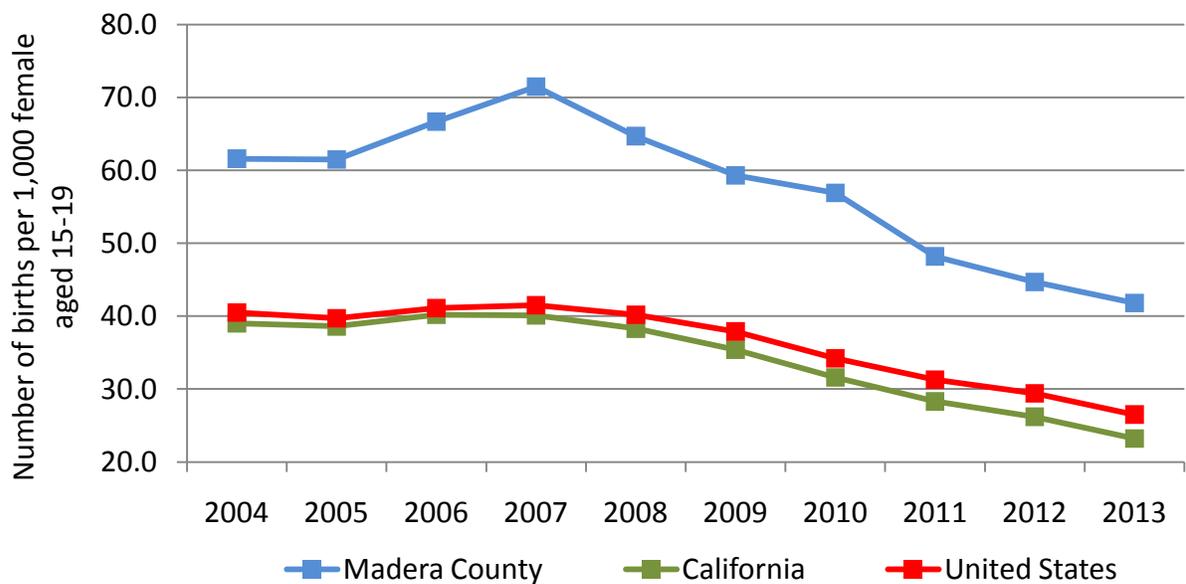
Infants whose mothers received prenatal care in the first trimester, Madera County, 2006-2016



Source: AVSS

In 2010, the general birth rate in Madera County decreased 12.9% compared to that in 2006, but was still higher than the rates of California.² From 2006 to 2016, the percentage of Madera County women receiving first trimester prenatal care was consistently lower than 82%. In 2016, 73% of Madera County mothers received first trimester prenatal care.³ Teen birth rates in Madera County (43 live births per 1,000 females aged 15-19) ranked fourth out of all 58 counties in California (aggregate 2012-2014), and was 80.2% higher than the state level (41.8 in Madera County vs 23.2 in California per 1,000 female aged 15-19). Among all births to mothers aged 15-19 in Madera County, 17% of them have already experienced one or more live births.⁴

Teen Birth Rate, Madera County, 2004-2013

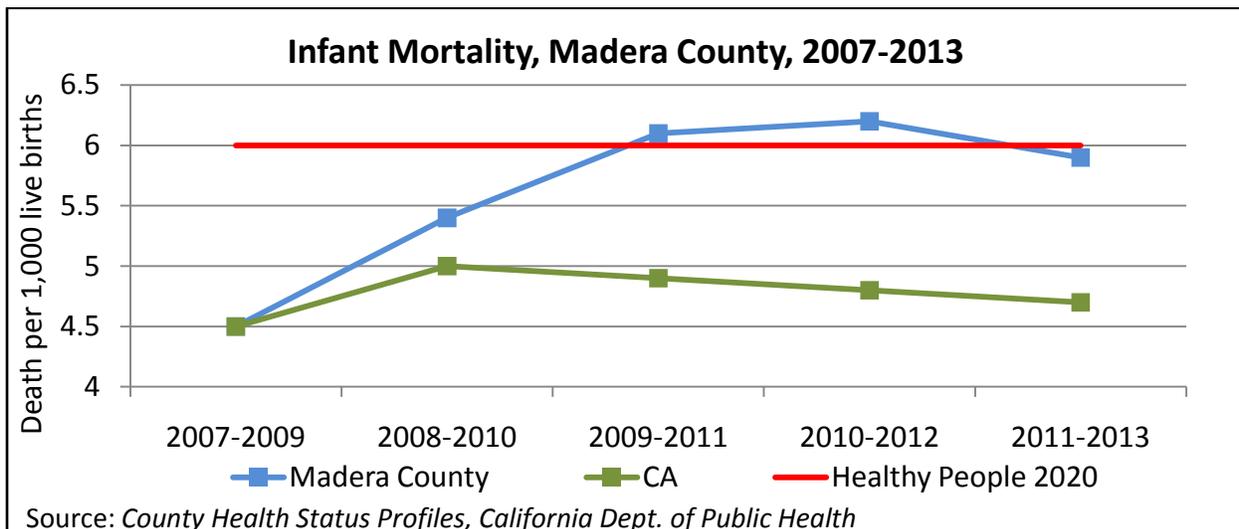


Source: Kidsdata.org

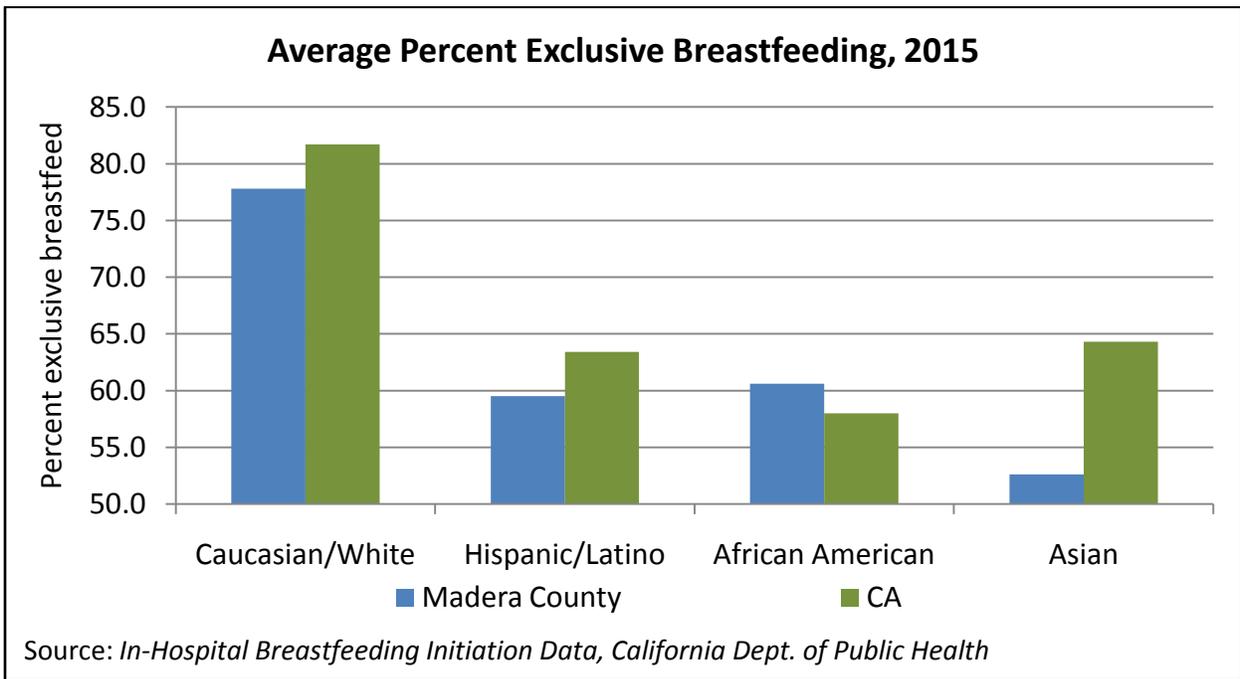
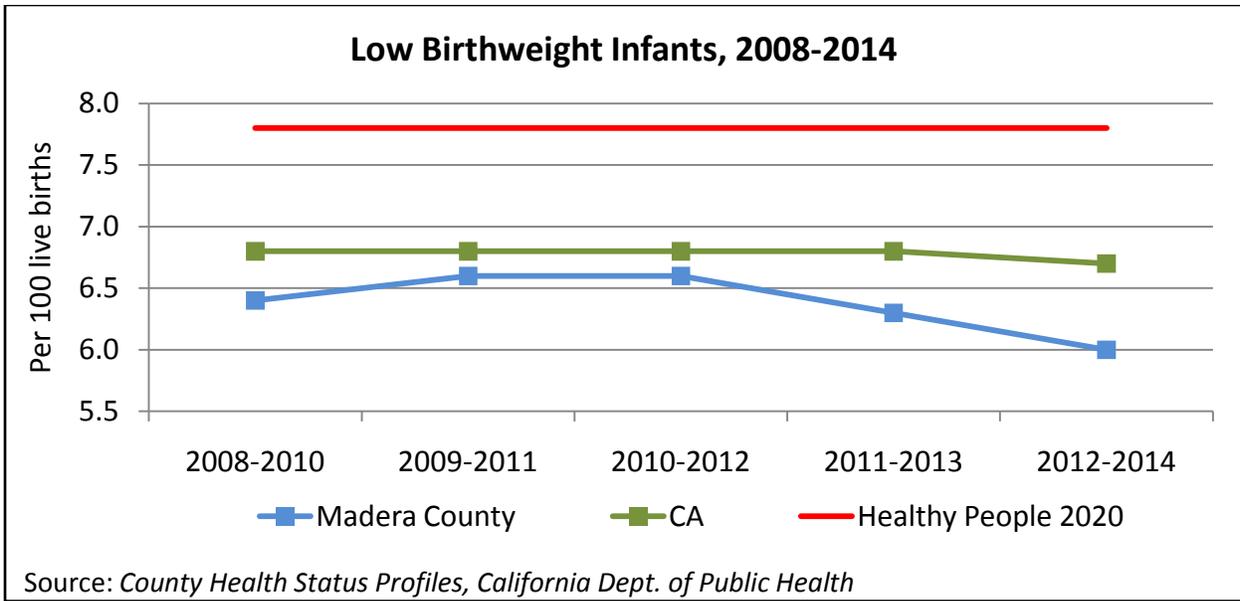
Quick Facts of Teen Birth in California⁵

- The San Joaquin Valley has the highest teen birth rates of any region in California - over twice the rate of the San Francisco Bay Area.
- Two of every three babies born to teens in California are born to Latinas.
- 70% of teen mothers drop out of high school.
- Only one out of five teen mothers receive any financial support from their child's father.
- 80% of teen fathers do not marry the teen girls who bore their child.
- Fathers of children born to teens are on average almost four years older than the mothers, and a majority is over the age of 21.
- Poor and low-income teens who make up approximately 40% of the adolescent population account for 83% of teens who give birth.
- An estimated 50 to 60% of parenting teens have been sexually abused, twice the national rate for never-pregnant teens.

Madera County infant mortality is near the Healthy People 2020 target of 6.0 per 1,000 live births, but 25.5% higher than the rate of California at 5.9 in Madera County vs. 4.7 in California per 1,000 live births.^{1, 6}



Over the past five years, Madera County consistently has had a lower rate in low birth-weight (LBW) infants than California. However, both the county and state rates were lower than the objective of Healthy People 2020 (7.8 per 100 live births).^{1, 6}

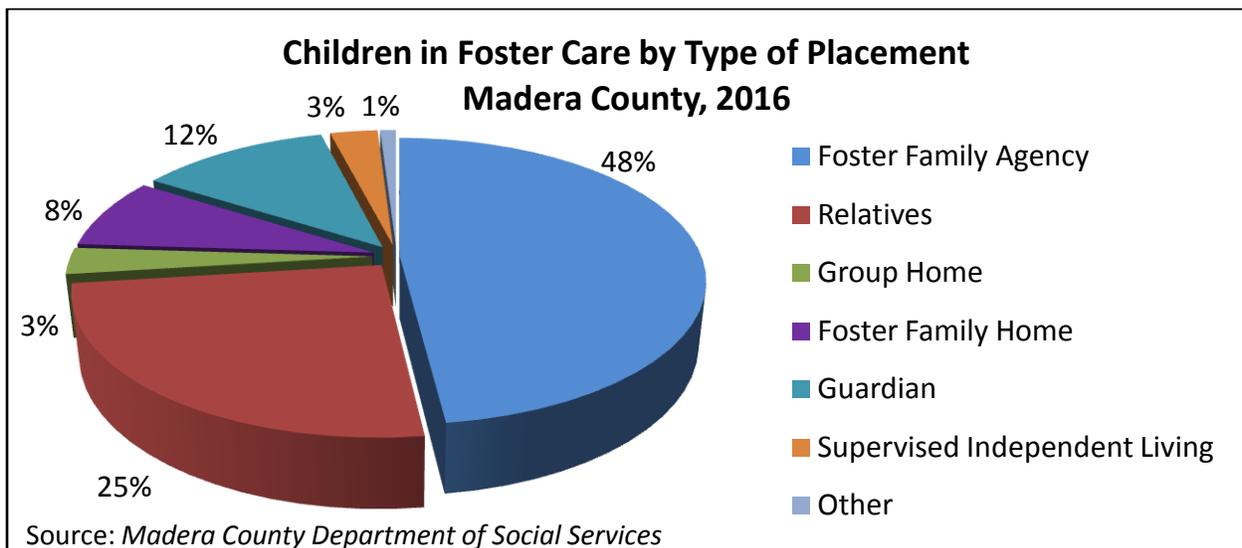
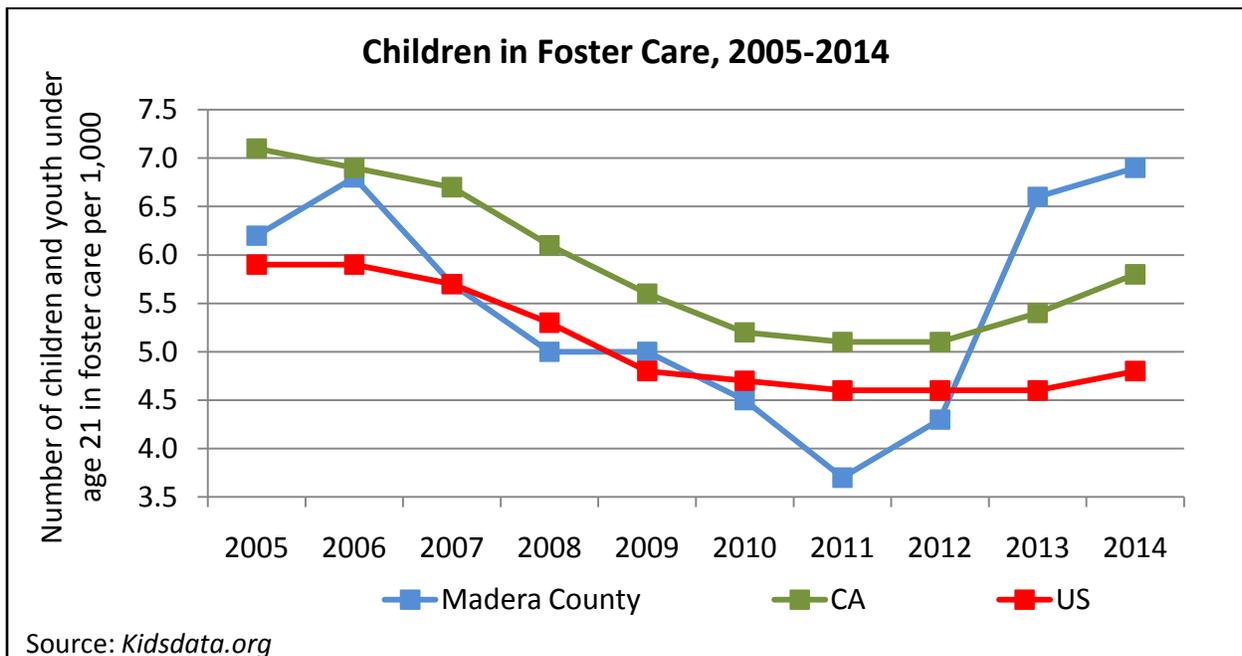


Madera County has lower rates of exclusive breastfeeding mothers (63.8%) measured in the hospital after delivery than in California (68.8%), as a whole. This is consistent for all ethnic groups except African American mothers.⁷

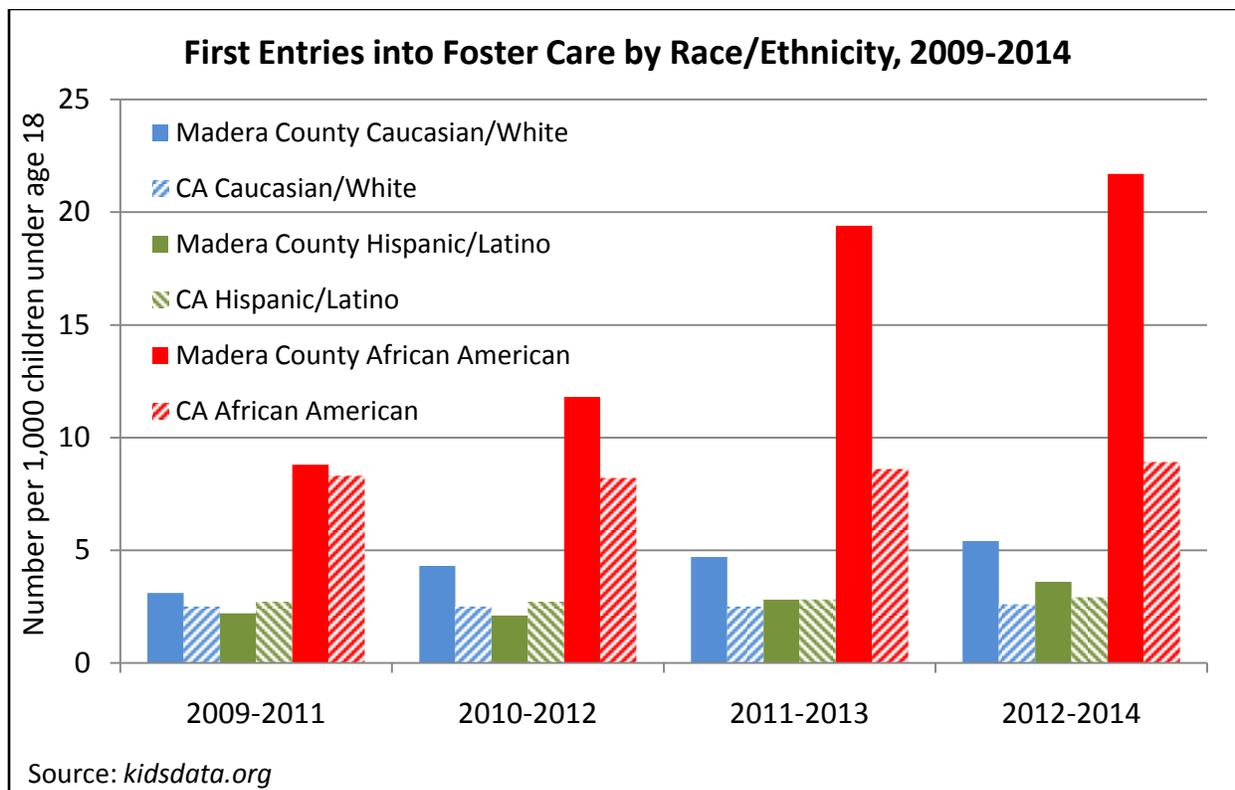
Child and Adolescent Health

Foster Care

Childhood health has a tremendous impact on future physical and mental health, cognitive development, academic performance, and quality of life. This chapter will focus on the health outcomes of Madera County’s children and adolescents, as well as factors that affect their health. The number of children in foster care provides a snapshot of actual situation at a point in time. Since 2011, the number of children and youth under age 21 in foster care per 1,000 experienced an 86.5% increase in Madera County from 3.7 to 6.9, which was 19% higher than the state level.¹

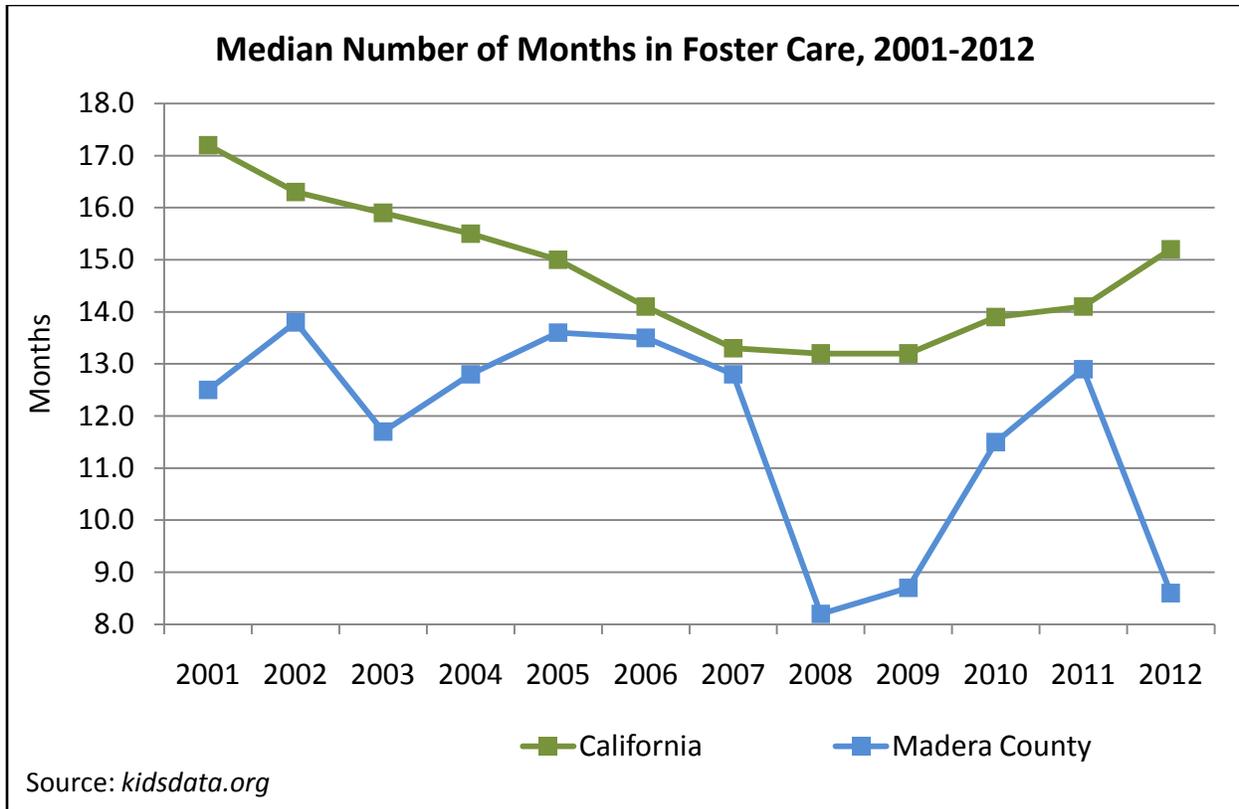


Among 359 children placed in out of home care in 2016, 48% of them were placed with foster families (overseen by licensed non-profit agencies); 25% of them were placed with relatives and 12% of them were placed with guardians.²



Foster care is measured in several different ways, with each indicator illustrating a different aspect of this complex system. Rate of first entries into foster care reflects the incidence of children who are removed from unsafe home environments. The rate of first entries into foster care also varies by race/ethnicity. In Madera County, the rate of first entries into foster care is higher than the state, especially among the African American population where the county rate is 2.44 times higher than the state rate. African American and Hispanic/Latino children consistently have the highest rates of foster care entry, at 21.7 and 5.4 per 1,000, respectively, in 2012-14; this compares to 3.6 for White.^{1,3}

While the number of children in foster care has decreased substantially in the U.S. and California over the previous decade, California continues to have the largest number of children entering the system.^{3,4}



Median number of months in foster care gives an indication of how much time children are spending in foster care. Madera County was consistently lower than the state in this indicator (8.6 months in Madera County vs. 15.2 months in California).¹

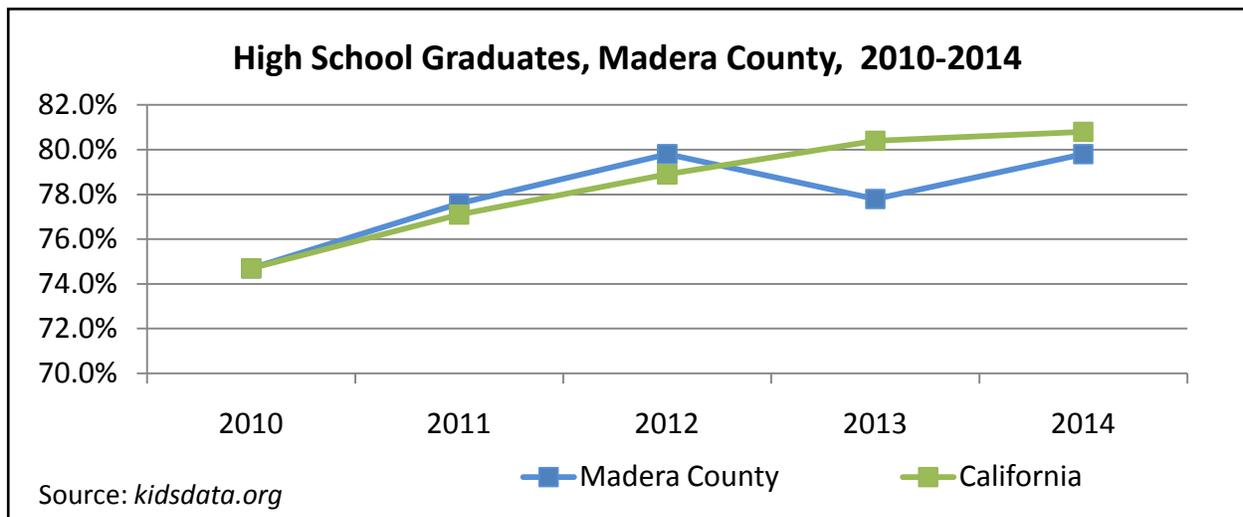
The median length of time California children spent in foster care declined between 2001 and 2009 from 17 to 13 months, but then rose to 15 months in 2012.³



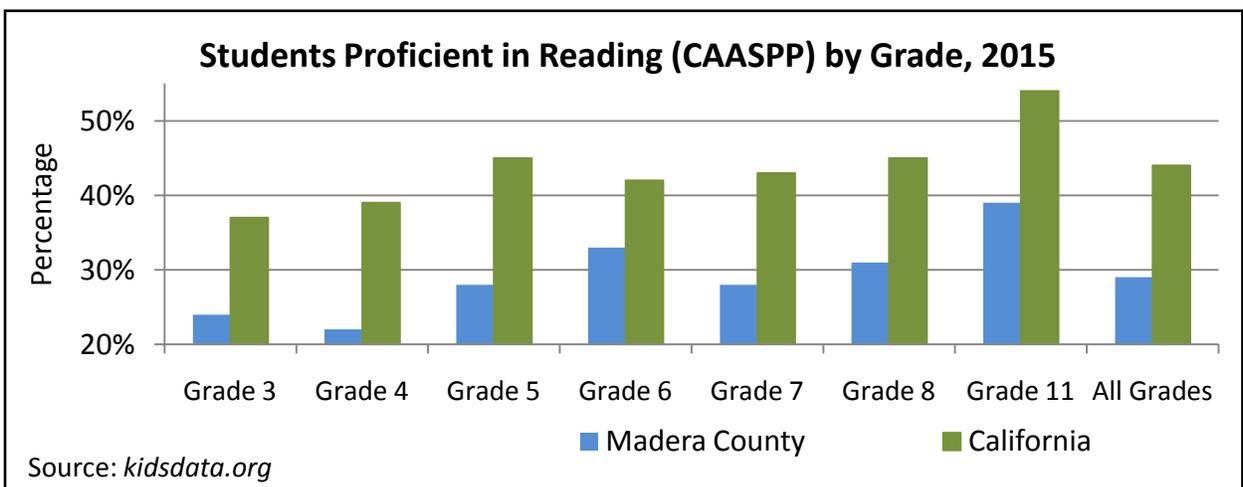
School Outcomes

In Madera County, the rate of high school graduation within four years (79.8%) is slightly lower than the state's (80.8%).³

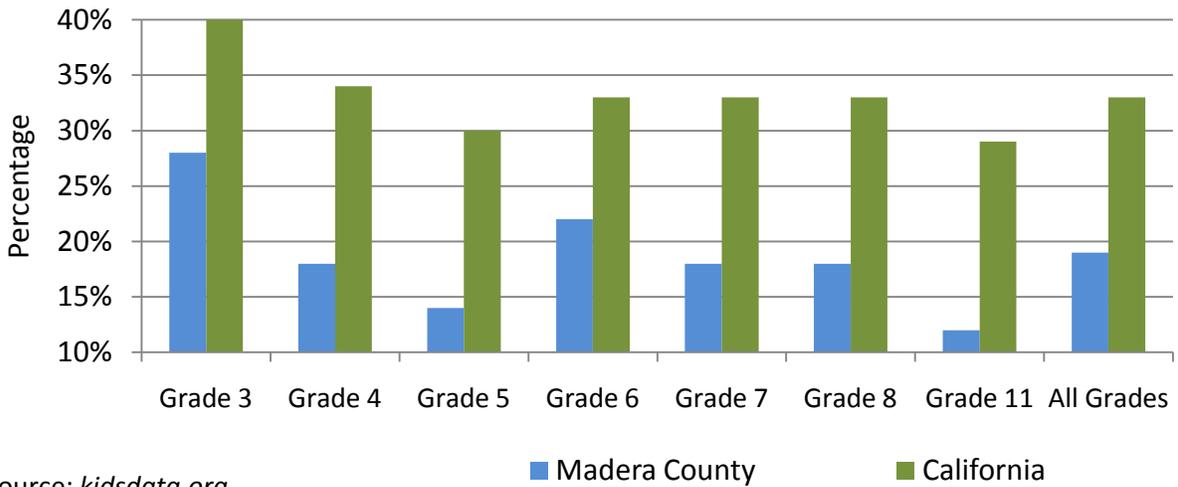
Madera County has lower rates of reading and math proficiency than California, at every grade level.³



The California Assessment of Student Performance and Progress is an annual standardized test that examines the student's abilities in various subjects, including math and reading proficiency. Proficiency is defined as a test score meeting or exceeding a student's grade level standard. In both math and reading, for every grade level, the percentage of Madera County students who are deemed proficient in math and reading generally lags behind those of California. The gap is more pronounced in math than in reading.³

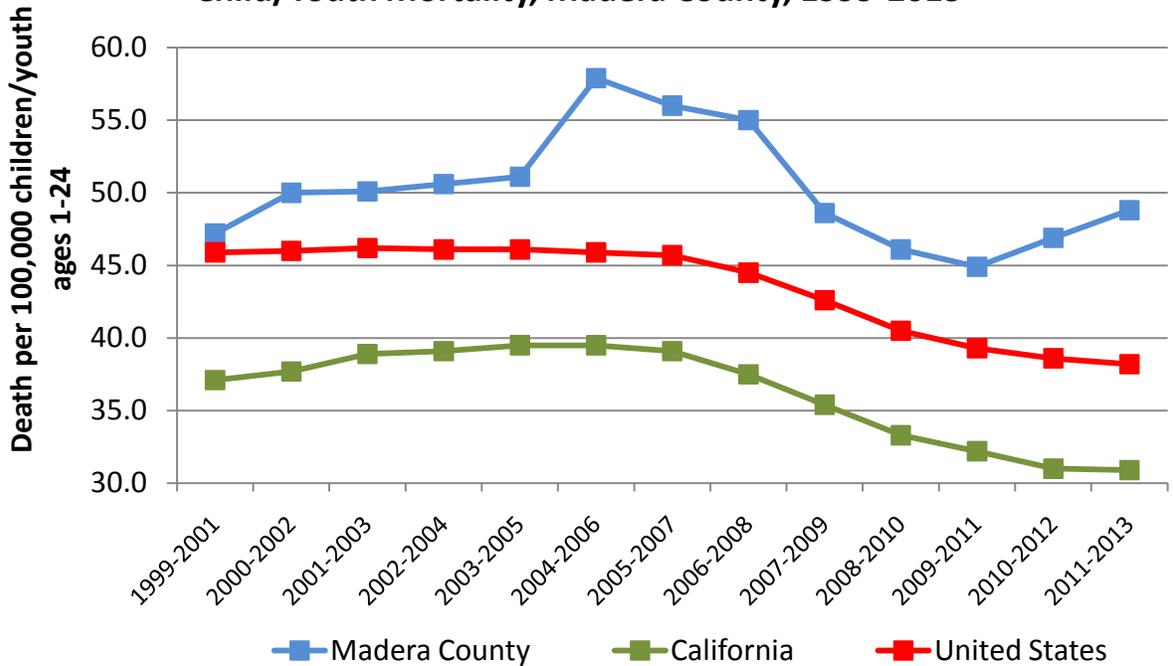


Students Proficient in Mathematics by Grade, 2015



Source: *kidsdata.org*

Child/Youth Mortality, Madera County, 1999-2013



Source: *Kidsdata.org*

For children and adolescents in Madera County the rate of deaths (48.8/100,000 children/youth ages 1-24) is higher than both the state (30.9) and the nation (38.2). California and US child/youth mortality have both decreased over the past 10 years; however, experiencing fluctuation, child/youth mortality in Madera County increased slightly compared to 12 years ago and is 57.9% higher than California's current rate.^{3,5}

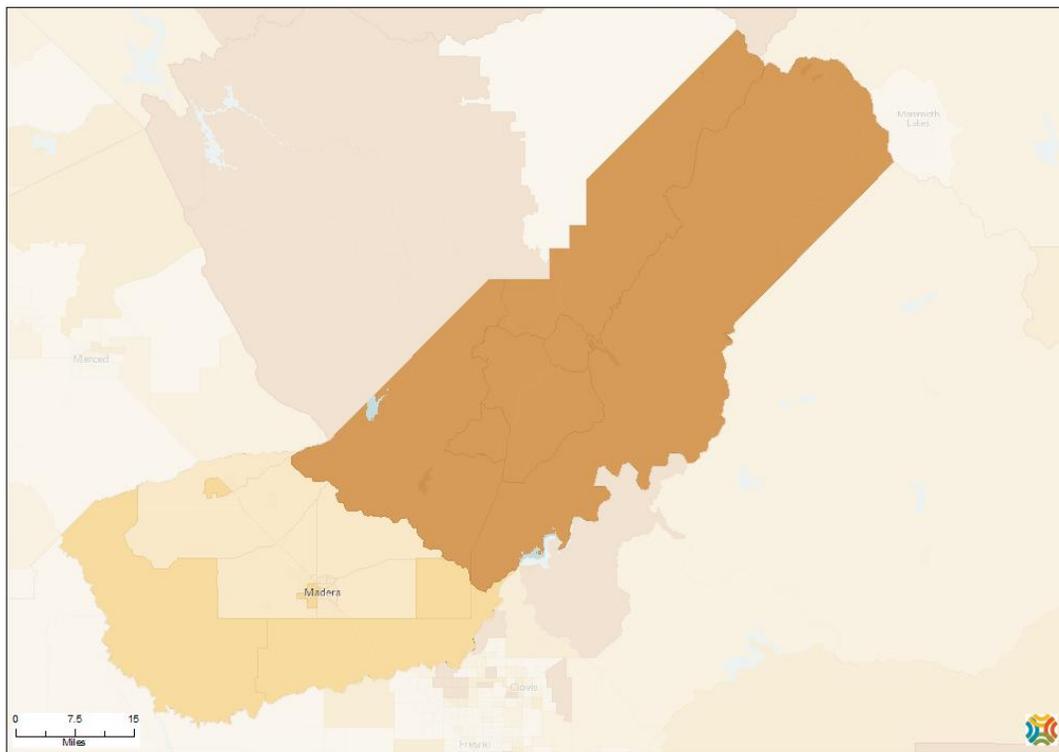
Aging Populations

ALZHEIMER'S DISEASE AND ARTHRITIS

Alzheimer's Disease

Madera County has a population with a median age of 34.3 years, which is younger than that of California (36.2 years) or the US (37.8 years).¹ However, health conditions that predominantly affect the senior population are still a concern. For instance, Alzheimer's disease is the sixth leading cause of death in the county.²

Population of Age 65, Madera County, 2010-2014



Map Legend

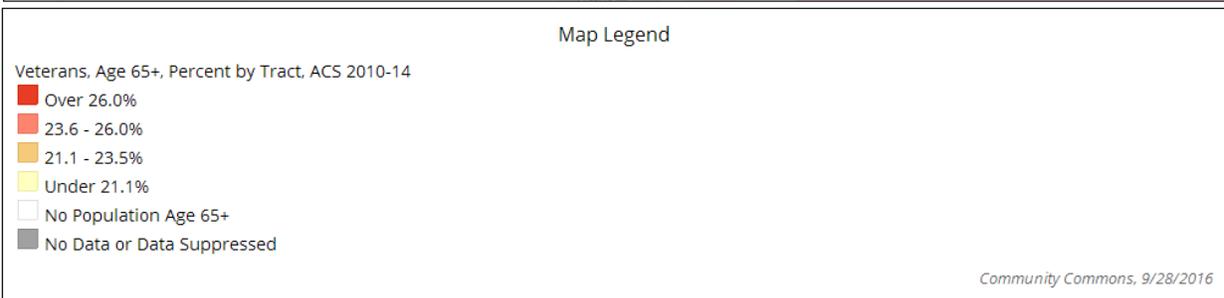
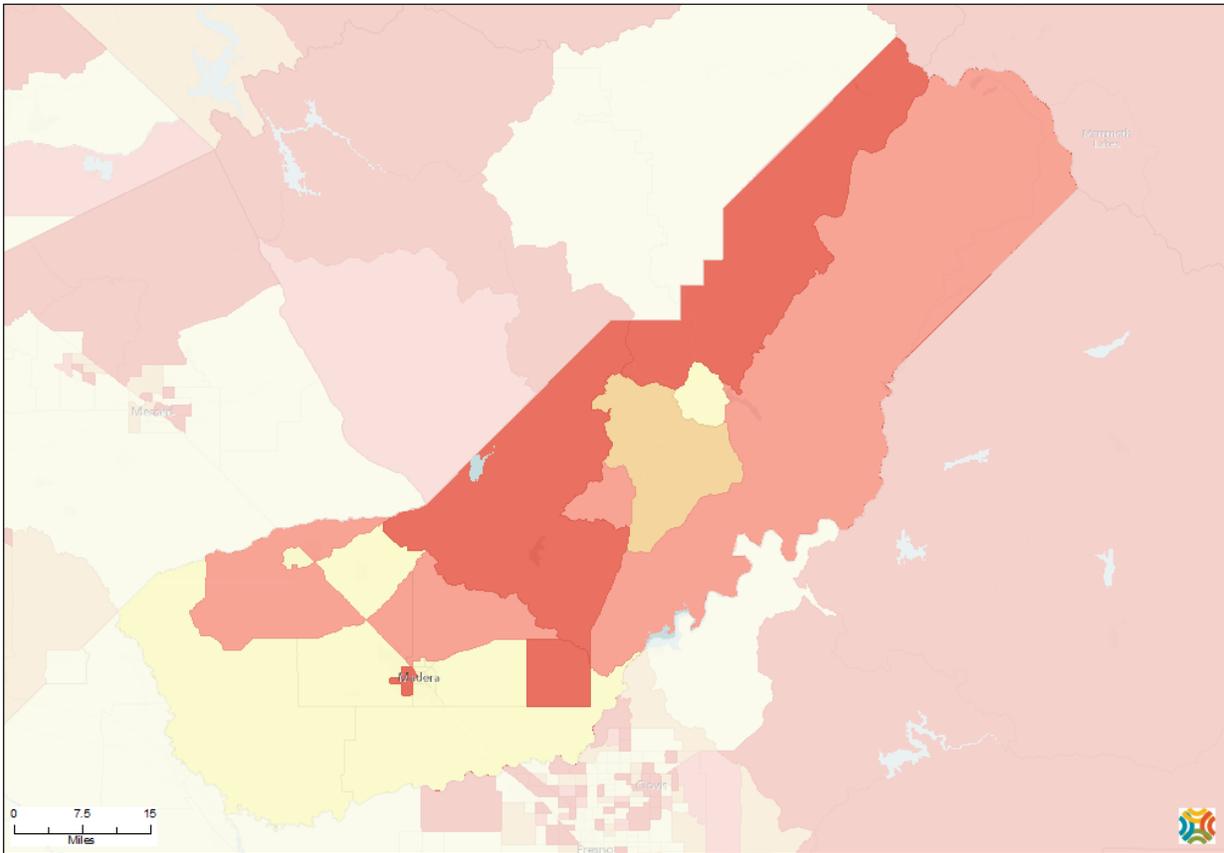
Population Age 65+, Percent by Tract, ACS 2010-14

- Over 20.0%
- 16.1 - 20.0%
- 12.1 - 16.0%
- Under 12.1%
- No Data or Data Suppressed

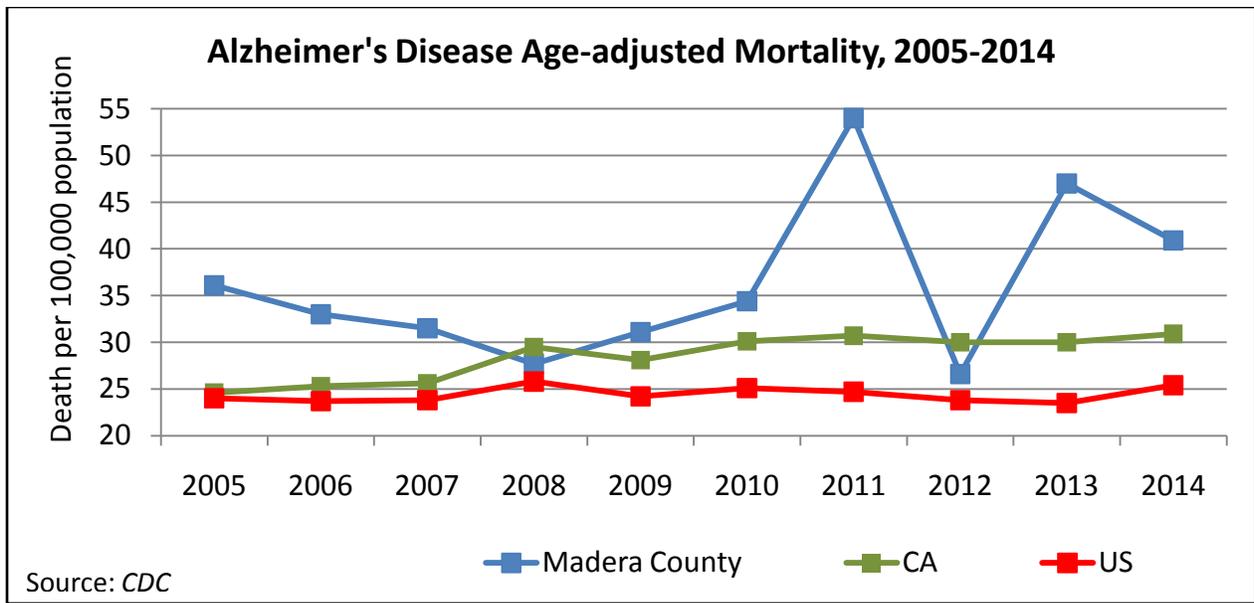
Community Commons, 9/28/2016

Madera County's senior population is not evenly dispersed across the county and certain census tracts have higher populations of people aged 65+. Census tracts in East Madera are made up of more than 20% seniors. Included in the areas with a high population of seniors, is also a high percentage of veterans and they too are not evenly dispersed across the county. Since eastern Madera and the City of Madera have more senior veterans, ailments associated with aging might be more of a concern in these census tracts than others.³

Veteran Population Older than 65, Madera County, 2010-2014



Based on rates of death per 100,000 population, Madera County has a 32.4% higher Alzheimer's related mortality rate than California at 30.9, and a 61.0% higher rate than the U.S. at 25.4.² Mortality of Alzheimer's disease in Madera County increased dramatically since 2012.



Arthritis

Arthritis is inflammation of a joint or joints. Inflamed joints are often red, hot, swollen, and tender. The cost of arthritis (including direct medical costs as well as absenteeism from work or school) in Madera County is estimated to be \$ 59,603,556.00 annually.⁴

Risk Factors

Certain factors have been shown to be associated with a greater risk of arthritis. Some of these risk factors are modifiable while others are not.

NON-MODIFIABLE RISK FACTORS

- **Age:** The risk of developing most types of arthritis increases with age.
- **Gender:** Most types of arthritis are more common in women; 52% of all adults with arthritis are women. Gout is more common in men.
- **Genetic:** Specific genes are associated with a higher risk of certain types of arthritis, such as rheumatoid arthritis (RA), systemic lupus erythematosus (SLE), and ankylosing spondylitis.

MODIFIABLE RISK FACTORS

- **Overweight and Obesity:** Excess weight can contribute to both the onset and progression of knee osteoarthritis.
- **Joint Injuries:** Damage to a joint can contribute to the development of osteoarthritis in that joint.
- **Infection:** Many microbial agents can infect joints and potentially cause the development of various forms of arthritis.
- **Occupation:** Certain occupations involving repetitive knee bending and squatting are associated with osteoarthritis of the knee.

Infectious Disease

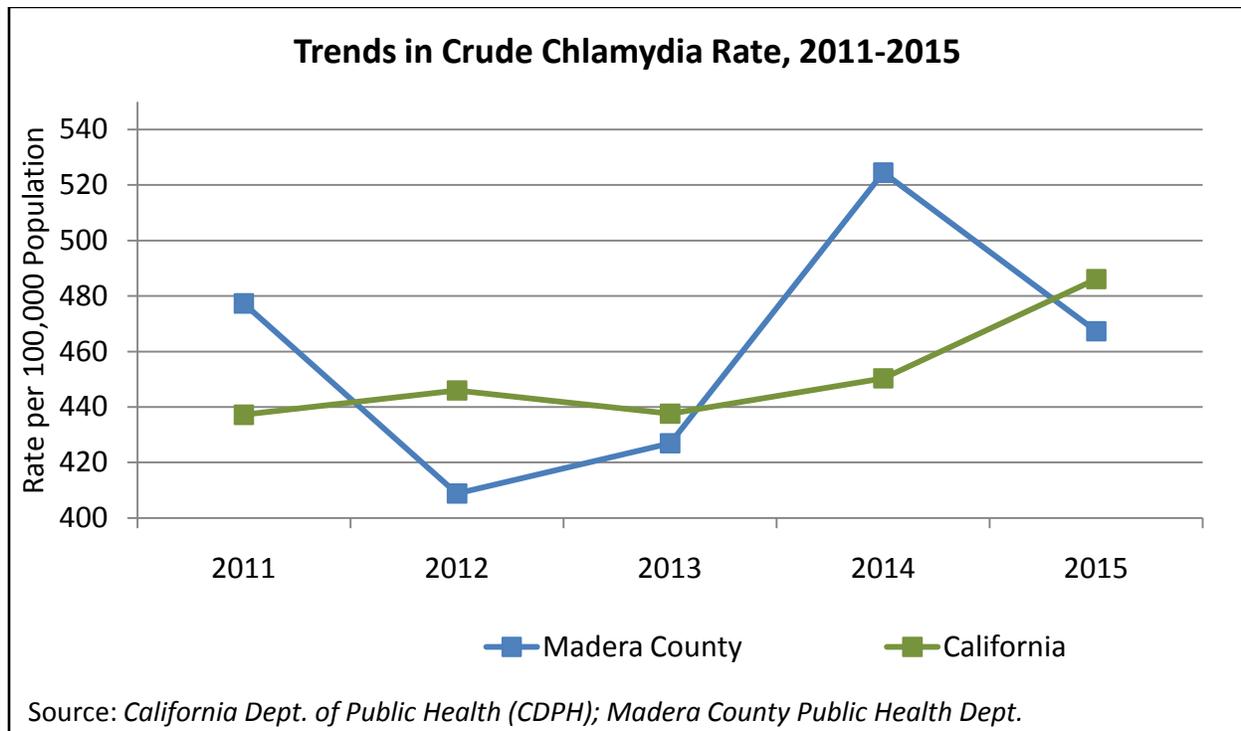
SEXUALLY TRANSMITTED INFECTIONS, COCCIDIOIDOMYCOSIS,
HEPATITIS B-CHRONIC, HEPATITIS C-CHRONIC, PERTUSIS & TUBERCULOSIS

Sexually Transmitted Infections (STIs)

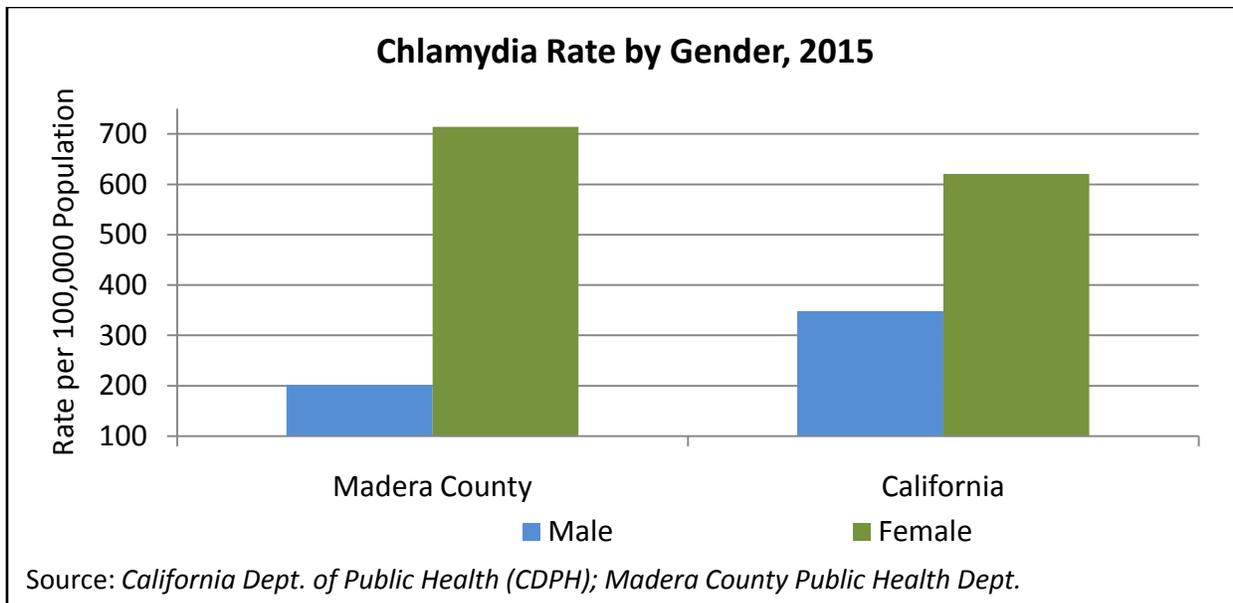
STIs are the most commonly reported conditions that health care providers are legally obligated to report under Title 17 of the California Health and Safety Code.¹

Chlamydia

Chlamydia is the most frequently reported STI, with an average of 720 infections reported to the Madera County health department annually. In 2016, 766 cases of Chlamydia infections were reported in Madera.²

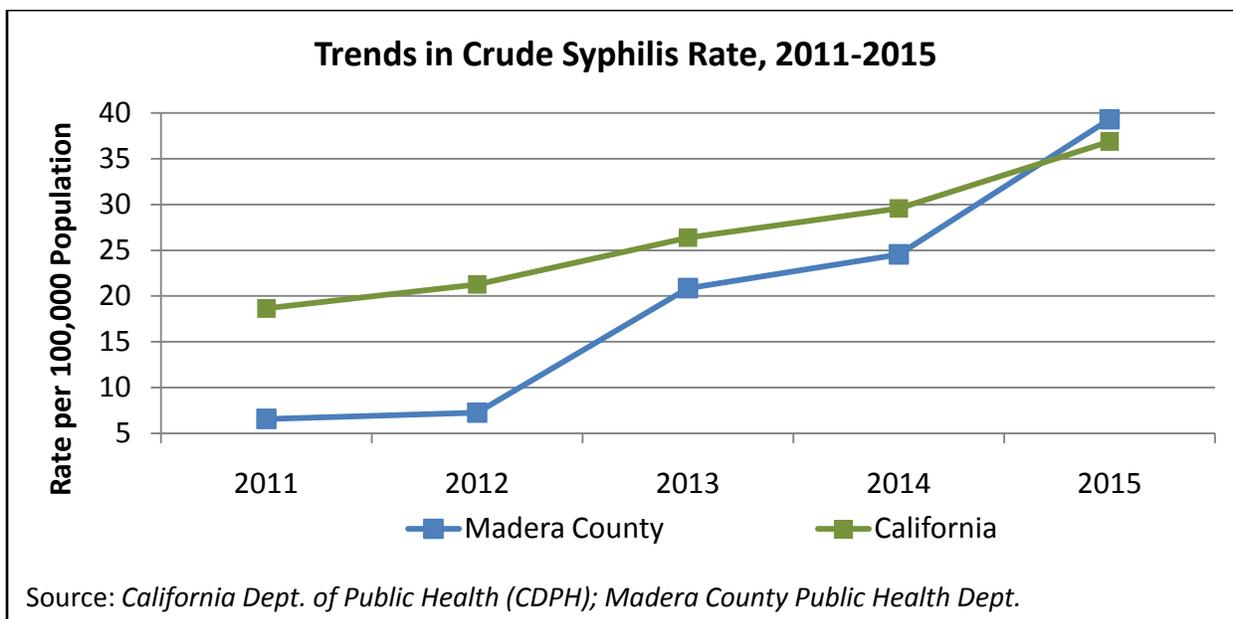


Gender Disparity: In 2015, the Chlamydia incidence (infection) rate of Madera County in women was 3.5 times the rate in men.²

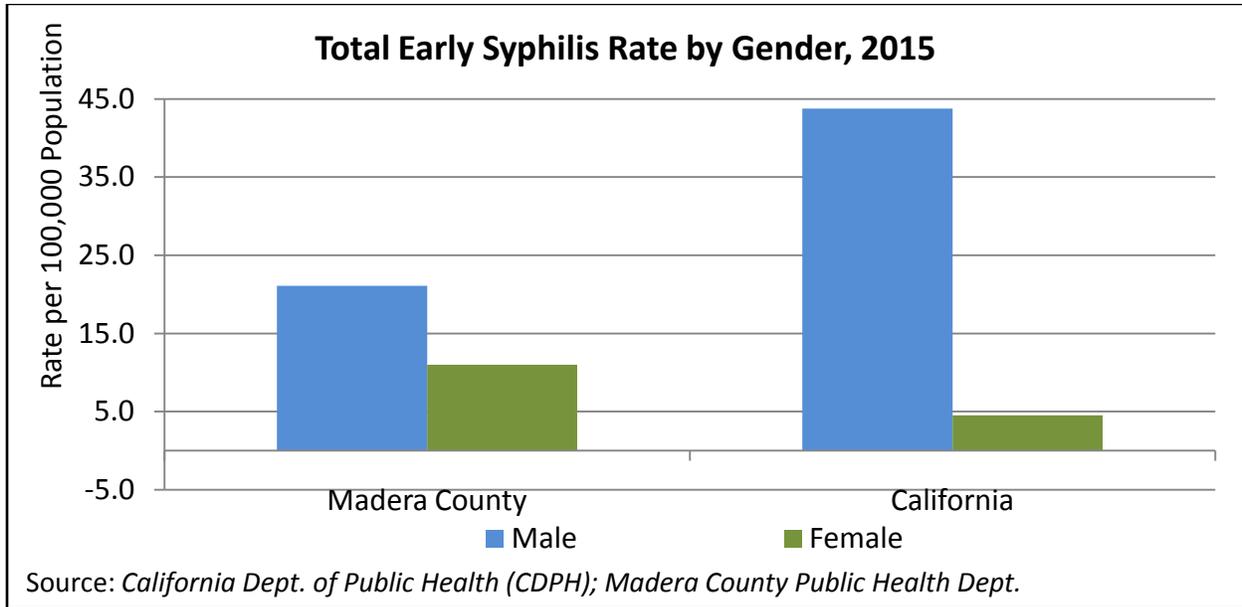


Syphilis

Syphilis is an increasing problem, both in Madera County and California. Syphilis is a particularly difficult STI due to its latent phase in which symptoms disappear but the disease can still be transmitted from person to person. If left untreated, late stage syphilis can include neurologic impairment, internal organ damage, blindness and death.⁴ Madera County has seen a dramatic increase in the rate of syphilis (primary, secondary, early and late latent), from 6.6 cases per 100,000 population in 2011 to 39.3 cases per 100,000 population in 2015 (an increase about 500%).² The Madera County rate has increased 60.4% since 2014, and was more than California's in 2015.³

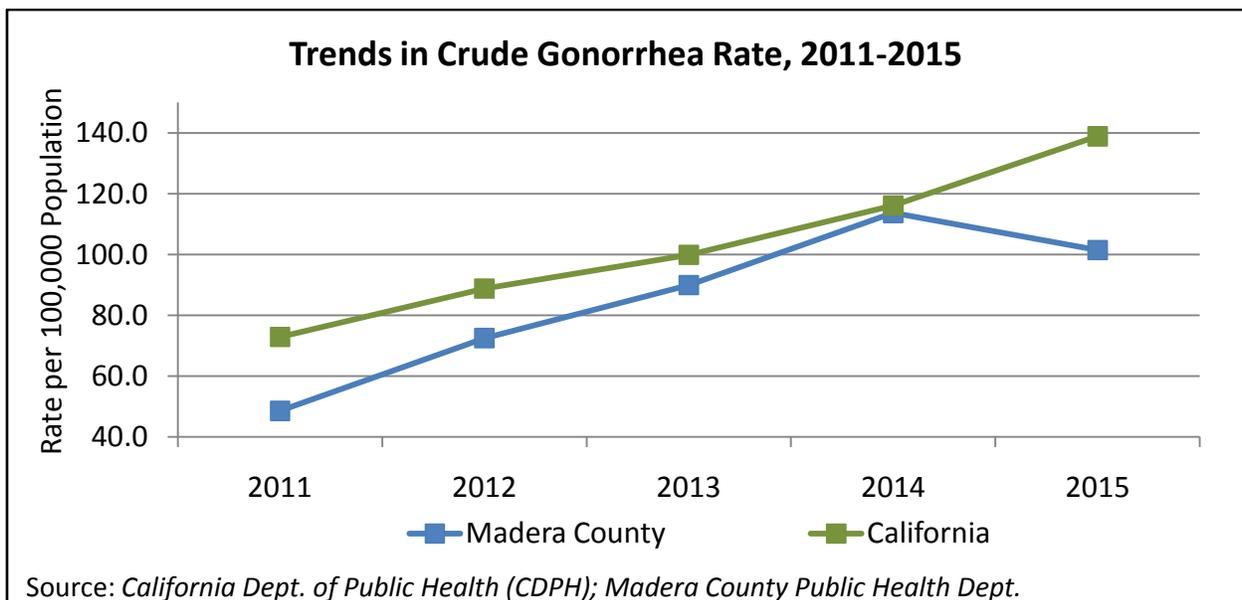


Gender Disparities: There is a stark disparity in total early (primary, secondary and early latent) syphilis rates between males and females at both the County level and the State level. In Madera County, the rate for females is 52% of the rate for males.² In contrast; California’s total early syphilis rate for females is 10.3% of the rate for males.³



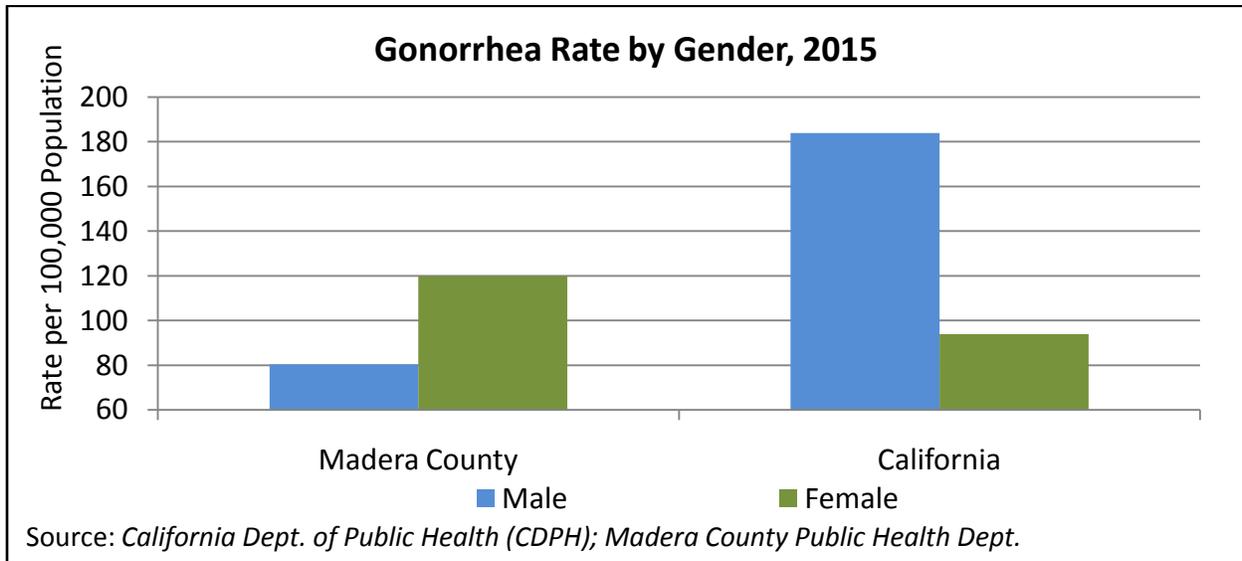
Gonorrhea

Gonorrhea is the second most frequently reported sexually transmitted disease in Madera County. If left untreated, Gonorrhea can result in serious reproductive problems such as pelvic inflammatory disease (PID), infertility and ectopic pregnancy. Pregnant women who have Gonorrhea are at risk of preterm labor and other complications such as preterm rupture of membranes and chorioamnionitis.⁵



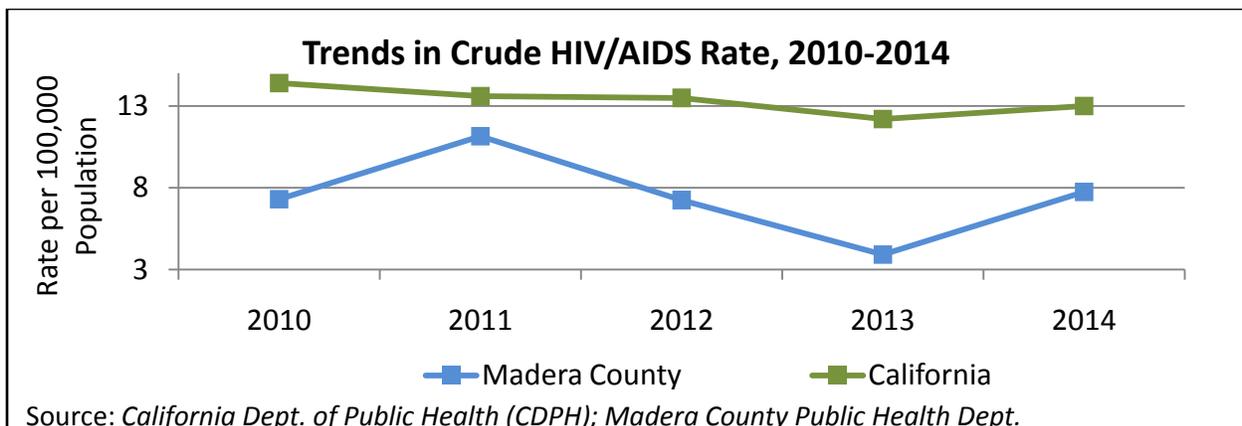
In the past five years (2011-2015), California consistently had higher Gonorrhea infection rates than Madera County.³ Madera County Gonorrhea infection rates increased through 2011-2014, but were still lower than the state; in 2015, the statewide infection rate (138.9 per 100,000 population) was 1.4 times the County infection rate (101.4 per 100,000 population).^{2,3}

Gender Disparity: In 2015, the incident rate of Gonorrhea in women was 1.5 times the rate in men in Madera. In California the rate is opposite with males having a significantly higher rate than females.^{2,3}



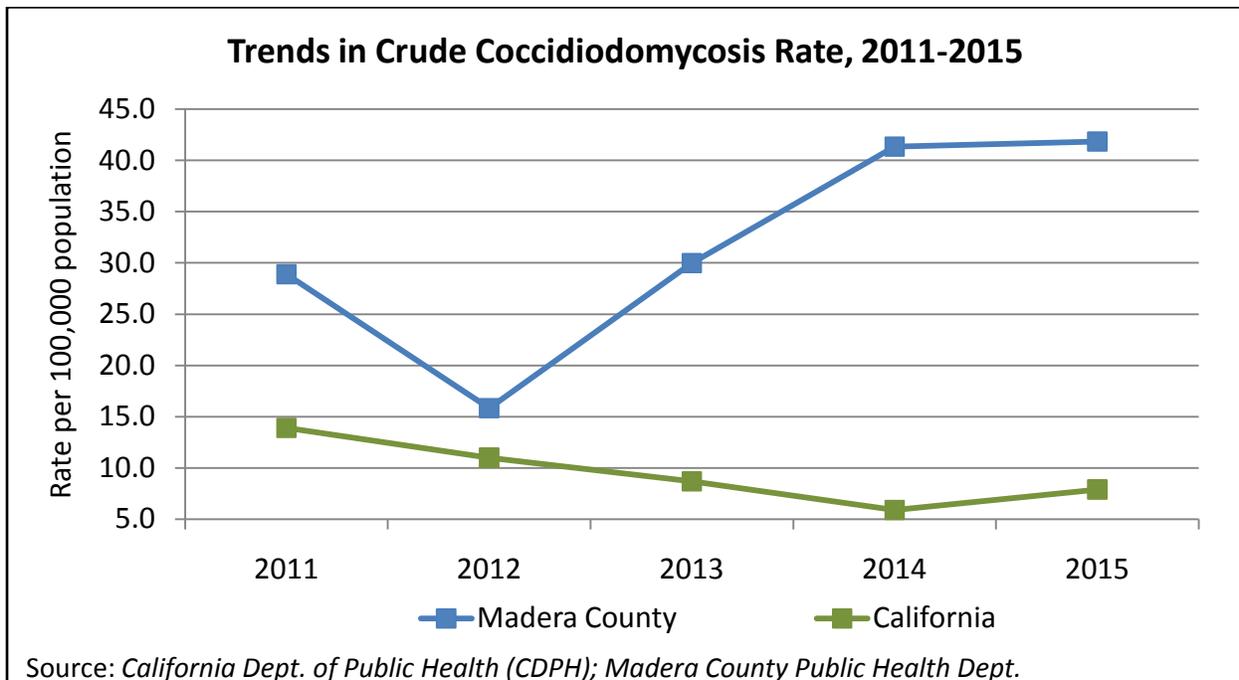
HIV/AIDS

HIV is the human immunodeficiency virus. It is the virus that can lead to acquired immune deficiency syndrome, or AIDS. HIV damages a person's body by destroying specific blood cells, called CD4+ T cells, which are crucial to helping the body fight diseases.⁶ In the past five years (2010-2014), California consistently had higher HIV/AIDS infection rates than Madera County.³ Due to the small number of new cases, Madera County HIV/AIDS infections rates were unstable, but were still lower than the state; in 2014, the statewide infection rate (13 per 100,000 population) was 1.7 times the County infection rate (7.8 per 100,000 population).^{2,3}

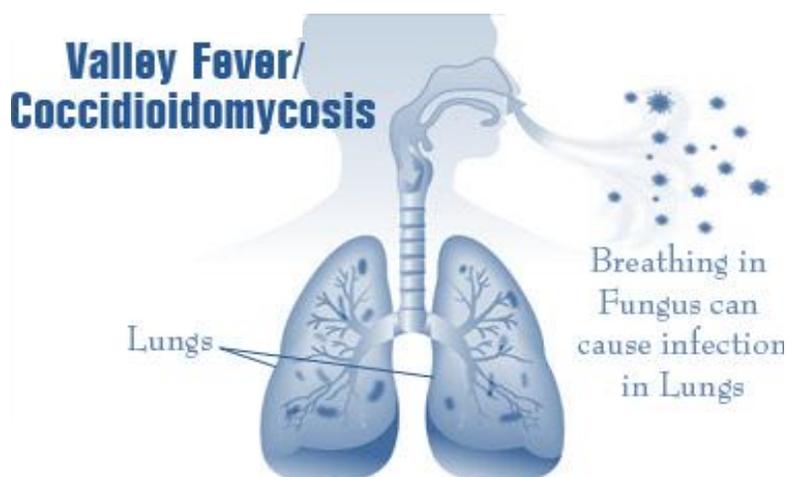


Coccidioidomycosis

Valley Fever (Coccidioidomycosis or “cocci”) is an illness caused by a fungus that lives in the soil and dirt. It can infect the lungs and cause flu-like symptoms or severe illness.⁷ People can get sick by breathing in a form of the Valley Fever fungus called spores. Spores are too small to be seen. They can get into the air with dust when it is windy or when dirt is disturbed. Valley Fever cannot be spread from one person to another.⁷ Valley Fever infection can occur year round. In California, it has been reported from most counties, but especially from the San Joaquin (Central) Valley. Anyone who lives in, works in, or visits a place with cocci can be infected.⁷

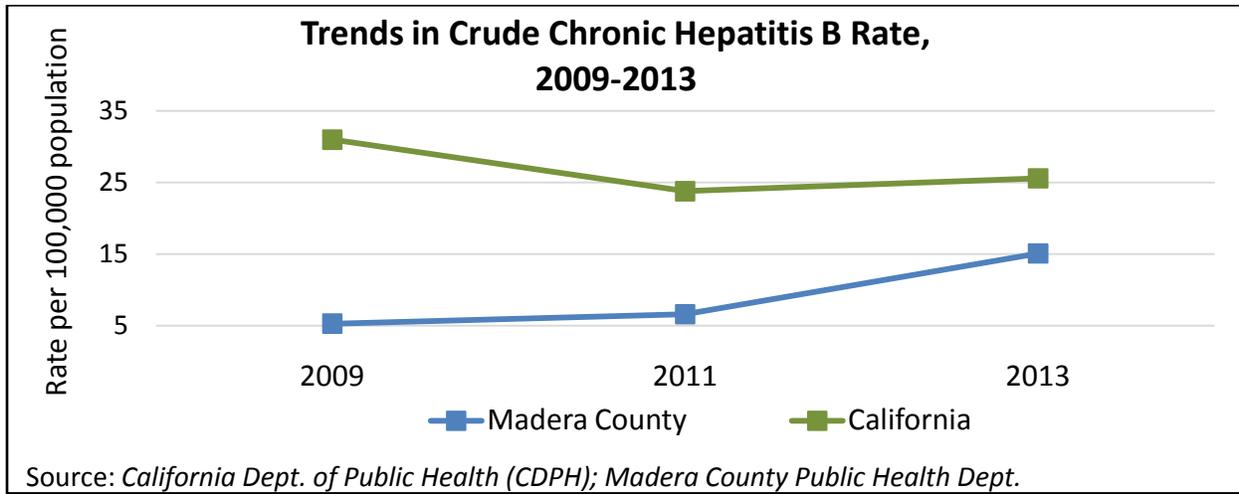


In the past five years (2011-2015), Madera County consistently had higher Coccidioidomycosis incident rates than California.⁸ Madera County Coccidioidomycosis incident rates increased through 2011-2015 and in 2015, the county incident rate (41.8 per 100,000 population) was more than 5 times the state incident rate (7.9 per 100,000 population).^{2,8}



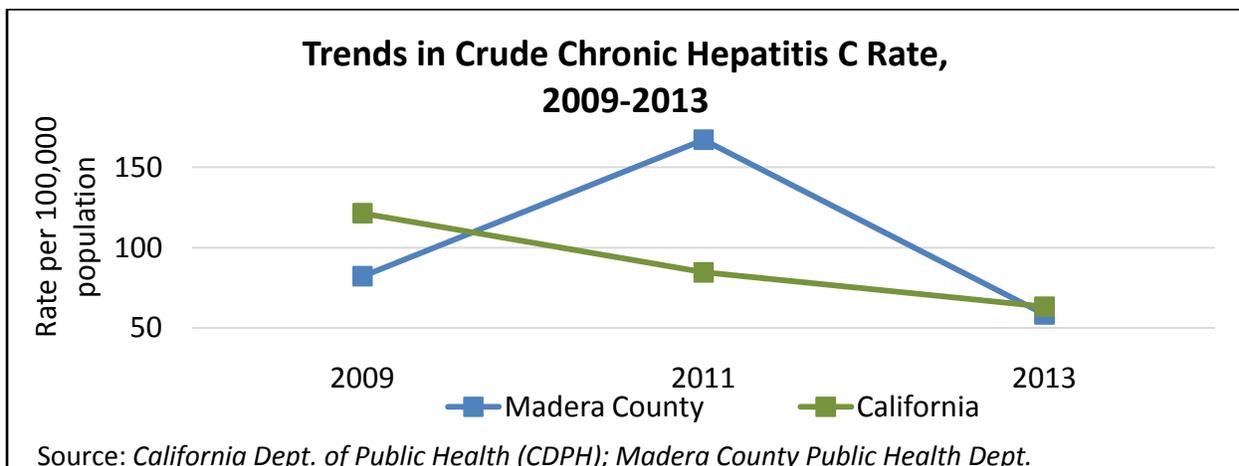
Hepatitis B, Chronic

Hepatitis B is a contagious liver disease that ranges in severity from a mild illness lasting a few weeks to a serious, lifelong illness. It results from infection with the Hepatitis B virus.⁹ From 2009 through 2013; Madera County consistently had lower chronic hepatitis B incident rates than California.^{2,8} Madera County newly reported chronic hepatitis B infection rates increased 184.9% through 2009-2013, but were still lower than the state; in 2013, the statewide infection rate (25.6 per 100,000 population) was 1.7 times the County infection rate (15.1 per 100,000 population).^{2,8}



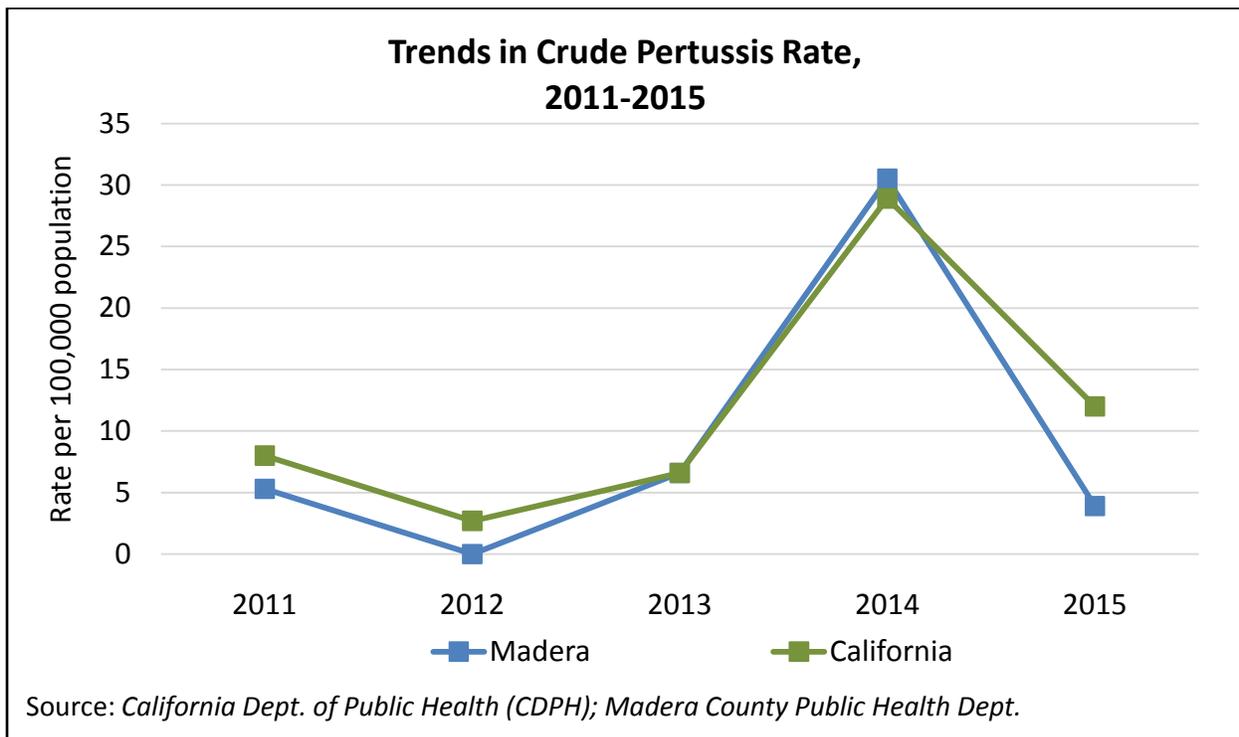
Hepatitis C, Chronic

Hepatitis C is a contagious liver disease that ranges in severity from a mild illness lasting a few weeks to a serious, lifelong illness that attacks the liver. It results from infection with the Hepatitis C virus (HCV), which is spread primarily through contact with the blood of an infected person.¹⁰ Madera County newly reported chronic hepatitis C infection rates fluctuated through 2009-2013 and were lower than the state in 2013, the statewide infection rate (63.3 per 100,000 population) was 8.2% higher than the County infection rate (58.5 per 100,000 population).^{2,8}



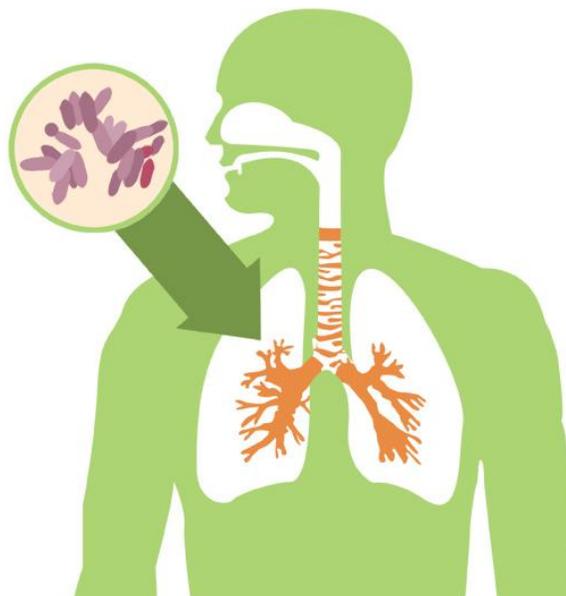
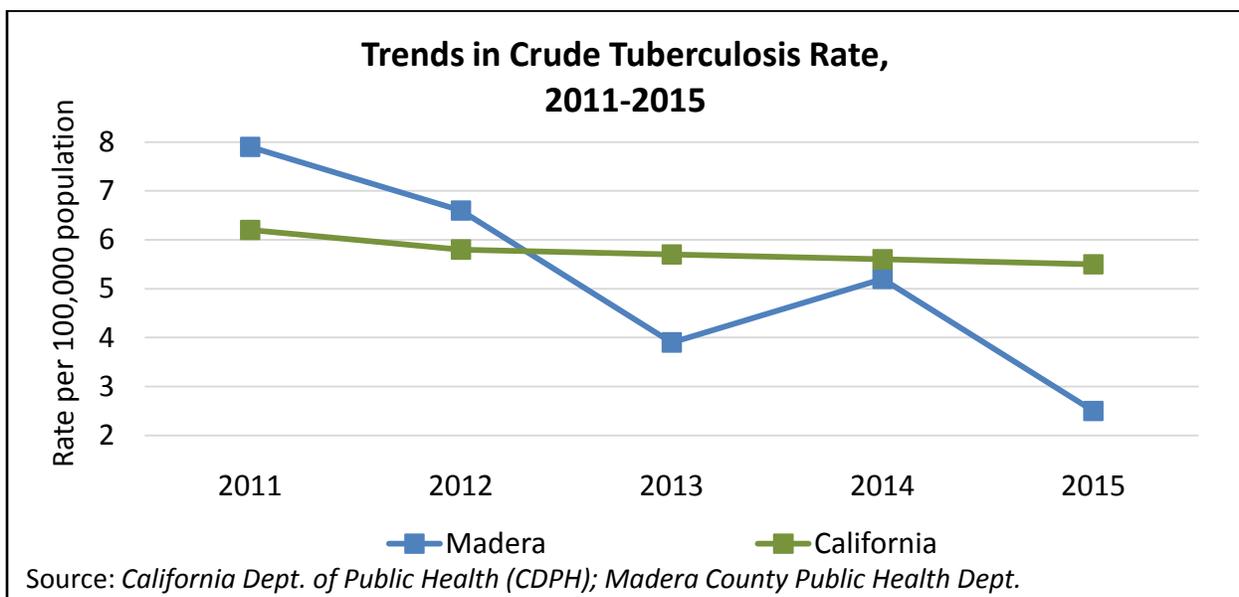
Pertussis

Pertussis, also known as whooping cough, is a highly contagious respiratory disease. It is caused by the bacterium *Bordetella Pertussis*.¹¹ Pertussis is known for uncontrollable, violent coughing which often makes it hard to breathe. After fits of many coughs, someone with Pertussis often needs to take deep breaths which result in a "whooping" sound. Pertussis can affect people of all ages but can be very serious, even deadly, for babies less than a year old.¹¹ Madera County newly reported Pertussis incident rates fluctuated through 2011-2015 and were lower than the state in 2015, the statewide infection rate (12.0 per 100,000 population) was more than 3 times the County infection rate (3.9 per 100,000 population).^{2,8}



Tuberculosis

Tuberculosis (TB) is a disease caused by germs that are spread from person to person through the air. TB usually affects the lungs, but it can also affect other parts of the body, such as the brain, the kidneys, or the spine. A person with TB can die if they do not get treatment.¹² TB germs are put into the air when a person with TB disease of the lungs or throat coughs, sneezes, speaks, or sings. These germs can stay in the air for several hours, depending on the environment. Persons who breathe in the air containing these TB germs can become infected; this is called latent TB infection.¹² Madera County newly reported TB incident rates decreased through 2011-2015 and were lower than the state in 2015, the statewide infection rate (5.5 per 100,000 population) was more than 2 times the County infection rate (2.5 per 100,000 population).^{2, 8}



Mental Health

DEPRESSION, SUICIDE AND MENTAL HEALTH SERVICES

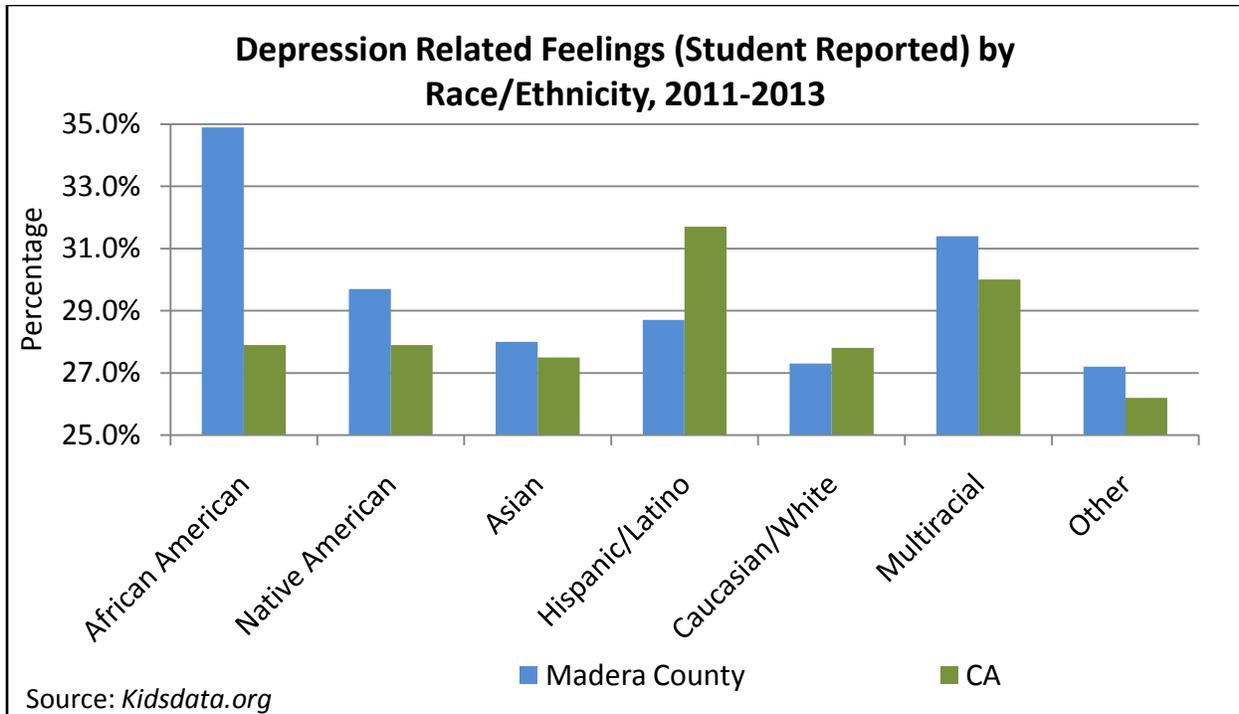
Depression

Depression is a mood disorder that causes a persistent state of sadness that can result in an aversion to activity or apathy that can affect a person's thoughts, behavior, feelings and sense of well-being. Depression may require long-term treatment, including medication, psychological counseling or both; and may result in physical health conditions, loss of productivity and suicide, if left untreated.^{1,2}

Depression is one of the most common emotional health problems among youth, with an estimated 11% of U.S. adolescents diagnosed with depression by age 18.¹⁰ A recent study found that depression accounted for 44% of all pediatric mental health hospital admissions, costing \$1.33 billion.¹¹

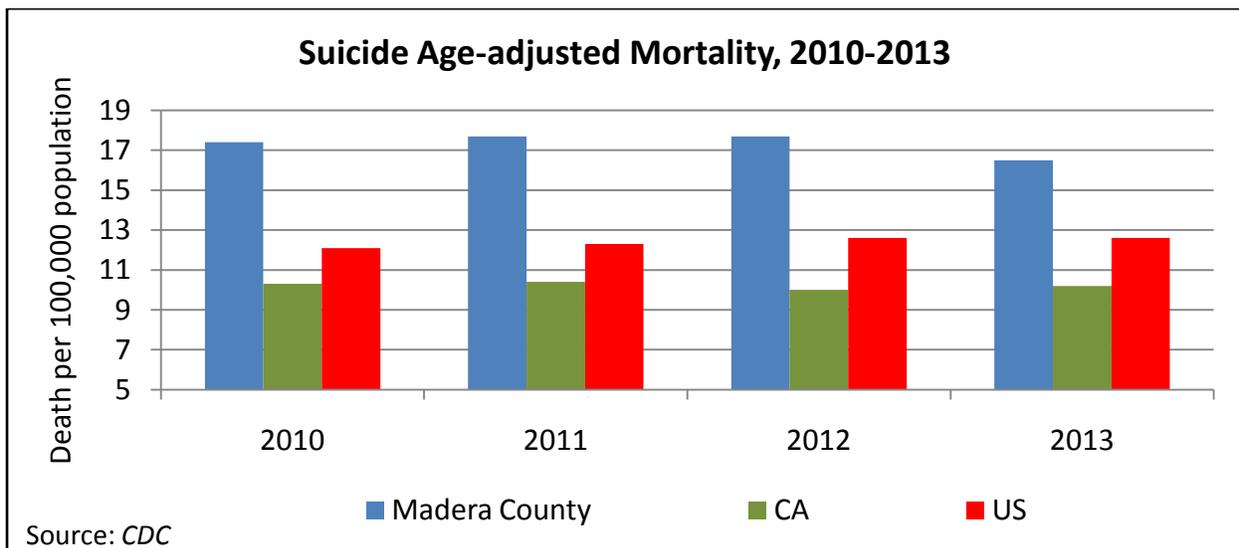
Using a standard measurement tool such as a Patient Health Questionnaire-9 (PHQ-9), depression related feelings such as hopelessness, sadness, or a loss of interest in daily activities, can be measured. Administering this tool to both non-traditional students and students in public school grades 7, 9, and 11, can identify whether in the past 12 months students had felt so sad or hopeless almost every day for two weeks or more that they stopped doing some usual activities. Through this indicator, a sub-population with a high risk of developing depression can be identified and an early-stage, customized intervention can be implemented to prevent the occurrence of severe conditions (for example, suicide attempt). Among all races/ethnicities, the percentage of students who reported depression related feelings in Madera County was consistent with the pattern of suicidal ideation. Hispanic and white students in Madera County reported lower percentages of depression related feelings than that of California; African American students in Madera County reported 25.1% higher than that of California.⁵

The cost of depression (including direct medical costs as well as absenteeism from work or school) in Madera County is estimated to be \$ 33,226,357.00 annually.⁹

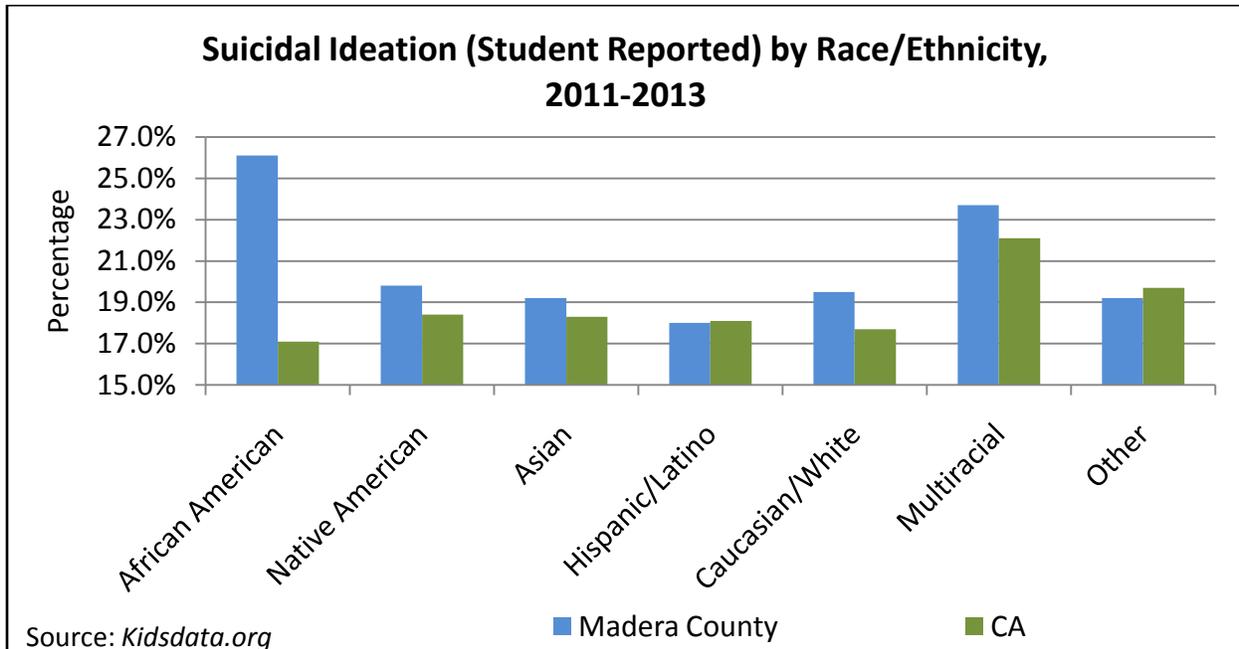


Suicide

Suicide mortality in Madera County decreased to 16.5 per 100,000 population in recent years, but is still higher than that of California (12.6) and the US (10.2).³ Emotional health is an integral part of overall health, as physical and mental health are intricately linked.^{4,5} Sound emotional health for adolescents is more than the absence of disorders, it includes effective coping skills, the ability to form positive relationships, the ability to adapt in the face of challenges, and the ability to function well at home, in school, and in life.^{4,6} Positive emotional or mental health is critical to equipping young people for the challenges of growing up and living as healthy adults.^{4,5}



Youth suicide and self-inflicted injury are serious public health concerns. According to 2013 data, suicide is the second leading cause of death among young people ages 15-19 in the U.S.⁷ Suicidal ideation is defined as public school students in grades 9, 11, and non-traditional students who report seriously considering attempting suicide. Suicidal ideation is used as an indicator for this public health issue. Compared to the suicidal ideation percentages of Californians among all race/ethnicity, Madera County has a higher percentage of students reporting to attempt suicide among all race/ethnicity except the Hispanic population. Conversely, African American students had much higher rates than the state level (52.6% higher) and other races.⁸

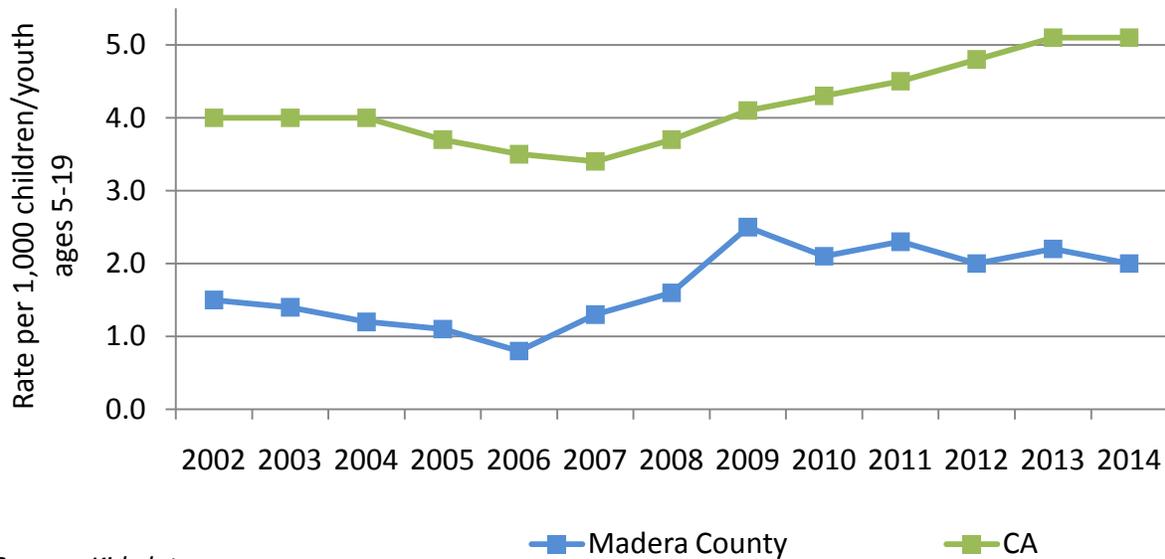


Mental Health Services

Madera County students (grades 9, 11, and non-traditional students) reported relatively higher rates of suicidal ideation and depression related feelings than California state levels. However, the rate of hospitalizations (children/youth ages 5-19) for mental health issues in Madera County was merely 39.2% of the state level.⁸ According to a recent study, the majority of youth who needed mental health treatment do not receive it.⁴ If that's the case, there may be gaps between the quantity/quality of mental health resources and children who need them in Madera County.

In 2013, 30% of high school students nationwide reported persistent feelings of sadness or hopelessness—one indicator of depression.¹² Youth with depression are more likely to engage in suicidal behavior, drop out of school, use alcohol or drugs, and have unsafe sexual activity, in addition to having difficulties with school and relationships.^{10, 12}

Hospitalizations for Mental Health Issues, Madera County, 2002-2014



Source: Kidsdata.org

Community Resources

DOMESTIC VIOLENCE ASSISTANCE & COUNSELING SERVICES

- Community Action Partnership of Madera County (CAPMC)
Victim Services Center (VSC): 1-559-661-1000
- Confidential support for victims of Domestic Violence 24 hour hotline: 1-800-355-8989
- Lideres Campesinas: 1-559-661-4776 & 1-661-1734 (*Assistance & referral for field workers that are victims of domestic violence, sexual assault, & human trafficking; & information regarding the dangers of pesticides*)
- Lake Street Center: 1-559-661-5156 (*County Mental Health program for families, children involved in DSS/CWS Services*)
- Madera Access Point: 1-559-661-5156 (*Mental health, domestic violence, alcohol & drug counseling services for Cal-WORKS recipients*)
- Comprehensive Counseling Services: 1-559-661-7574 (*Batterers Treatment, Anger Management, Substance Abuse, Domestic Violence, Parenting/Child Abuse, Sex Offender Treatment, Sexual Assault Survivors counseling, Family & Marital counseling, Victims of Crime; services offered to adults & minors*)
- Madera County Behavioral Health: 1-559-673-3508 (*Mental Health and Substance Abuse Counseling & Services*)
- 24 HR Crisis Line: 1-888-275-9779
- Angel Babies: 1-209-383-3123 (*Bereavement support program/infant loss support program; Spanish speaking only; home visitation*)

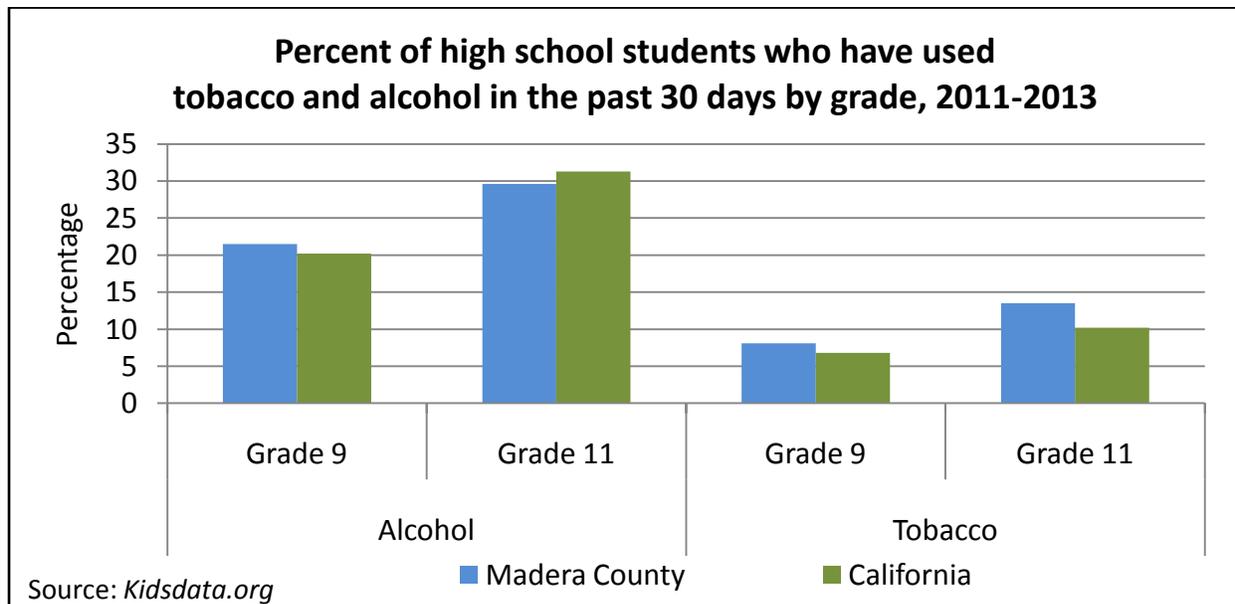
Substance Abuse

YOUTH TOBACCO, ALCOHOL AND DRUG USAGE

Substance abuse, also known as drug abuse, is a patterned use of a drug or drugs in which the user consumes the substance in amounts or with methods which are harmful to them or others.¹ It can also be considered a form of substance-related disorder.¹

Youth Tobacco and Alcohol

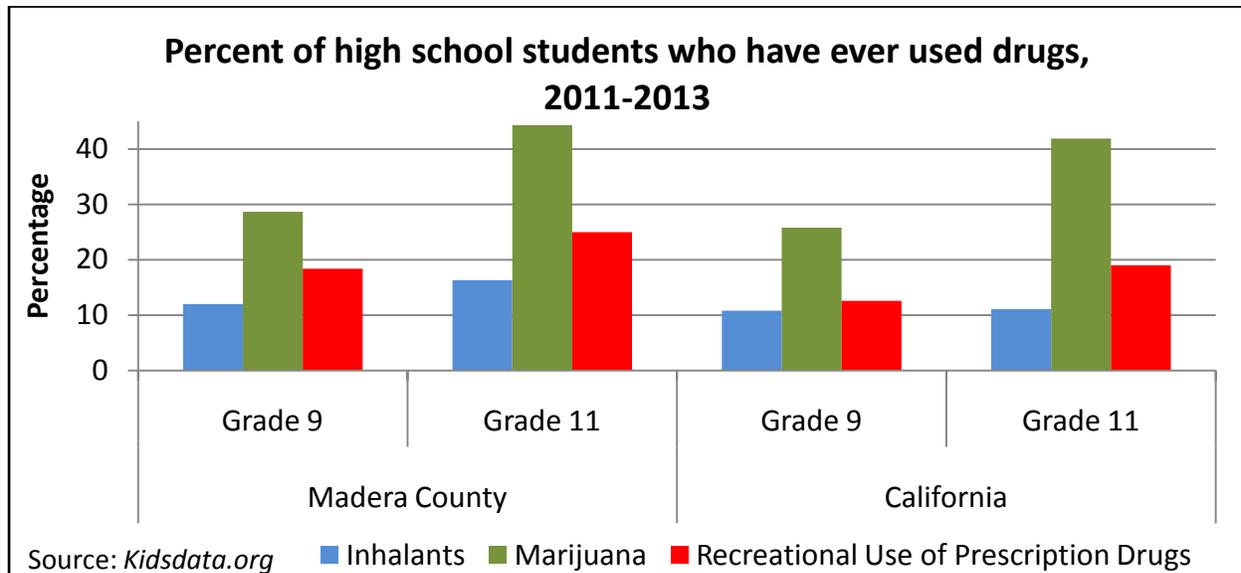
Smoking and secondary smoke have serious health consequences for people of all ages. However, tobacco use by young people is particularly problematic as earlier use is correlated with higher use later in life. Similarly, the National Center on Addiction and Substance Abuse indicates that teens who experiment with alcohol are “virtually certain” to continue using alcohol in the future. Youth alcohol consumption is also connected to risky sexual activity, school drop outs, overdose deaths and suicides.



Through school year 2011 to 2013, over one-fifth of high school students reported drinking alcohol in the past 30 days. Older students reported drinking at higher percentages (31%) than younger students (20%). Smoking was less prevalent but still a concern. About 10% of high school students reported using tobacco in the past 30 days.³

Drug Use

Drug use is also linked to educational failure, family and social problems. Unfortunately, drug use is cyclical as children of drug users are more likely to use substances themselves. Through school year 2011 to 2013, 29% and 44% of Madera County youth in 9th and 11th grades reported having used marijuana at some point in their lives. Inhalants had been used by 12 - 16% of high school students while recreational use of prescription drugs had been used by 18 - 25% of 9th and 11th graders. Overall, drug use increased as the youth became older.³

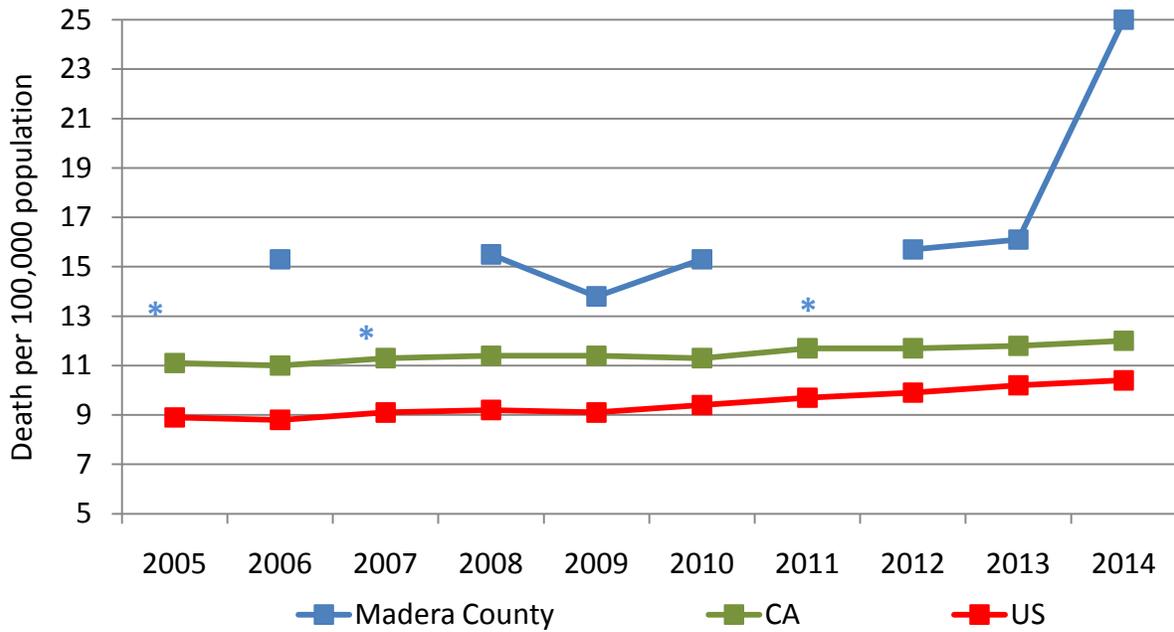


Both drug-induced death and cirrhosis/liver disease mortality rates have increased in Madera County over the last 10 years however, cirrhosis/liver disease mortality rates have increased dramatically. This is particularly stark when compared to the California and national mortality rates in these two categories, which have remained stable.¹

Madera County has higher drug-induced death rates (15.9 per 100,000 population) than California (15.5) and the US (11.8). Madera County also has much higher liver/cirrhosis mortality (25.0 per 100,000 population) than California (12.0) and the U.S. (10.4).²



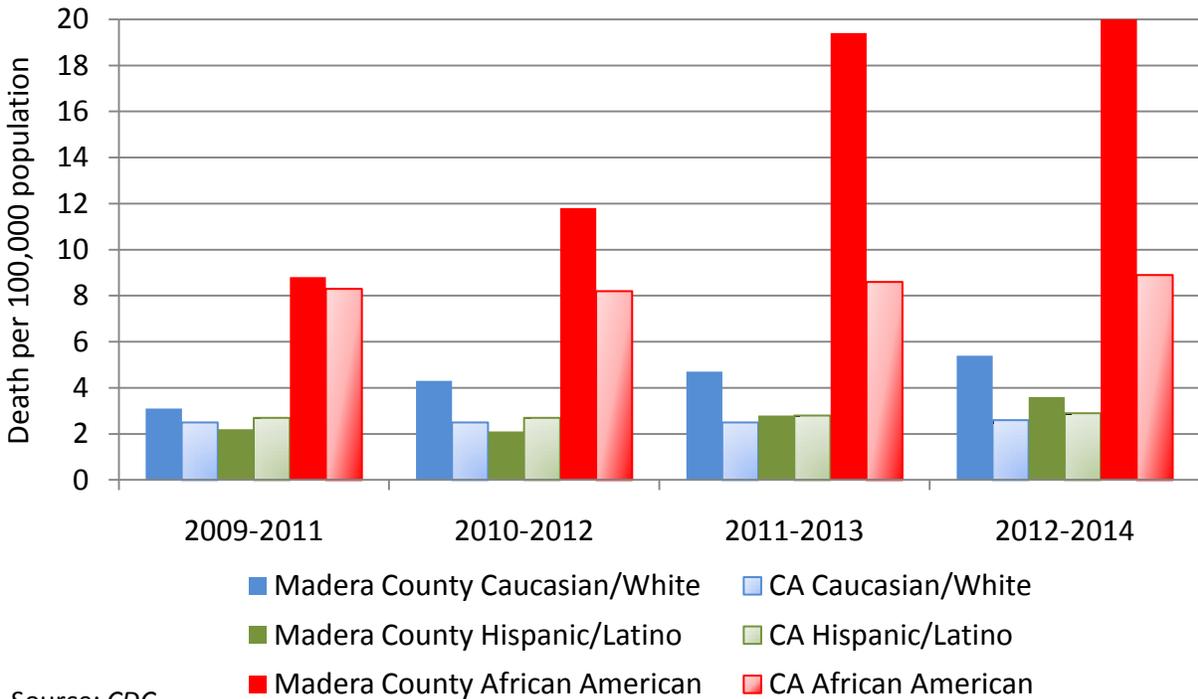
Age-adjusted Mortality of Cirrhosis/Liver Disease, 2005-2014



Source: CDC

* Data Unavailable

Drug-induced Deaths Age-adjusted Mortality, 2010-2014



Source: CDC

References

Overview

1. United States Census Bureau. <http://www.census.gov> Accessed September, 2016.
2. Community Commons. www.communitycommons.com Accessed September, 2016.
3. Madera County Community Health Survey 2016. Madera County Public Health Department. 2016.
4. 2016 County Vital Statistics Report. Madera County Public Health Department, Office of Policy and Planning. 2016.
5. 2000-2014 California Adolescent Birth Report. California Department of Public Health, Center for Family Health Maternal, Child and Adolescent Health Division, Epidemiology, Assessment, and Program Development Branch.
<https://www.cdph.ca.gov/data/statistics/Documents/2014ABRFinalPressReleaseSlides.pdf> Accessed October, 2016.
6. California Health Interview Survey (CHIS). UCLA Center for Health Policy Research <http://healthpolicy.ucla.edu/chis> Accessed October, 2016.
7. 2014 National Diabetes Statistics Report. Center for Disease Control and Prevention. <https://www.cdc.gov/diabetes/pubs/statsreport14/national-diabetes-report-web.pdf> Accessed February, 2017.
8. CDC WONDER Online Query System. Center for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics, 2012-2014. Accessed October, 2016.
9. Obesity in California: The weight of the state, 2000-2012. California Department of Public Health, Nutrition Education and Obesity Prevention Branch, 2014
<https://www.cdph.ca.gov/programs/cpns/Documents/ObesityinCaliforniaReport.pdf> Accessed October, 2016.
10. Kidsdata.org Accessed October, 2016.
11. Madera County, <http://www.madera-county.com> Accessed September, 2016.
12. United States Census Bureau,
<http://www.census.gov/quickfacts/table/PST045215/06039> Accessed September, 2016.
13. Community Commons, www.communitycommons.com Accessed September, 2016.
14. American Public Health Association. Understanding Hunger and Obesity and the Role for Center for School-Based Health Care.
https://www.apha.org/~media/files/pdf/factsheets/apha4_article_hungerobesity_9_14_final2.ashx. Accessed January, 2017.
15. Madera County Community Health Survey 2016. Madera County Public Health Department. 2016.

Cardiovascular Disease (CVD)

1. Mendis S, Puska P, Norrving B. World Health Organization (2011) Global Atlas on Cardiovascular Disease Prevention and Control . World Health Organization in collaboration with the World Heart Federation and the World Stroke Organization. pp. 3–18.
2. McGill HC, McMahan CA, Gidding SS. Preventing heart disease in the 21st century: implications of the Pathobiological Determinants of Atherosclerosis in Youth (PDAY) study. *Circulation*. 2008; 117 (9): 1216–27.
3. CDC WONDER Online Query System. Center for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics, 2012-2014. Accessed October, 2016.
4. CDC Interactive Atlas of Heart Disease and Stroke, Center for Disease Control and Prevention, Division for Heart Disease and Stroke Prevention. Accessed October, 2016.
5. Prevention Quality Indicators (PQIs), Version 5.0, 2005-2014. California Office of Statewide Health Planning and Development. Accessed October, 2016.
6. Managed Care Quality and Monitoring Division, California Department of Health Care Services. 2015 HEDIS Aggregate Report for Medi-Cal Managed Care, p84; 2016.
7. Brown P, Gonzalez M, & Sandhu R. Economic burden of chronic diseases. <http://cbcd.ucmerced.edu/Health>. Accessed September 2016.
8. Robert HE. Obesity and Heart Disease. *Circulation*. 1997; 96: 3248-3250.
9. Obesity in California: The Weight of the State, 2000-2012. California Department of Public Health Nutrition Education and Obesity Prevention Branch. <http://www.cdph.ca.gov/programs/NEOPB/Documents/Obesity%20in%20California.pdf> Accessed October, 2016.
10. CDC Interactive Atlas of Estimated County-Level Prevalence of Diabetes and Obesity, Center for Disease Control and Prevention. Accessed October, 2016.
11. US County Profile: Madera County, California. Institute for Health Metrics and Evaluation. https://www.healthdata.org/sites/default/files/files/county_profiles/US/County_Report_Madera_County_California.pdf Accessed October, 2016.

Cancer

1. Defining Cancer. National Cancer Institute. <https://www.cancer.gov/about-cancer/understanding/what-is-cancer> Accessed September, 2016.
2. CDC WONDER Online Query System. Center for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics, 2012-2014. Accessed October, 2016.
3. Managed Care Quality and Monitoring Division, California Department of Health Care Services. 2015 HEDIS Aggregate Report for Medi-Cal Managed Care, p84; 2016.
4. Brown P, Gonzalez M, & Sandhu R. Economic burden of chronic diseases. <http://cbcd.ucmerced.edu/Health> Accessed September 2016.

Injury and Violence

1. CDC WONDER Online Query System. Center for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics, 2012-2014. Accessed October, 2016.
2. FBI Uniform Crime Reporting Program. Federal Bureau of Investigation. <https://ucr.fbi.gov> Accessed October, 2016.
3. Criminal Justice Profiles. California Department of Justice. <https://oag.ca.gov/crime/cjsc/stats/domestic-violence> Accessed October, 2016.

Respiratory Disease

1. National Center for Health Statistics. Health, United States 2015 with Special Feature on Racial and Ethnic Health Disparities. Hyattsville, MD: US Dept. Health and Human Services; 2016. (<http://www.cdc.gov/nchs/hus/>) Accessed November, 2016.
2. CDC WONDER Online Query System. Center for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics, 2012-2014. Accessed October, 2016.
3. California Health Interview Survey (CHIS). UCLA Center for Health Policy Research <http://healthpolicy.ucla.edu/chis> Accessed October, 2016.
4. Asthma Care Quality Improvement. Agency for Healthcare Research and Quality. <http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/asthmaqual/asthmacare/module1b.html> Access October, 2016.
5. AHRQ Quality Indicator Trends, 2005-2014 Prevention Quality Indicators (PQIs). August, 2015. Office of Statewide Health Planning and Development. California Health and Human Services Agency, Office of Statewide Health Planning and Development. http://oshpd.ca.gov/HID/Products/PatDischargeData/AHRQ/pqi_overview.html Access October, 2016.
6. State of the Air Report. American Lung Association. www.stateoftheair.org Accessed October 2016.
7. U.S. Environmental Protection Agency. Integrated Science Assessment of Ozone and Related Photochemical Oxidants (Final Report). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-10/076F, 2013

Stroke

1. National Heart, Lung, and Blood Institute. What Is a Stroke? <http://www.nhlbi.nih.gov/health/health-topics/topics/stroke> March 26, 2014. Accessed October 2016.
2. Straus SE, Majumdar SR, McAlister FA. New evidence for stroke prevention: scientific review. JAMA. 2002; 288 (11): 1388–95.
3. CDC WONDER Online Query System. Center for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics, 2012-2014. Accessed October, 2016.

4. *CDC Interactive Atlas of Heart Disease and Stroke*, Center for Disease Control and Prevention, Division for Heart Disease and Stroke Prevention. Accessed October, 2016.
5. Brown P, Gonzalez M, & Sandhu R. Economic burden of chronic diseases. <http://cbcd.ucmerced.edu/Health> Accessed September 2016.

Diabetes Mellitus (DM)

1. *Definition, diagnosis and classification of diabetes mellitus and its complications. Part 1: Diagnosis and classification of diabetes mellitus*. Geneva, World Health Organization (WHO/NCD/NCS/99.2), 1999.
2. CDC WONDER Online Query System. Center for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics, 2012-2014. Accessed October, 2016.
3. US Department of Health & Human Services, Health Resources and Services Administration, *Health Resources and Services Administration*. Accessed October, 2016.
4. AHRQ Quality Indicator Trends, 2005-2014 Prevention Quality Indicators (PQIs). August, 2015. Office of Statewide Health Planning and Development. California Health and Human Services Agency, Office of Statewide Health Planning and Development. http://oshpd.ca.gov/HID/Products/PatDischargeData/AHRQ/pqi_overview.html Access October, 2016.
5. HEDIS, Measurement Q. What is HEDIS. The National Committee for Quality Assurance. <http://www.ncqa.org/hedis-quality-measurement/what-is-hedis>.
6. Managed Care Quality and Monitoring Division, California Department of Health Care Services. 2015 HEDIS Aggregate Report for Medi-Cal Managed Care; 2016.
7. Brown P, Gonzalez M, & Sandhu R. Economic burden of chronic diseases. <http://cbcd.ucmerced.edu/Health> Accessed September 2016.

CVD and DM Modifiable Risk Factors

1. *Obesity in California: The Weight of the State, 2000-2012*. California Department of Public Health, Nutrition Education and Obesity Prevention Branch, 2014 <https://www.cdph.ca.gov/programs/cpns/Documents/ObesityinCaliforniaReport.pdf> Accessed October, 2016.
2. Kidsdata.org Accessed October, 2016.
3. 2006-2010 Pediatric Nutrition Surveillance System Report (Table 16B). California Department of Public Health, Child Health and Disability Prevention (CHDP) Program. <http://www.dhcs.ca.gov/services/chdp/Pages/PedNSS2009.aspx> Accessed February, 2017.
4. Behavioral Risk Factor Surveillance System (BRFSS). http://www.cdc.gov/brfss/data_documentation/index.htm Accessed October, 2016
5. American Community Survey (ACS). <http://www.census.gov/programs-surveys/acs> Accessed October, 2016.
6. California Health Interview Survey (CHIS). UCLA Center for Health Policy Research <http://healthpolicy.ucla.edu/chis> Accessed October, 2016.

Across the Lifespan

1. *County Health Status Profiles 2012-2016*. California Department of Public Health, Office of Health Information and Research
<https://www.cdph.ca.gov/programs/ohir/Documents/OHIRProfiles2016.pdf> Accessed October, 2016.
2. *Birth Statistical Data Tables*. California Department of Public Health
<https://www.cdph.ca.gov/data/statistics/Pages/CountyBirthStatisticalDataTables.aspx> Accessed October, 2016.
3. *2016 County Vital Statistics Report*. Madera County Public Health Department, Office of Policy and Planning. 2016.
4. *2014 California Adolescent Birth Report*. California Department of Public Health, Center for Family Health Maternal, Child and Adolescent Health Division, Epidemiology, Assessment, and Program Development Branch.
<https://www.cdph.ca.gov/data/statistics/Documents/2014ABRFinalPressReleaseSlides.pdf> Accessed October, 2016.
5. Takahashi ER, Florez CJ, Biggs MA, Ahmad S, Brindis CD. *Teen Births in California: A Resource for Planning and Policy*. California Department of Public Health, Maternal, Child and Adolescent Health Division and Office of Family Planning, and the University of California, San Francisco. Sacramento, CA; November 2008.
6. Office of Disease Prevention and Health Promotion. (2016). *Maternal, Infant, and Child Health. Healthy People 2020*. <https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives> Accessed October, 2016.
7. *In-Hospital Breastfeeding Initiation Data. County of Residence by Race/Ethnicity, 2015. Newborn Screening Program*. California Department of Public Health
<http://www.cdph.ca.gov/data/statistics/Documents/County%20of%20Residence%20x%20Race%20Ethnicity%20Report%202015.pdf> Accessed October, 2016.

Child and Adolescent Health

1. Webster, D., et al. *California Child Welfare Indicators Project Reports*, UC Berkeley Center for Social Services Research (May 2015)
http://cssr.berkeley.edu/ucb_childwelfare/ReportDefault.aspx Accessed October, 2016.
2. *Client Profile (October 2016)*. Madera County Department of Social Services.
3. U.S. Department of Health and Human Services, Children's Bureau. *Child welfare outcomes 2009–2012: Report to Congress*.
<http://www.acf.hhs.gov/programs/cb/resource/cwo-09-12> Accessed October, 2016.
4. Kidsdata.org Accessed October, 2016.
5. *Children entering foster care*. KIDS COUNT Data Center.
<http://datacenter.kidscount.org/data/tables/6269-children-entering-foster-care?loc=1&loct=2#ranking/2/any/true/36/any/13036> Accessed October, 2016.
6. CDC WONDER Online Query System. Center for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Accessed October, 2016.

Aging

1. United States Census Bureau, <http://www.census.gov/quickfacts/table/PST045215/06039> Accessed September, 2016.
2. CDC WONDER Online Query System. Center for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Accessed October, 2016.
3. 2010-2014 American Community Survey 5-year estimates. United States Census Bureau, <https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml> Accessed October, 2016.
4. Brown P, Gonzalez M, & Sandhu R. Economic burden of chronic diseases. <http://cbcd.ucmerced.edu/Health> Accessed September 2016.

Infectious Disease

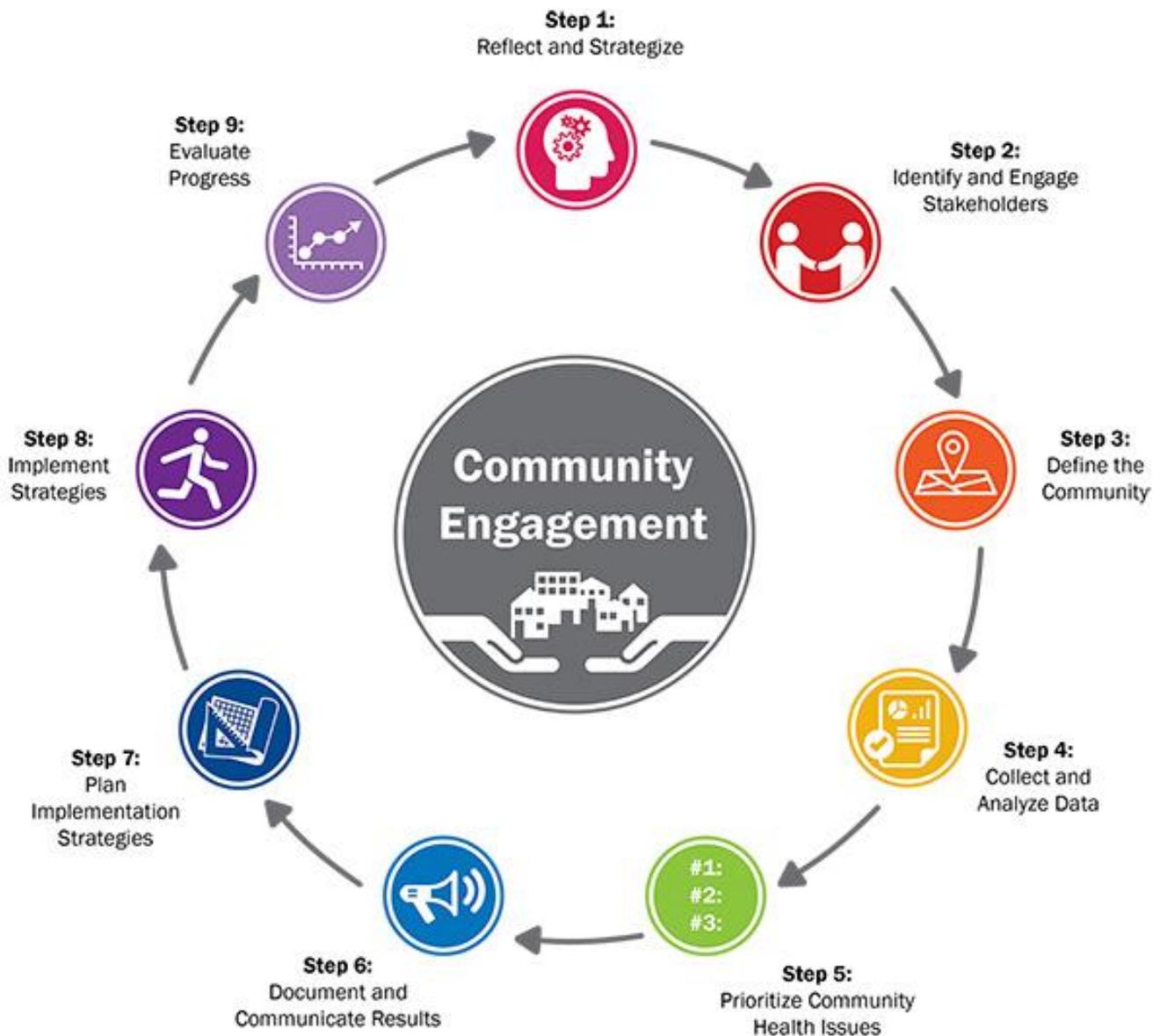
1. Health and Safety Code. California Legislative Information. [leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=HSC](http://leginfo.ca.gov/faces/codesTOCSelected.xhtml?tocCode=HSC). Accessed February, 2017.
2. Office of Policy and Planning. Communicable Disease and Vital Statistics. Madera County, CA: Madera County Public Health Department. 2013-2015
3. Sexually Transmitted Diseases Data. California Department of Public Health. www.cdph.ca.gov/data/statistics/Pages/STDDData.aspx. Accessed February, 2017.
4. CDC. Syphilis - CDC fact sheet. CDC. www.cdc.gov/std/syphilis/stdfact-syphilis.htm. Accessed February, 2017.
5. CDC. Gonorrhea - CDC fact sheet. CDC. www.cdc.gov/std/gonorrhea/stdfact-gonorrhea.htm. Accessed February, 2017.
6. CDC. About HIV/AIDS. CDC. www.cdc.gov/hiv/basics/whatishiv.html. Accessed February, 2017.
7. Coccidioidomycosis. California Department of Public Health. www.cdph.ca.gov/HealthInfo/discond/Pages/Coccidioidomycosis.aspx. Accessed February, 2017.
8. Yearly Summaries of Selected General Communicable Diseases in California, 2011–2015. California: California Department of Public Health; August 2016. www.cdph.ca.gov/data/statistics/Documents/YearlySummaryReportsofSelectedGeneralCommDiseasesinCA2011-2015.pdf#page=37. Accessed February, 2017.
9. CDC. Hepatitis B. CDC. www.cdc.gov/hepatitis/hbv/bfaq.htm#bFAQ03. Accessed February, 2017.
10. CDC. Hepatitis C. CDC. www.cdc.gov/hepatitis/hcv/hcvfaq.htm#a2. Accessed February, 2017.
11. CDC. Whooping cough. CDC. www.cdc.gov/pertussis/. Accessed February, 2017
12. Tuberculosis. California Department of Public Health. www.cdph.ca.gov/healthinfo/discond/Pages/Tuberculosis.aspx. Accessed February, 2017.

Mental Health

1. Sandra Salmans. *Depression: Questions You Have – Answers You Need*. People's Medical Society; 1997.
2. *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*. American Psychiatric Association; 2013.
3. CDC WONDER Online Query System. Center for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Accessed October, 2016.
4. Murphey, D., et al. *Are the children well? A model and recommendations for promoting the mental wellness of the nation's young people*. Child Trends and Robert Wood Johnson Foundation. 2014. <http://www.rwjf.org/en/library/research/2014/07/are-the-children-well-.html> Accessed October, 2016.
5. *Mental health action plan 2013-2020*. World Health Organization. 2013. http://www.who.int/mental_health/maternal-child/child_adolescent/en Accessed October, 2016.
6. *Children's mental health—New report*. Centers for Disease Control and Prevention. 2013. <http://www.cdc.gov/Features/ChildrensMentalHealth> Accessed October, 2016.
7. *Teen homicide, suicide, and firearm deaths*. Child Trends Databank. <http://www.childtrends.org/?indicators=teen-homicide-suicide-and-firearm-deaths> Accessed October, 2016.
8. Kidsdata.org Accessed October, 2016.
9. Brown P, Gonzalez M, & Sandhu R. *Economic burden of chronic diseases*. <http://cbcd.ucmerced.edu/Health> Accessed September 2016.
10. Avenevoli S., et al. *Major depression in the National Comorbidity Survey—Adolescent Supplement: Prevalence, correlates, and treatment*. *J Am Acad Child Adolesc Psychiatry*. 2015; 54(1), 37-44.e2.
11. Bardach, N. S., et al. *Common and costly hospitalizations for pediatric mental health disorders*. *Pediatrics*. 2014; 133(4), 602-609.
12. *Adolescents who felt sad or hopeless*. Child Trends Databank. <http://www.childtrends.org/?indicators=adolescents-who-felt-sad-or-hopeless> Accessed October, 2016.

Substance Abuse

1. Ray OS, Ksir C. *Drugs, society, and human behavior*. 9th ed. Boston: Mcgraw-Hill College; July 1, 2001.
2. CDC WONDER Online Query System. Center for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Accessed October, 2016.
3. Kidsdata.org Accessed October, 2016.



Appendix: Community Health Assessment Survey

The 2016 Madera County Community Health Assessment Survey was conducted over 1,720 face-to-face and more than 460 electronic surveys among adult Madera County residents at 5 districts and more than 15 agencies throughout Madera County in July and August of 2015.

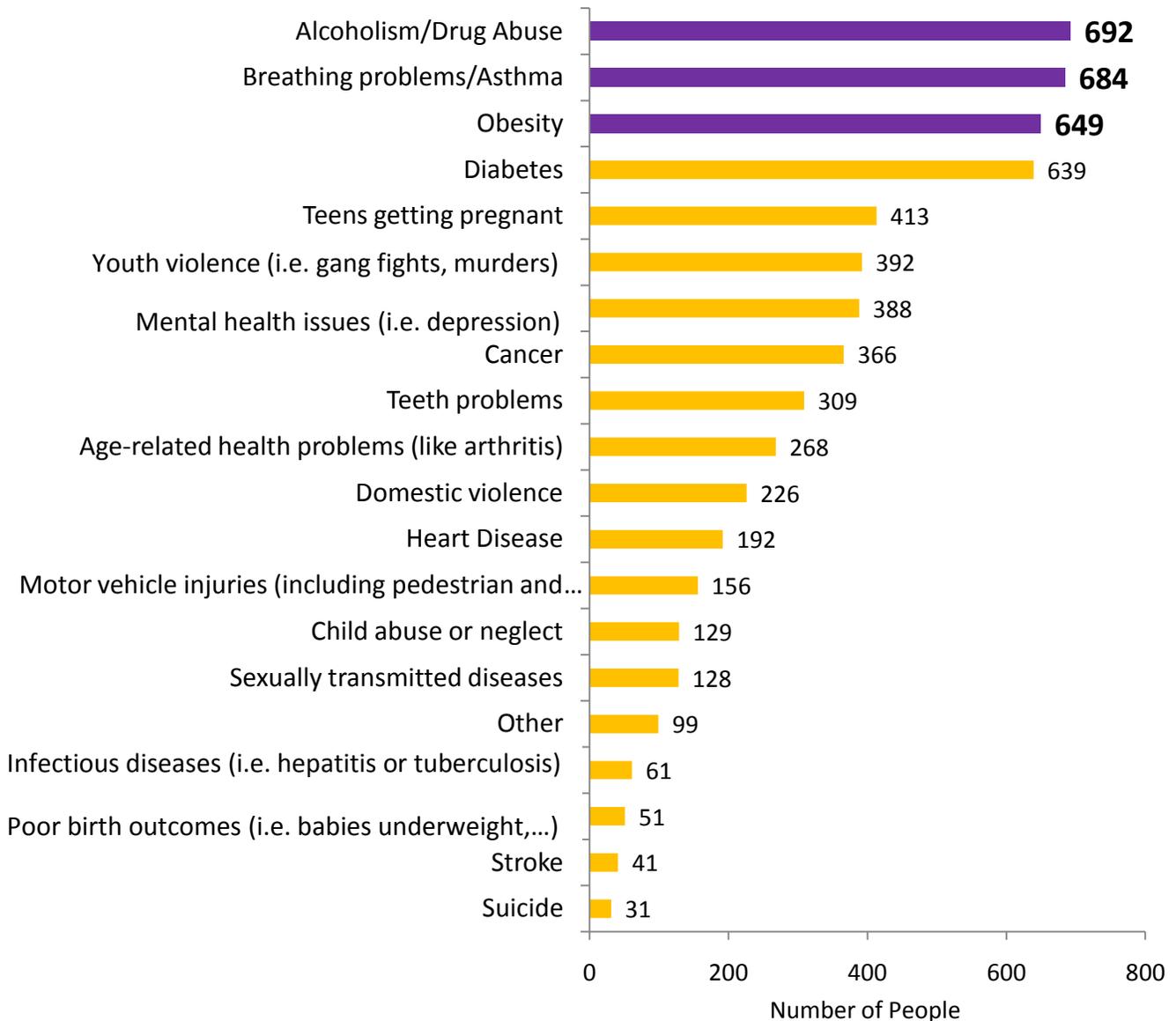
Part I: Demographics

	Madera County	Chowchilla	E. City of Madera	W. City of Madera	East Madera	Madera Ranchos/Firebaugh
Age, year-old (Mean, StdDev)	38.2,14.6	36.3,14.4	37.1,13.5	38.5,14.7	46.1,18.4	43.6,15.6
Sex: Female (%)*	80.3	81.4	81.8	80.3	69.2	75.0
Race/Ethnicity (%)						
<i>White</i>	22.1	34.7	9.9	22.8	75.7	38.6
<i>Hispanic/Latino</i>	65.8	50.0	80.5	63.7	8.7	47.7
<i>Black</i>	2.7	4.6	2.1	3.3	1.0	2.3
<i>Asian</i>	0.9	0.5	0.4	1.5	0.0	6.8
<i>Native American</i>	1.3	0.5	1.2	1.0	5.8	0.0
<i>Other</i>	7.1	9.7	5.9	7.7	8.7	4.5
Education Level (%)						
<i>Less than high school</i>	26.3	19.2	38.3	17.7	3.8	9.3
<i>With high school diploma, less than college</i>	48.9	63.4	40.8	53.1	52.9	58.1
<i>College degree and above</i>	19.2	13.1	13.9	23.7	43.3	30.2
<i>Other</i>	5.6	4.2	7.0	5.4	0.0	2.3
Marital Status (%)						
<i>Married</i>	46.1	48.3	45.1	45.9	51.0	43.2
<i>Single</i>	29.8	26.3	29.7	32.6	21.0	34.1
<i>Widowed</i>	3.2	5.7	2.5	2.3	6.0	6.8
<i>Living with Partner</i>	11.8	9.6	15.5	9.0	8.0	2.3
<i>Divorced</i>	9.1	10.0	7.2	10.2	14.0	13.6
Employment: Yes (%)	51.0	39.6	46.9	59.0	54.5	70.5
Annual household income (%)						
<i>Less than \$10,000</i>	24.2	24.4	30.0	19.4	9.6	13.3
<i>\$10,000 to \$14,999</i>	11.7	12.7	13.3	9.7	11.5	4.4
<i>\$15,000 to \$24,999</i>	13.3	14.0	13.8	12.1	12.5	17.8
<i>\$25,000 to \$34,999</i>	10.6	7.7	10.0	12.3	8.7	17.8
<i>\$35,000 to \$49,999</i>	8.1	8.1	7.2	8.7	8.7	13.3
<i>\$50,000 to \$99,999</i>	10.3	6.3	5.9	16.5	20.2	11.1
<i>\$100,000 or more</i>	4.4	3.6	2.1	5.5	16.3	6.7
<i>Don't know</i>	17.4	23.1	17.8	15.7	12.5	15.6
Have Health Insurance						
<i>Yes</i>	69.8	74.7	60.4	75.7	92.3	86.7
<i>No</i>	17.1	13.1	23.8	12.7	4.8	2.2
<i>Don't know</i>	13.1	12.2	15.8	11.6	2.9	11.1
Household size (%)						
<i>1</i>	5.6	4.3	3.7	6.3	14.4	16.7
<i>2</i>	15.0	16.1	11.6	15.8	32.7	19.0
<i>3</i>	17.4	15.6	15.7	20.7	20.2	11.9
<i>4</i>	23.0	24.2	22.9	23.8	17.3	23.8
<i>5</i>	19.2	21.3	20.5	19.3	7.7	11.9
<i>6</i>	9.7	7.1	12.1	8.4	6.7	2.4
<i>7</i>	6.4	8.5	8.2	3.5	1.0	14.3
<i>8 or more</i>	3.6	2.8	5.4	2.1	0.0	0.0
Veteran: Yes (%)	3.5	4.5	2.5	3.3	8.7	4.4

*Four participants identified their gender as other; two of them are from E. City of Madera; one from Chowchilla and one from Eastern Madera County.

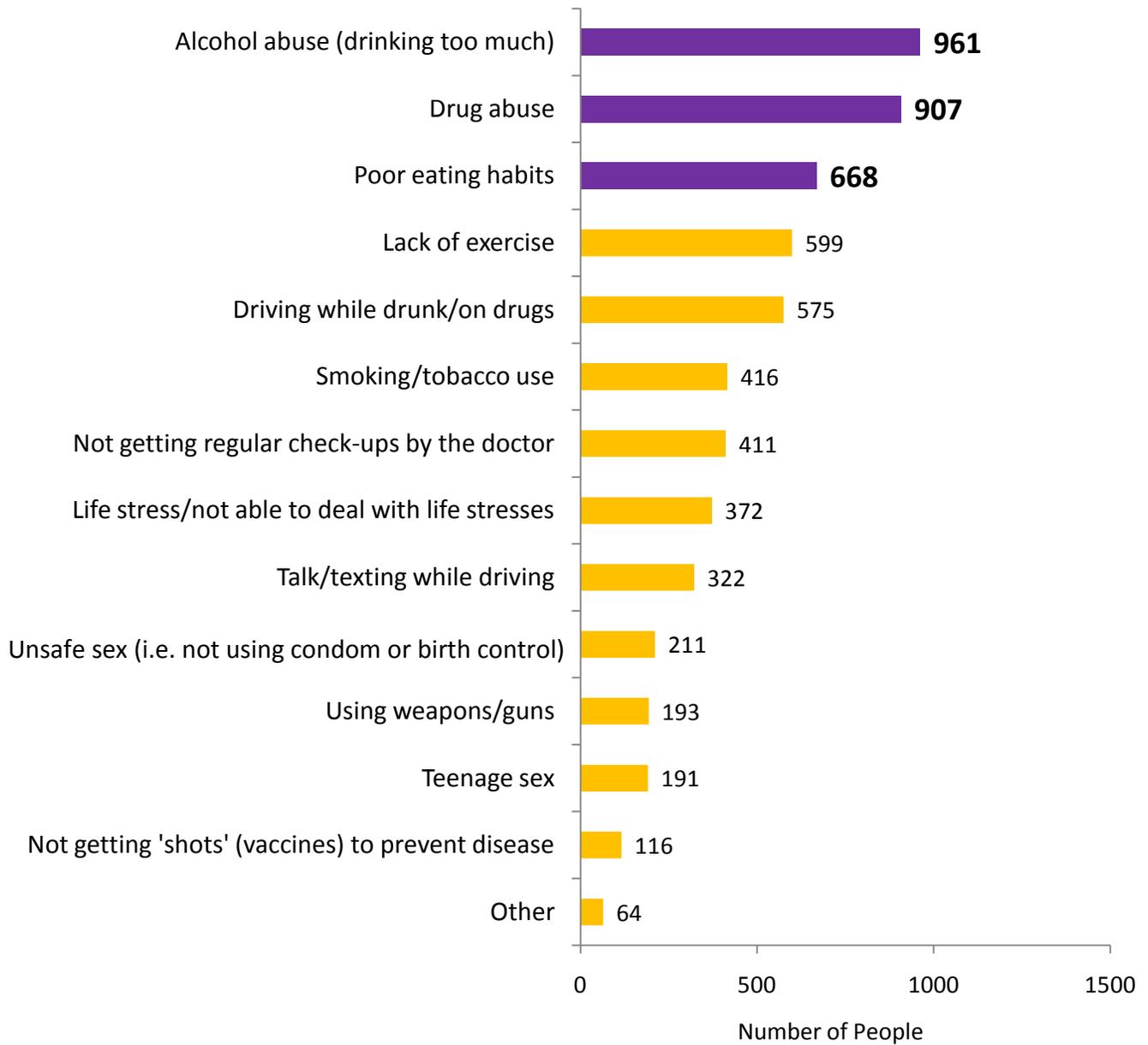
Part II: Influential Factors to Community Health

Q4. The three biggest health problems in your community, Madera County (n=2083), 2016



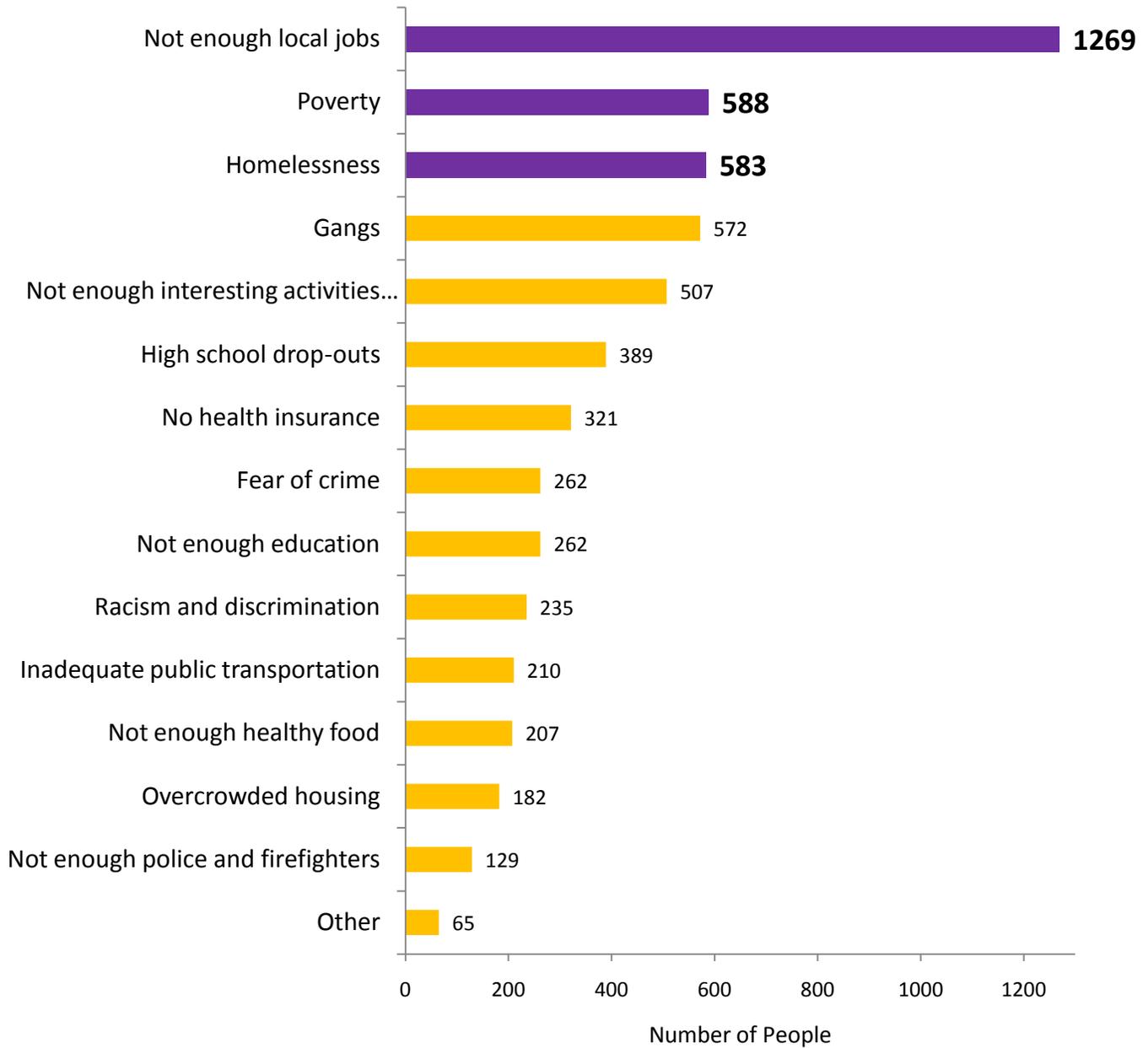
Source: Madera County Community Health Survey (2016)

Q5. Three behaviors that most affect health in your community, Madera County (n=2083), 2016



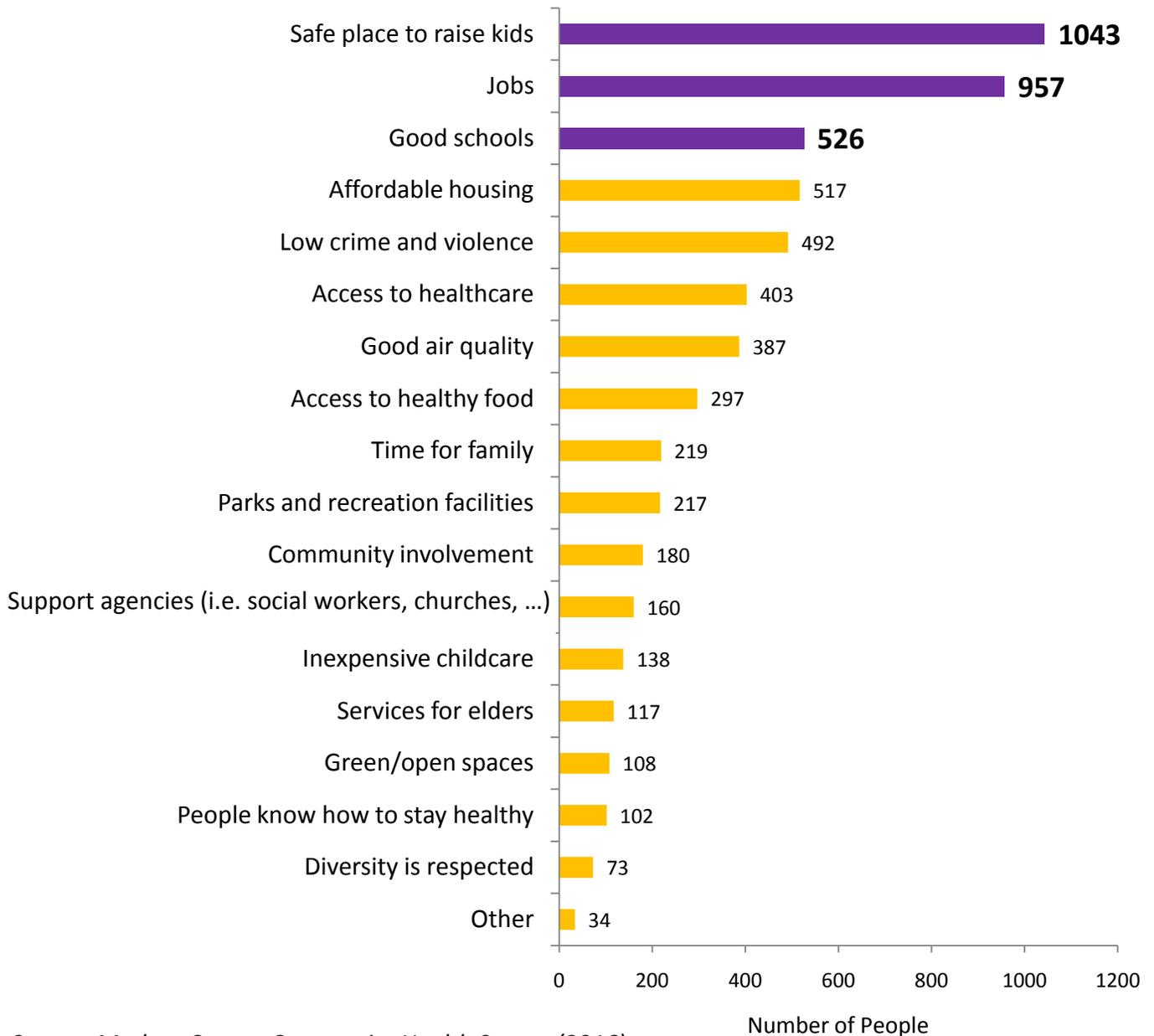
Source: Madera County Community Health Survey (2016)

Q6. The three biggest social and economic problems in your community, Madera County (n=2083), 2016



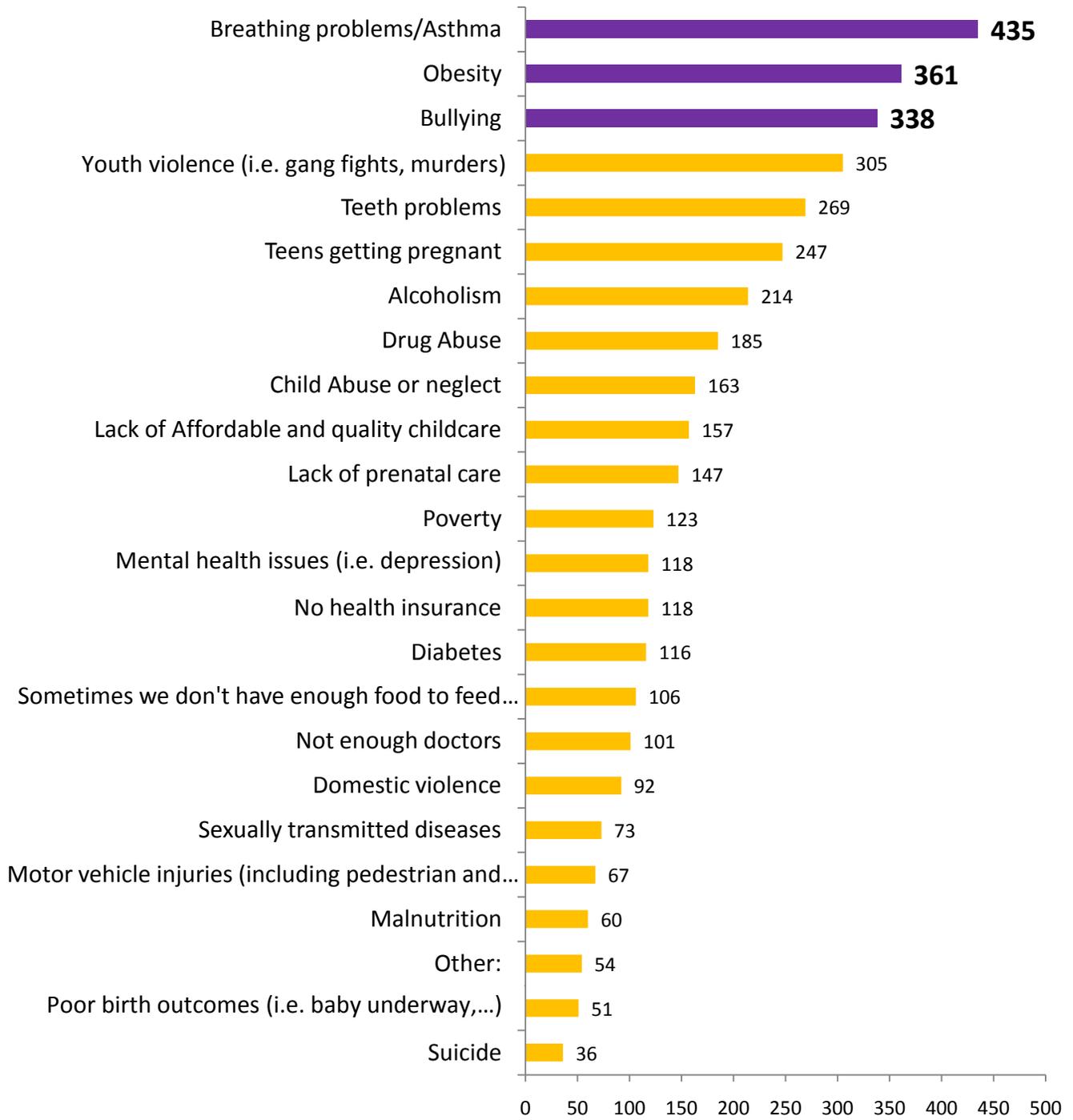
Source: Madera County Community Health Survey (2016)

Q11. The three most important aspects of a healthy, thriving community, Madera County (n=2083), 2016



Source: Madera County Community Health Survey (2016)

Q25. The three biggest health problems facing children ages 0-18 in your community, Madera County (n=2083), 2016

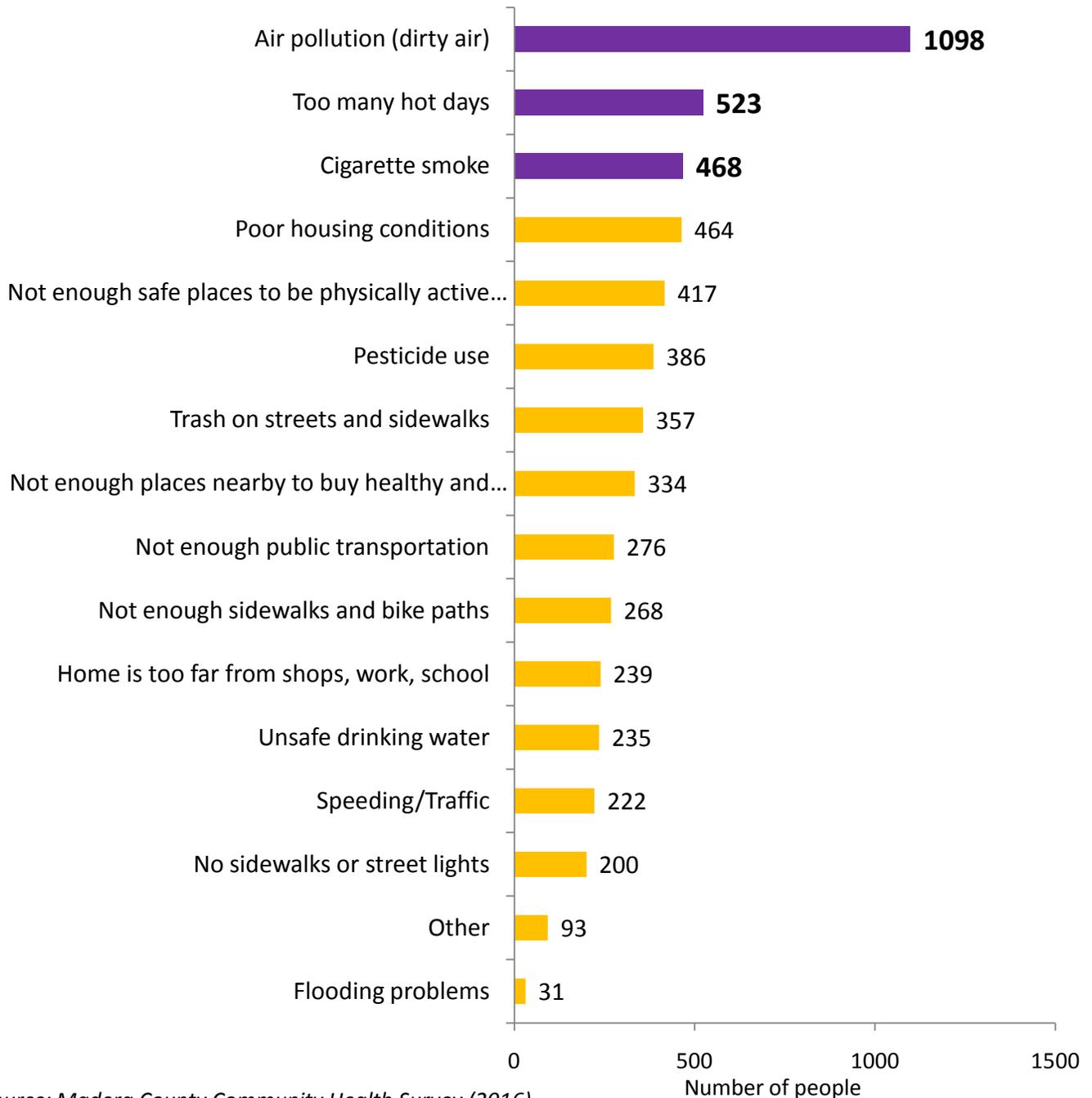


Source: Madera County Community Health Survey (2016)

Number of People

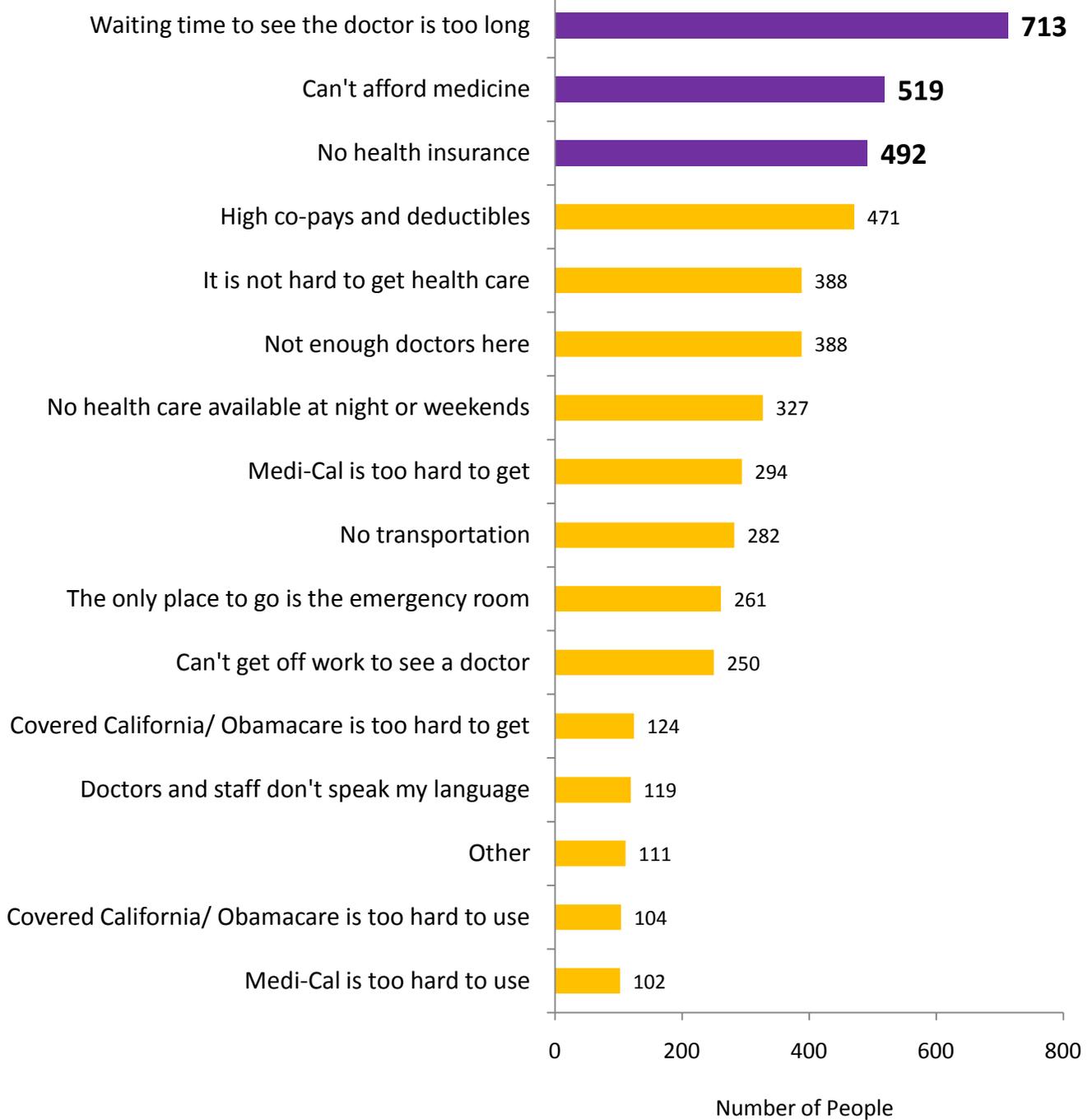
Part III: Barriers to Healthy Environment and Health Care

Q7. The three biggest obstacles to having a healthy environment in your community, Madera County (n=2083), 2016



Source: Madera County Community Health Survey (2016)

Q10. The three things that make it hard to get health care in your community, Madera County (n=2083), 2016



Source: Madera County Community Health Survey (2016)

Part IV: Self Evaluation on Health Status and Community Health Factors

Q3. What would you say about your health in general?

	Excellent	Very Good	Good	Fair	Poor	Don't Know
Madera County	13.3%	24.0%	37.1%	18.5%	4.8%	2.3%
Chowchilla	11.6%	22.7%	36.7%	21.9%	4.4%	2.8%
93637	13.1%	27.9%	38.1%	15.1%	4.7%	1.2%
93638	13.6%	19.7%	37.4%	21.1%	5.2%	3.1%
Eastern Madera	16.1%	31.5%	32.3%	14.5%	4.0%	1.6%
Madera Ranchos/Firebaugh	13.1%	39.3%	32.8%	8.2%	4.9%	1.6%

Q8. In your opinion, is store window advertising of tobacco, alcohol, and sugary beverages a problem?

	A medium problem	A small problem	Not a problem	A big problem	I don't know
Madera County	33.3%	16.1%	10.7%	18.6%	21.3%
Chowchilla	25.1%	20.0%	12.3%	17.4%	25.1%
93637	33.6%	15.5%	13.2%	18.8%	18.9%
93638	38.2%	14.1%	08.0%	17.2%	22.4%
Eastern Madera	13.3%	25.8%	14.2%	31.7%	15.0%
Madera Ranchos/Firebaugh	27.6%	19.0%	13.8%	15.5%	24.1%

Q12-a. Rate your family's health

	Excellent	Good	OK	Poor	Very Poor	Don't Know
Madera County	17.8%	50.9%	26.2%	3.7%	0.5%	0.9%
Chowchilla	18.4%	50.2%	27.6%	2.9%	0.0%	0.8%
93637	19.2%	52.7%	22.3%	4.4%	0.7%	0.8%
93638	17.0%	48.4%	29.6%	3.8%	0.4%	0.8%
Eastern Madera	18.2%	57.9%	18.2%	1.7%	0.8%	3.3%
Madera Ranchos/Firebaugh	10.9%	61.8%	23.6%	1.8%	1.8%	0.0%

Q12-b. Rate your community's health

	Excellent	Good	OK	Poor	Very Poor	Don't Know
Madera County	2.5%	15.0%	49.6%	19.2%	3.6%	10.0%
Chowchilla	1.8%	11.6%	52.0%	24.0%	2.7%	08.0%
93637	1.6%	16.3%	45.1%	20.6%	4.9%	11.6%
93638	3.7%	14.0%	51.3%	18.4%	3.0%	09.6%
Eastern Madera	1.7%	15.7%	57.0%	12.4%	4.1%	09.1%
Madera Ranchos/Firebaugh	0.0%	30.0%	46.0%	12.0%	2.0%	10.0%

Q13-a. Rate how well neighbors work together to help solve community problems

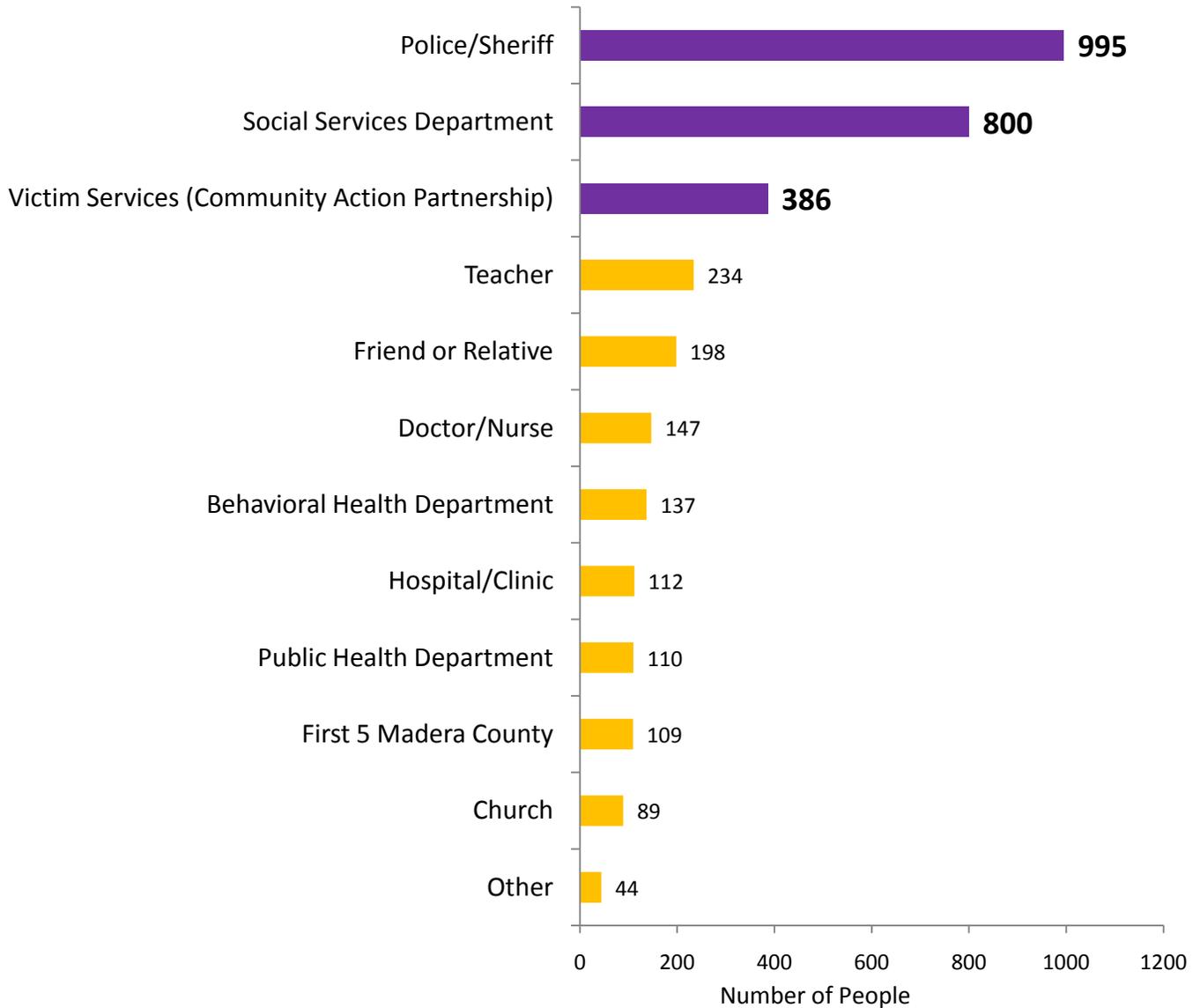
	Excellent	Good	OK	Poor	Very Poor	Don't Know
Madera County	7.3%	26.8%	36.3%	13.4%	4.8%	11.4%
Chowchilla	6.9%	24.2%	36.8%	15.6%	2.6%	13.9%
93637	7.0%	27.9%	37.3%	12.1%	4.7%	11.1%
93638	6.9%	25.2%	37.2%	14.3%	5.2%	11.2%
Eastern Madera	11.6%	35.5%	26.4%	12.4%	5.8%	8.3%
Madera Ranchos/Firebaugh	9.1%	32.7%	30.9%	7.3%	5.5%	14.5%

Q13-b. Rate how well county government agencies work together to help solve community problems

	Excellent	Good	OK	Poor	Very Poor	Don't Know
Madera County	4.4%	23.2%	39.2%	15.5%	5.2%	12.5%
Chowchilla	6.1%	21.2%	35.8%	17.9%	4.2%	14.6%
93637	2.5%	25.2%	38.7%	17.6%	5.0%	10.9%
93638	5.0%	22.7%	40.6%	13.6%	5.0%	13.0%
Eastern Madera	4.1%	24.5%	30.6%	14.3%	6.1%	20.4%
Madera Ranchos/Firebaugh	3.3%	24.2%	39.1%	16.9%	5.7%	10.8%

Part V: Children's Health

Q26. If you suspected that a child was being physically and/or emotionally neglected or abused, who would you contact? , Madera County (n=2083), 2016



Source: Madera County Community Health Survey (2016)

Q26. If you suspected that a child was being physically and/or emotionally neglected or abused, who would you contact?			
	1 st Choice (%)	2 nd Choice (%)	3 rd Choice (%)
Madera County	Police/Sheriff (47.8%)	Social Services Department (38.4%)	Victim Services (18.5%)
Chowchilla	Police/Sheriff (52.8%)	Social Services Department (49.2%)	Victim Services (16.3%)
93637	Police/Sheriff (47.4%)	Social Services Department (40.2%)	Victim Services (19.9%)
93638	Police/Sheriff (49.7%)	Social Services Department (37.1%)	Victim Services (20.6%)
Eastern Madera	Police/Sheriff (34.4%)	Social Services Department (26.4%)	Teacher (9.6%)
Madera Ranchos/Firebaugh	Police/Sheriff (26.6%)	Social Services Department (19.7%)	Teacher (9.8%)

Part VI: Influential Factors to Community Health by Region

Q4. The three biggest health problems in your community			
	1 st Choice (%)	2 nd Choice (%)	3 rd Choice (%)
Madera County	Alcoholism/Drug Abuse (33.2%)	Breathing Problems/Asthma (32.8%)	Obesity (31.2%)
Chowchilla	Alcoholism/Drug Abuse (43.7%)	Breathing Problems/Asthma (33.7%)	Obesity (26.6%)
93637	Breathing Problems/Asthma (36.0%)	Obesity (31.3%)	Diabetes (30.0%)
93638	Diabetes (35.6%)	Obesity (33.1%)	Breathing Problems/Asthma (30.9%)
Eastern Madera	Alcoholism/Drug Abuse (56.0%)	Mental Health Issues (33.6%)	Age-Related Health Problems (30.4%)
Madera Ranchos/Firebaugh	Breathing Problems/Asthma (44.3%)	Obesity (37.7%)	Diabetes (31.1%)

Q5. The three behaviors that most affect health in your community			
	1 st Choice (%)	2 nd Choice (%)	3 rd Choice (%)
Madera County	Alcohol Abuse (46.1%)	Drug Abuse (43.5%)	Poor Eating Habits (32.1%)
Chowchilla	Drug Abuse (59.9%)	Alcohol Abuse (46.8%)	Smoking/Tobacco Use (31.3%)
93637	Alcohol Abuse (45.3%)	Drug Abuse (43.2%)	Poor Eating Habits (34.0%)
93638	Alcohol Abuse (46.0%)	Drug Abuse (40.1%)	Poor Eating Habits (32.9%)
Eastern Madera	Alcohol Abuse (52.0%)	Drug Abuse (49.6%)	Smoking/Tobacco Use (32.0%)
Madera Ranchos/Firebaugh	Lack of Exercise (44.3%)	Alcohol Abuse (42.6%)	Poor Eating Habits (39.3%)

Q6. The three biggest social and economic problems in your community			
	1 st Choice (%)	2 nd Choice (%)	3 rd Choice (%)
Madera County	Not enough local jobs (60.9%)	Poverty (28.2%)	Homelessness (28.0%)
Chowchilla	Not enough local jobs (76.6%)	Not enough interesting activities for youth (44.0%)	Homelessness (31.0%)
93637	Not enough local jobs (58.3%)	Gangs (33.4%)	Poverty (30.4%)
93638	Not enough local jobs (56.9%)	Gangs (31.4%)	Poverty (27.6%)
Eastern Madera	Not enough local jobs (76.0%)	Inadequate public transportation (40.0%)	Homelessness (38.4%)
Madera Ranchos/Firebaugh	Not enough local jobs (59.0%)	Not enough interesting activities for youth (27.9%)	Inadequate public Transportation (23.0%)

Q11. The three most important aspects of a healthy, thriving community			
	1 st Choice (%)	2 nd Choice (%)	3 rd Choice (%)
Madera County	Safe place to raise kids (50.1%)	Jobs (45.9%)	Good Schools (25.3%)
Chowchilla	Safe place to raise kids (60.7%)	Jobs (50.8%)	Low crime and violence (28.6%)
93637	Safe place to raise kids (52.0%)	Jobs (47.3%)	Good Schools (25.0%)
93638	Safe place to raise kids (46.2%)	Jobs (43.6%)	Affordable housing (25.7%)
Eastern Madera	Jobs (49.6%)	Safe place to raise kids (42.4%)	Affordable housing (28.8%)
Madera Ranchos/Firebaugh	Safe place to raise kids (63.9%)	Jobs (41.0%)	Good Schools (31.1%)

Q25. The three biggest health problems facing children ages 0-18 in your community			
	1 st Choice (%)	2 nd Choice (%)	3 rd Choice (%)
Madera County	Breathing Problems/Asthma (20.9%)	Obesity (17.3%)	Bullying (16.2%)
Chowchilla	Breathing Problems/Asthma (23.0%)	Alcoholism (19.4%)	Drug Abuse (19.0%)
93637	Breathing Problems/Asthma (20.5%)	Bullying (18.1%)	Obesity (17.5%)
93638	Breathing Problems/Asthma (21.9%)	Obesity (19.3%)	Youth Violence (16.8%)
Eastern Madera	Breathing Problems/Asthma (12.8%)	Not enough doctors (11.2%)	Drug Abuse (9.6%)
Madera Ranchos/Firebaugh	Breathing Problems/Asthma (16.4%)	Obesity (9.8%)	Bullying (9.8%)

Q26. If you suspected that a child was being physically and/or emotionally neglected or abused, who would you contact?			
	1 st Choice (%)	2 nd Choice (%)	3 rd Choice (%)
Madera County	Police/Sheriff (47.8%)	Social Services Department (38.4%)	Victim Services (18.5%)
Chowchilla	Police/Sheriff (52.8%)	Social Services Department (49.2%)	Victim Services (16.3%)
93637	Police/Sheriff (47.4%)	Social Services Department (40.2%)	Victim Services (19.9%)
93638	Police/Sheriff (49.7%)	Social Services Department (37.1%)	Victim Services (20.6%)
Eastern Madera	Police/Sheriff (34.4%)	Social Services Department (26.4%)	Teacher (9.6%)
Madera Ranchos/Firebaugh	Police/Sheriff (26.6%)	Social Services Department (19.7%)	Teacher (9.8%)

Part VII: Barriers to Healthy Environment and Health Care by Region

Q7. The three biggest obstacles to having a healthy environment in your community			
	1st Choice (%)	2nd Choice (%)	3rd Choice (%)
Madera County	Air pollution (dirty air) (52.7%)	Too many hot days (25.1%)	Cigarette smoke (22.5%)
Chowchilla	Air pollution (dirty air) (48.0%)	Cigarette smoke (27.0%)	Too many hot days (26.2%)
93637	Air pollution (dirty air) (58.0%)	Too many hot days (26.7%)	Poor housing conditions (23.6%)
93638	Air pollution (dirty air) (54.1%)	Too many hot days (24.6%)	Poor housing conditions (24.0%)
Eastern Madera	Not enough public transportation (36.8%)	Not enough sidewalks and bike paths (33.6%)	Unsafe drinking water (32.8%)
Madera Ranchos/Firebaugh	Air pollution (dirty air) (42.6%)	Not enough sidewalks and bike paths (26.2%)	Not enough safe places to be physically active (23.0%)

Q10. The three things make it hard to get health care in your community			
	1st Choice (%)	2nd Choice (%)	3rd Choice (%)
Madera County	Waiting time to see the doctor is too long (34.2%)	Can't afford medicine (24.9%)	No health insurance (23.6%)
Chowchilla	Waiting time to see the doctor is too long (33.7%)	It is not hard to get health care (23.0%)	No health care available at night or weekends (23.0%)
93637	Waiting time to see the doctor is too long (36.0%)	High co-pays and deductibles (26.2%)	Can't afford medicine (25.6%)
93638	Waiting time to see the doctor is too long (34.8%)	No health insurance (28.0%)	Can't afford medicine (27.8%)
Eastern Madera	Not enough doctors here (44.8%)	No health care available at night or weekends (39.2%)	No transportation (28.0%)
Madera Ranchos/Firebaugh	Waiting time to see the doctor is too long (36.1%)	High co-pays and deductibles (29.5%)	Can't afford medicine (26.2%)

MADERA COUNTY BOARD OF SUPERVISORS

- District 1- Brett Frazier**
- District 2- David Rogers**
- District 3- Robert L. Poythress**
- District 4- Max Rodriguez**
- District 5- Tom Wheeler**



Public Health Department

14215 Road. 28

Madera, CA 93638

(559) 675-7893

Toll Free: 800-427-6897

**Public Health Department-
Oakhurst Office**

40325 Highway 41

Oakhurst, CA 93644

(559) 658-7456

**Public Health Department-
Chowchilla Office**

405 Trinity Ave

Chowchilla, CA 93610

(559) 201-5023