

Healthy El Dorado County, 2014

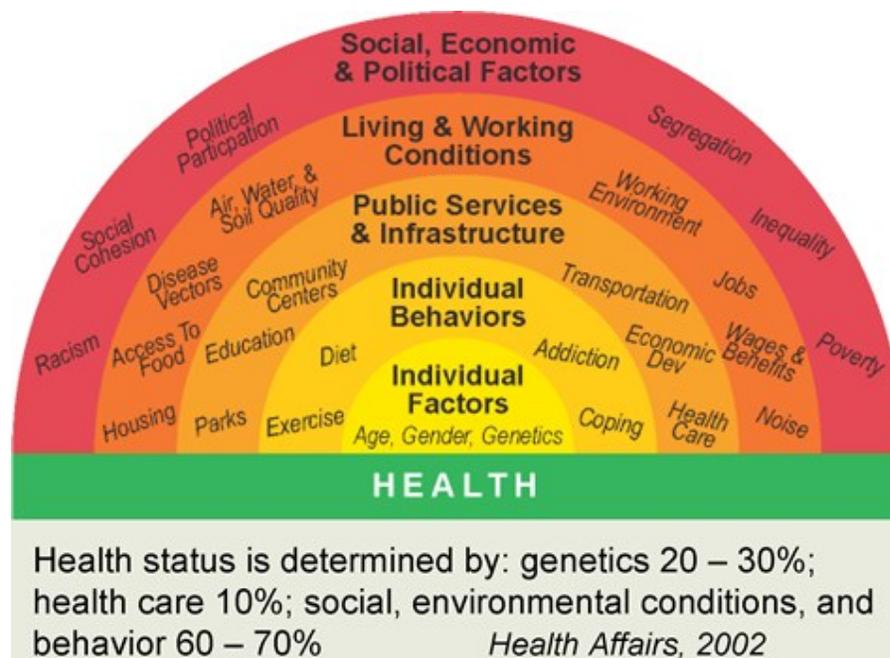
An El Dorado County Community Health Status Assessment



INTRODUCTION

Healthy El Dorado County, 2014, is a report written by the El Dorado County Health and Human Services Agency, Public Health Division. The report presents an assessment of health in El Dorado County in the broadest sense and using the latest available data.

El Dorado County is a great place to live and play. Its lakes, fields, forests and rivers provide a beautiful backdrop for everyday activities. The residents of the county are on average among the healthiest people in the State of California; The County ranked 7th healthiest out of 57 California counties, according to The County Health Rankings and Roadmaps 2014 report. Health is defined by the World Health Organization as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” This kind of health is not just about individuals, but includes families, communities and systems, and is a result of the interaction of complex networks of conditions and factors. It starts long before illness is manifest. As is shown in the Factors Responsible for Population Health diagram below, health begins in homes and schools, in jobs and workplaces, and in communities. While genetic and other factors generally beyond a person’s control are significant, 70-80% of health is determined by environmental factors, medical and related services, and health behaviors. With supportive environments and healthy behavior, people can increase their length and quality of life.



To reflect this understanding of health, *Healthy El Dorado County, 2014* covers a wide array of indicators and information about the conditions and factors affecting health, as well as indicators of health status. This information may be used to inform decisions and guide efforts to improve community health and wellness. Understanding the health of the community informs critical decision making regarding program and policy development, resource allocation, and individual behavior. When we are well-informed with current information and scientific data, we can make better decisions and take more effective actions that support healthier and longer lives.

METHODS AND LIMITATIONS

While this document presents many important issues and topics, it does not cover every possible health-related issue. The issues and indicators chosen are intended to reveal the scope and complexity of population health, however, space does not allow for each of them to be thoroughly documented. Therefore, the assessment should not be considered a formal study or research document investigating the causes of each issue raised or providing a detailed analysis of the data. In some cases, information that could greatly inform a countywide health assessment is simply not available or the sample size is too small. The assessment also does not include the many programs, services, and strategies that are currently (or could be) implemented to address these health-related issues, either by partners in the community, by El Dorado County Public Health, or by other stakeholders.

The El Dorado County Public Health Division conducted a comprehensive review of secondary data sources to obtain the most current and reliable data for this report. Secondary data sources and resources include, but are not limited to, the U.S. Census, American Community Survey, California Department of Public Health (CDPH), California Department of Education (CDE), California Health Interview Survey (CHIS), California Healthy Kids Survey (CHKS), Behavioral Risk Factor Surveillance System (BRFSS), CDC National Center for Health Statistics, California Department of Justice, Healthy People 2020, and the 2012 County Health Rankings and Roadmaps. Data collected through the El Dorado County Public Health Division's Vital Statistics Office and the Communicable Disease Control Program are also used in this report. In all cases, this report presents the most current data and analyses available at the time this report was written. When needed, raw data were exported in database formats, cleaned, and basic descriptive statistics were calculated. SAS and EpilInfo (statistical analysis databases) were used for data analysis.

Data considered for inclusion in this report were carefully reviewed to ensure that they met specific criteria with respect to data quality, availability and relevance to health in El Dorado County. Sample sizes for datasets were examined to ensure that they were large enough for analyses, particularly for sub-populations. If sample sizes were not large enough, results were either aggregated over several years, were not presented, or the indicator was presented as “statistically unstable.”

For community health surveys such as CHIS and BRFSS, many survey questions are rotated and/or asked in alternate years; therefore, results from those sources may be presented in varying years or in multiyear estimates. A limitation of the cross-sectional data currently available is that it does not allow for examination of the cumulative or interactive effects of various factors that may impact health status. For example, being poor, female, Latino, and living in a certain neighborhood may have cumulative effects on health outcomes that are not reflected in individual indicators. In addition, while geographic boundaries do not necessarily reflect residents’ personal definitions of neighborhood, geographic data are presented in the format in which they are available (e.g., zip code). The communities within the county have developed out of the distinct characteristics of each of these regions and have historically operated quite independently. Where possible, data has been presented at the zip code level to account for the differences in regions within the county. Where this was not possible, it is important to remember that statistics for the county may not be representative of smaller geographic regions. Finally, population descriptions (e.g., demographic categories) may vary slightly throughout the report based on the source of the data.

Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. For 3 decades, Healthy People has established benchmarks and monitored progress over time to encourage collaboration across communities and sectors, empower individuals toward making informed health decisions, and measure the impact of prevention activities. Where possible, El Dorado County data were compared to Healthy People 2020 benchmarks in order to illustrate where we stand compared to national goals.

DEMOGRAPHICS

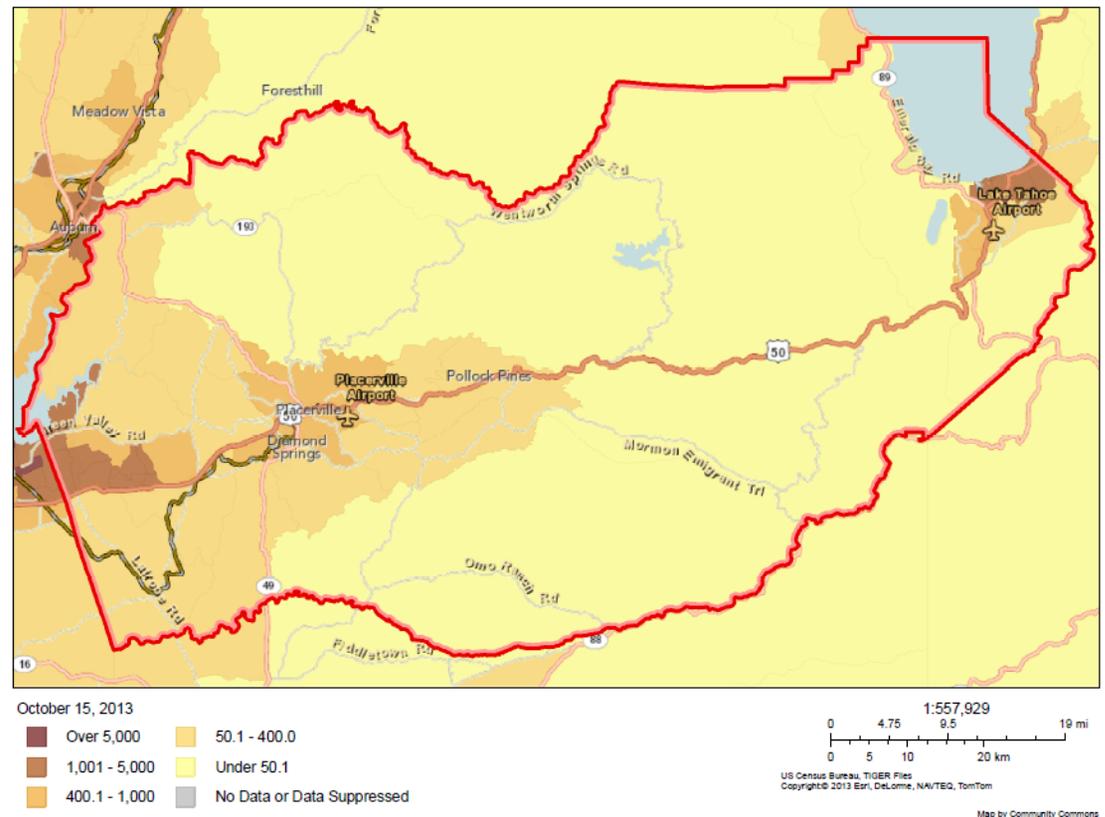
Population Density

A total of 179,878 people live in the 1,707.46 square mile report area defined for this assessment, according to the U.S. Census Bureau *American Community Survey 2011* 5-year estimates. The population density for this area, estimated at 105.35 persons per square mile, is less than the population density of California, which is estimated at 237.38 persons per square mile. Nearly 35% of El Dorado County is considered rural. Approximately 33% of the county's population resides toward the western border of the county in the El Dorado Hills and Cameron Park communities, with the Tahoe basin on the eastern border being the second highest region in population. Great expanses of rural land is found in-between these two population hubs. Eighty-two percent of the county's population reside in unincorporated areas of the county (Placerville and South Lake Tahoe are the only two incorporated cities in El Dorado County). The rural nature of many unincorporated areas of the county results in challenges to obtaining health services (e.g., transportation to services, outreach to residents, and public awareness relative to available services).

Growth and Migration

According to the U.S. Census Bureau Decennial Census, the population in the report area grew by 24,759 persons between 2000 and 2010, a change of 15.84%. An estimated 5.76% relocated to the area, according to the *American Community Survey 2011* 5-year data. Persons who moved to a new household from outside of their current county of residence, from outside their state of residence, or from abroad are considered part of

Population, Density (Persons per Sq Mile) by Tract, 2007-11

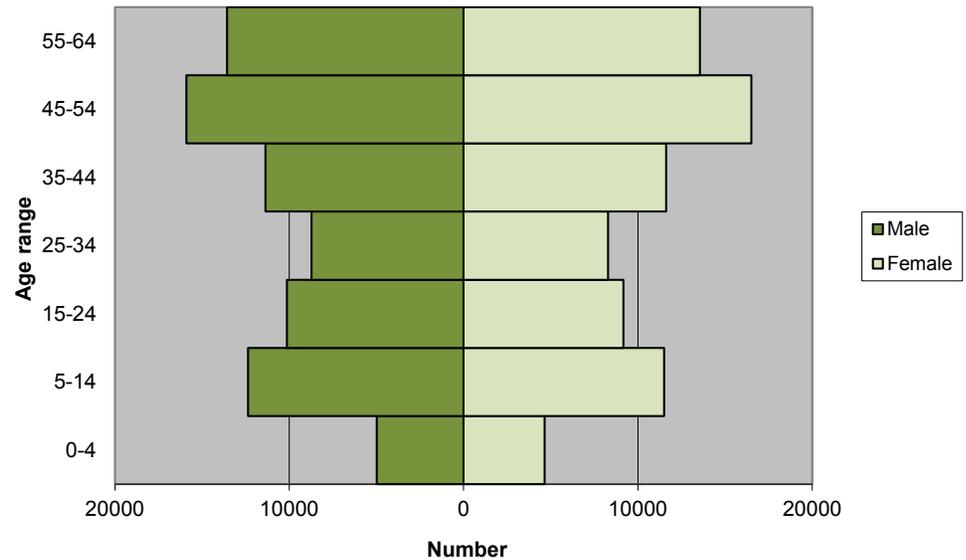


the in-migrated population. Persons who moved to a new household from a different household within their current county of residence are not included. A significant positive or negative shift in total population over time impacts healthcare providers and the use of community resources.

Age

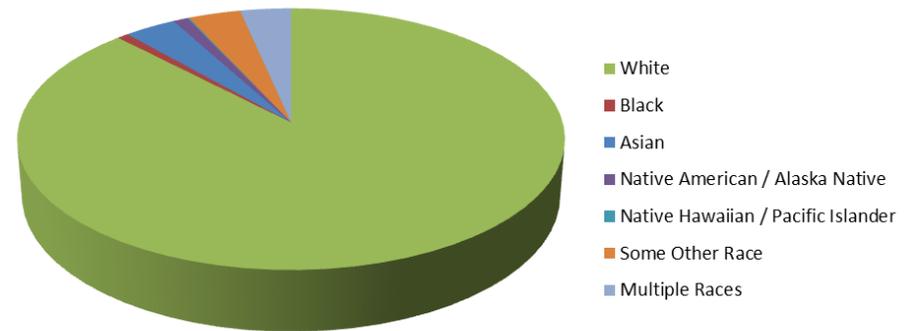
El Dorado County is aging faster than the state of California. The median age of El Dorado County residents is 43.10, approximately ten years older than the median age of residents in California. Just under half (47.3%) of residents in El Dorado County are over the age of 45. The population pyramid for El Dorado County, shown at right, can be considered constrictive because of the low numbers of younger people. A constrictive pyramid suggests a greying population with a low birth rate and is typical for a developed population. The bulge seen in the 45 to 65 year olds can partially be attributed to the baby boom which occurred post World War II.

2007-2011 Population Pyramid El Dorado County



Race and Ethnicity

El Dorado County’s racial and ethnic minorities are proportionately small compared to the rest of California. The majority of residents, 87.76%, self report White as their race and 11.80% of the total population identify as Hispanic or Latino as their ethnicity. 4.31 percentage of the population aged five and older speak a language other than English at home and speak English less than "very well." This indicator is relevant because an inability to speak English well can create barriers to healthcare access, provider communications, and health literacy/education.



Income

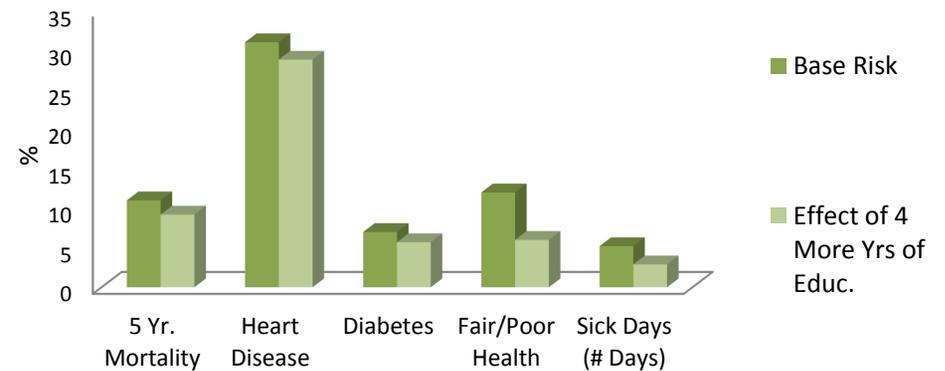
Income is the most common measure of socioeconomic status and a strong predictor of the health of an individual or community. The lower the income, the less likely a person will have a healthy diet or regular physical activity, and the more likely he or she will smoke. This leads to a greater likelihood of chronic conditions such as depression, obesity, asthma, diabetes, heart disease, stroke and premature death. Approximately eight and a half percent of individuals residing in El Dorado County are living in households with income below the Federal Poverty Level (FPL). As a point of comparison, 14.39% of Californians live in a household with income below the FPL.

Education

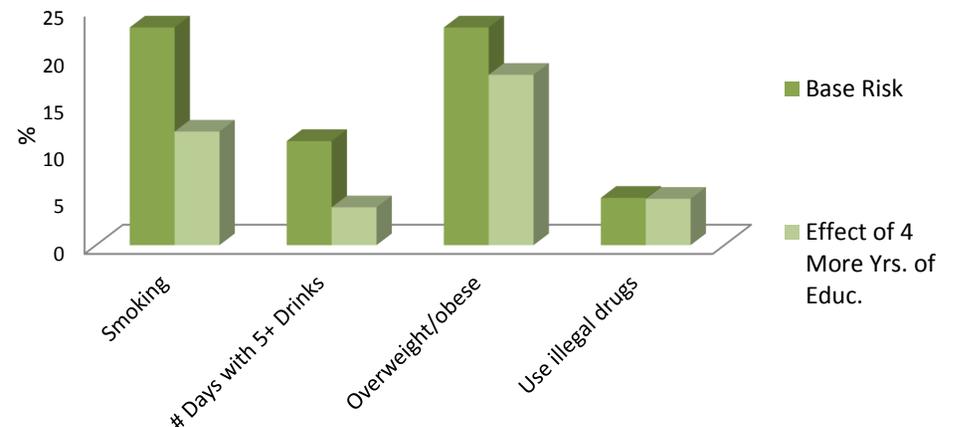
The University of Michigan National Poverty Center has done extensive research on the correlation between education and health. The following bulleted list highlights some of the more interesting findings:

- Better educated people have lower morbidity rates from the most common acute and chronic diseases, independent of basic demographic and labor market factors.
- Life expectancy is increasing for everyone in the United States, yet differences in life expectancy have grown over time between those with and without a college education.
- Health behaviors alone cannot account for health status differences between those who are less educated and those who have more years of education.
- The mechanisms by which education influences health are complex and are likely to include (but are not limited to) interrelationships between demographic and family background indicators, effects of poor health in childhood, greater resources associated with higher levels of education, a learned appreciation for the importance of good health behaviors, and one's social networks.

Effect of an Additional 4 Years of Education on Health Outcomes



Effect of an Additional 4 Years of Education on Health Behaviors



Graphs adopted from The University of Michigan National Poverty Center

Residents of El Dorado County tend to have more years of formal education than people in the rest of California. Approximately 93% of residents have a high school diploma (or equivalency) or higher compared to 81% of the rest of California. 40.70% of the population aged 25 and older have obtained an Associate's level degree or higher compared to 15.87% of the rest of California. Education is an important indicator because it is closely linked with occupation and income. Together these measures provide a more holistic measure of socioeconomic status.

Occupation

According to the U.S. Bureau of Labor Statistics, El Dorado County's workforce numbers 82,490. Total unemployment in the report area for the month of June, 2013, was 7,528, or 8.40% of the civilian noninstitutionalized population age 16 and older (non-seasonally adjusted). This rate is lower than the rest of California (9.33 %) but slightly higher than the United States (7.69 %).

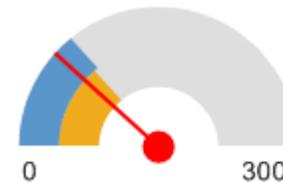
Access to Care

El Dorado County residents have fewer primary care physicians (per 100,000) population than the rest of the state and the United States, as well as a higher percentage of the population living in a "Health Professional Shortage Area" (HPSA). A HPSA is defined as having a shortage of primary medical care, dental or mental health professionals. This can be viewed visually in the graphics to the right. Federal Qualified Health Centers (FQHC) are community assets that provide health care to vulnerable populations; they receive extra funding from the federal government to promote access to ambulatory care in areas designated as medically underserved. El Dorado County has 1.66 FQHC's per 100,000 population compared to 1.79 in the state of California. The Tahoe Basin is separated from the remainder of the county by the Sierra Nevada Mountains, with Highway 50 providing a mountainous, 60-mile connector route between the two regions. There is no locally operated public transportation between the Tahoe basin and the west slope of the County, however Amtrak California operates once daily bus service between the two cities. In terms of service provision, the Tahoe basin and the west slope of the County are essentially two distinct areas.

Percent of Designated Population Underserved



Primary Care Physicians, Rate per 100,000 Pop.



<http://www.communitycommons.org/>

READERS GUIDE TO SELECTED HEALTH INDICATORS

The following section presents numerous public health indicators and goals for 2020 organized into seven thematic chapters:

- ◆ Family Planning
- ◆ Maternal and Infant Health
- ◆ Alcohol and Drugs
- ◆ Morbidity
- ◆ Mortality
- ◆ East Slope Indicators
- ◆ West Slope Indicators

Each focus area presents information in charts, graphs and text to show where we are, and where we aim to be by 2020. This collection of Indicators is intended to provide information for action, the starting point for framing successful public health responses to issues that matter most to people's health.

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INDICATORS/GOALS

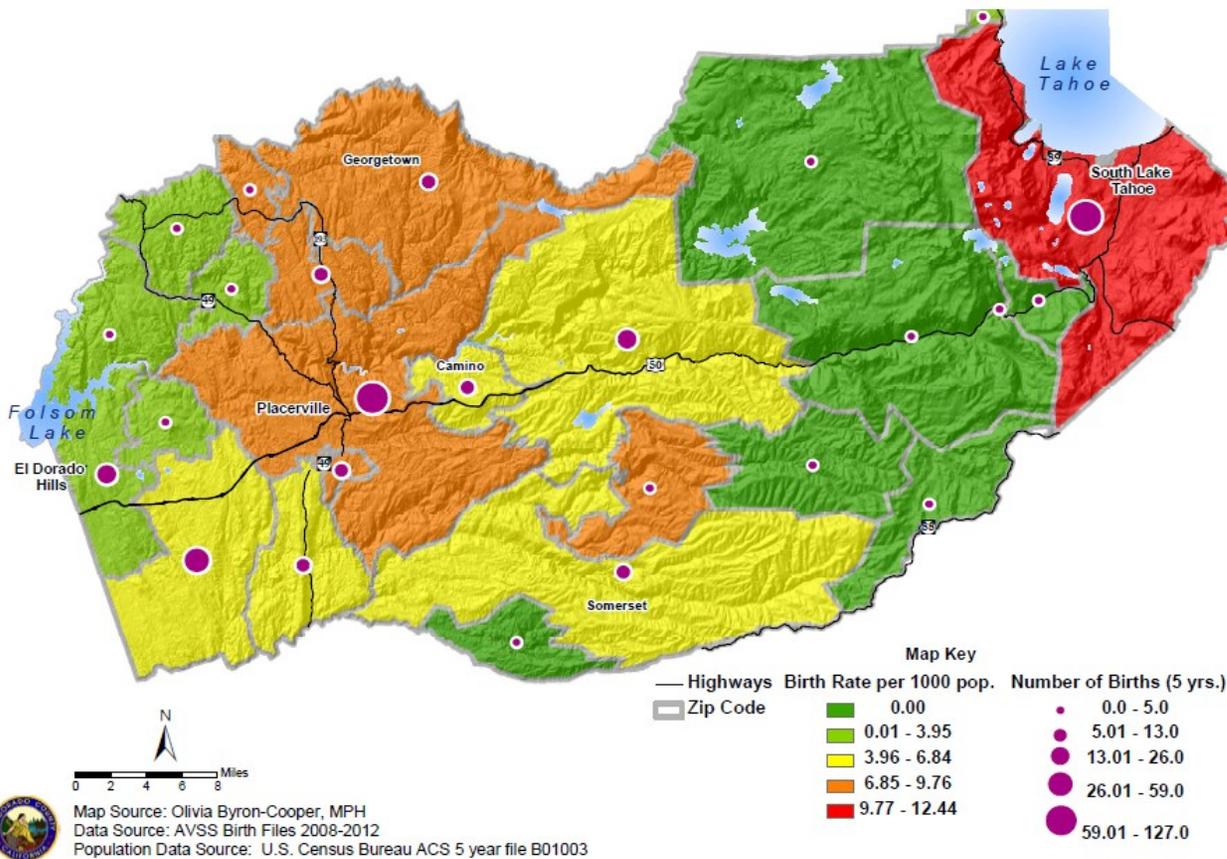
Teen Birth Rate per 1,000 females

El Dorado County	19
California	37
HP 2020 Goal	36.2

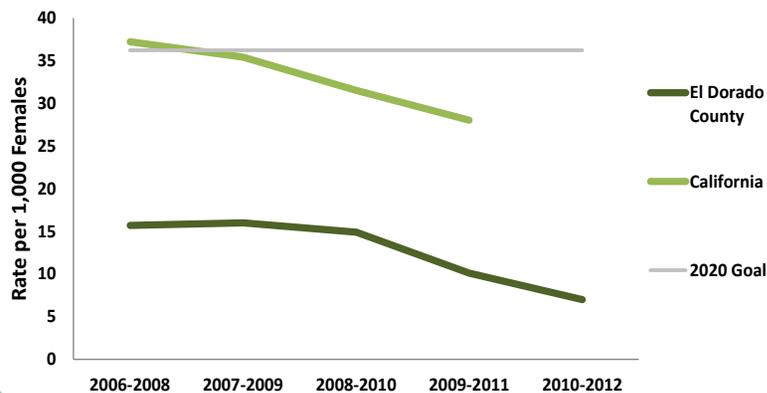
Percentage of Males and Females who use of Birth Control to Prevent Pregnancy

El Dorado County	72.8
California	61.4

Teen Births in El Dorado County by Zip Code, 2008-2012



Birth Rate per 1,000 Females 15-19 yrs, 3 Year Moving Average



According to the Public Health Institute, In 2010 the estimated annual cost to the taxpayer due to teen pregnancy in El Dorado County was \$1,300,000. The El Dorado County societal cost was estimated at \$6,200,000

INDICATORS/GOALS

Proportion of Pregnant Women who Receive Early and Adequate Prenatal Care

El Dorado County	78.7
California	83.3
HP 2020 Goal	77.9

Domestic Violence Calls for Assistance per 100,000

El Dorado County	731.9
California	450.5

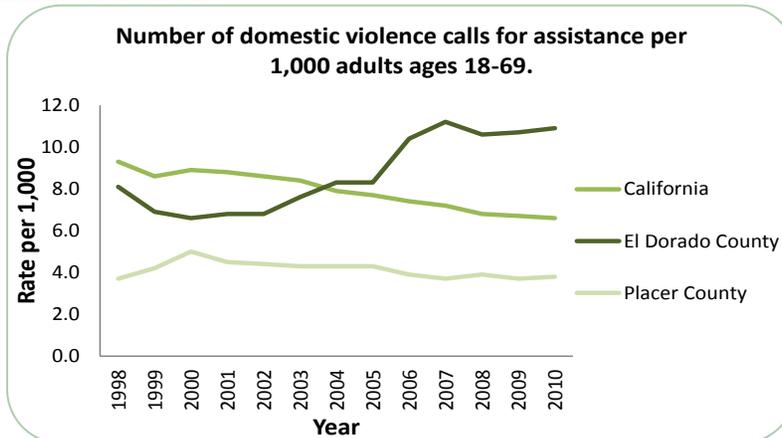
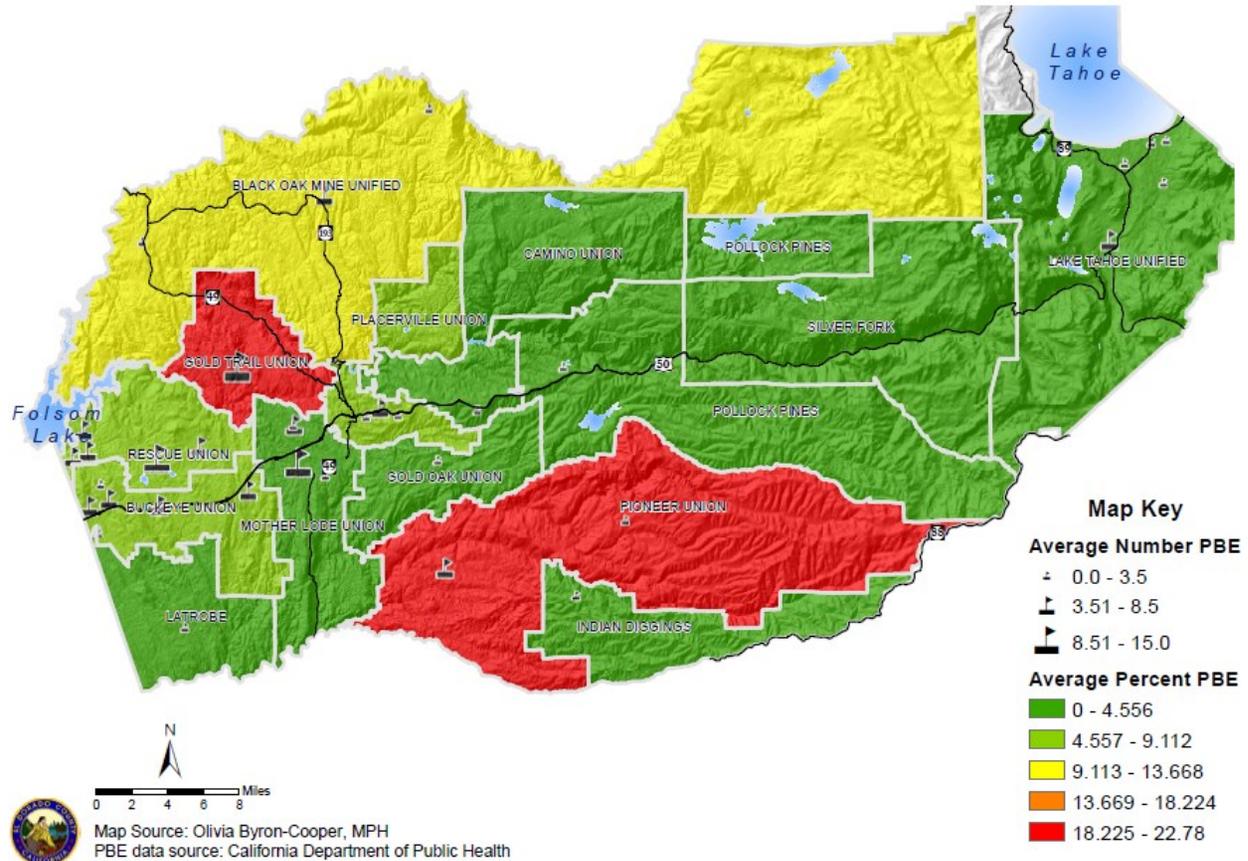
Substance use Hospitalizations per 1,000 Pregnant Females

El Dorado County	41.5
California	14.2

Percentage of Kindergarteners with Personal Belief Exemptions (2012)

El Dorado County	8.19
California	2.79
2015 Goal	7.26

Personal Belief Exemptions in El Dorado County, 2009-2011



Alcohol and Drugs

INDICATORS/GOALS

Percentage of Adults aged 18 and Older who Self-Report Binge Drinking in Past Month (5+ drinks at one time)

El Dorado County	21.6
California	17.6
HP 2020 Goal	24.4

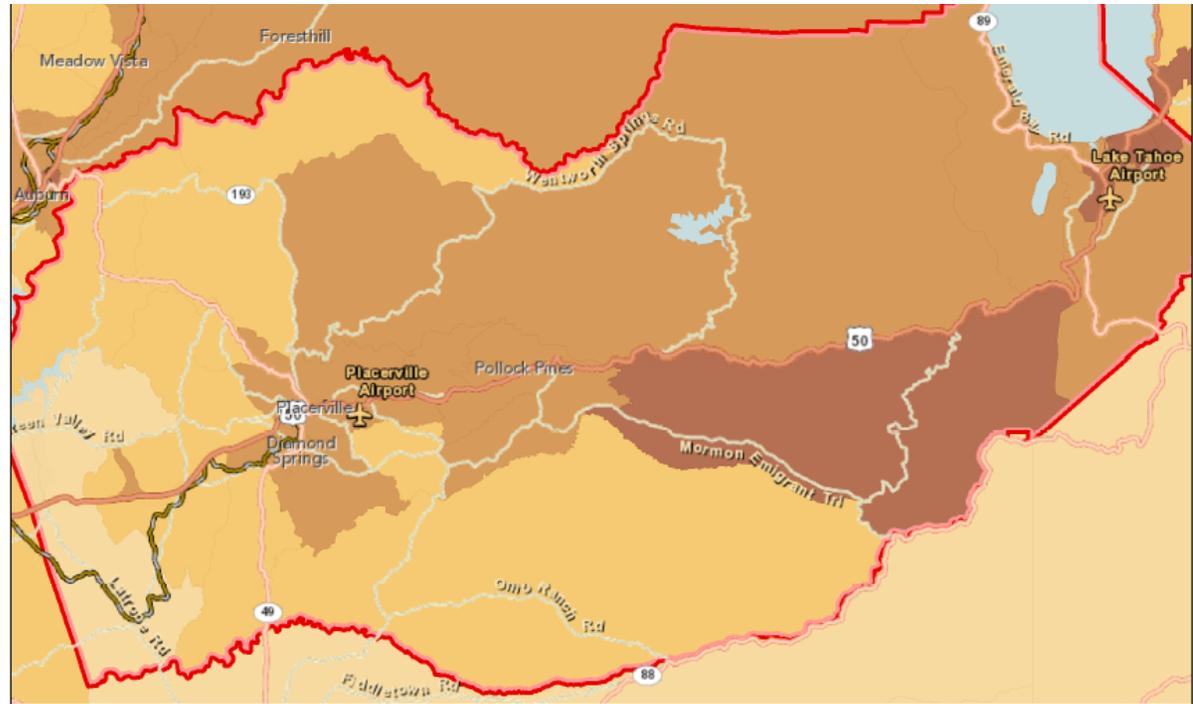
Percentage of Smokers who Attempted to Stop Smoking in Past 12 Months

El Dorado County	38.85
California	57.75
HP 2020 Goal	80.0

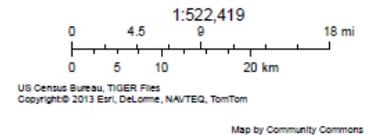
Percentage of Teens who Have Ever Tried Marijuana, Cocaine, Sniffing Glue, Other Drugs

El Dorado County	35.3
California	13.7

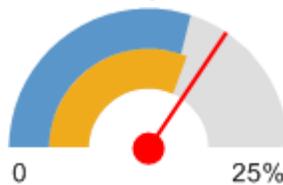
Estimated Expenditures for Alcoholic Beverages Purchased at Home, as a Percentage of Total Household Expenditures, 2011



October 25, 2013



Percent Population Heavily Consuming * Alcohol



	El Dorado County, CA (17.20%)
	California (15.70%)
	United States (15.02%)

* defined as more than two drinks per day on average for men and one drink per day on average for women

Graphic and map from Community Commons

According to the Department of Motor Vehicles, there were 54 fatal or injury crashes in El Dorado County with no record of conviction in 2010. Of those, 46.3% of the drivers were alcohol impaired.

INDICATORS/GOALS

Percentage of Adults Ever Diagnosed with Skin Cancer

El Dorado County	6.9
California	3.3

Age Adjusted Prostate Cancer Incidence Rate per 100,000 pop.

El Dorado County	152.90
California	140.20

Age Adjusted Colon and Rectum Cancer Incidence rate per 100,000 Pop.

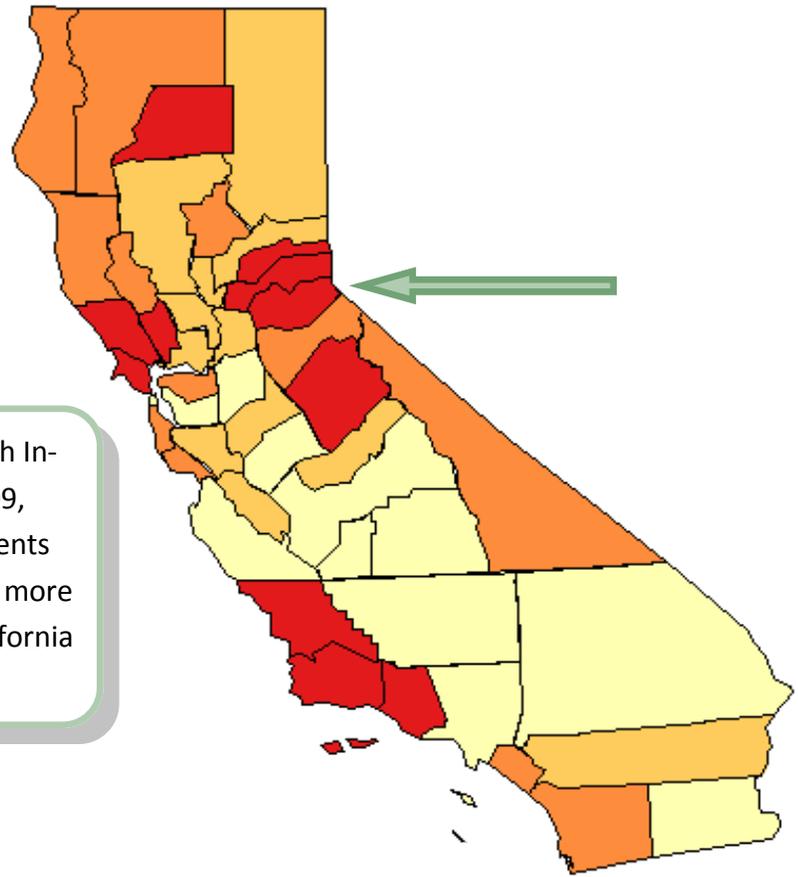
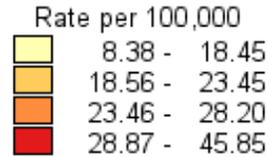
El Dorado County	42.60
California	42.60
HP 2020 Goal	<38.6

Percentage of Individuals with Heart Disease

El Dorado County	5
California	3.37

**Age-Adjusted Invasive Cancer Incidence Rates in California
Melanoma of the Skin, 2006-2010
By County**

Age-Adjusted to the 2000 U.S. Standard Population
California Rate: 20.66



According to the California Health Interview Survey conducted in 2009, 28.8% of El Dorado County residents self report being sunburned 2 or more times compared to 16.8% of California residents.

In 2012, 69.1% of residents in El Dorado County with heart disease stated that their doctors worked with them to develop a heart disease management plan (California Health Interview Survey)

Data accessed November 6, 2013
Based on February 2013 Extract (Released April 10, 2013)
Copyright © 2013 California Cancer Registry

INDICATORS/GOALS

Age Adjusted* Suicide Death Rate per 100,000 Population

El Dorado County	15.25
California	10.05
HP 2020 Goal	10.20

Age Adjusted Motor Vehicle Death Rate per 100,000 Population

El Dorado County	12.09
California	10.06
HP 2020 Goal	12.4

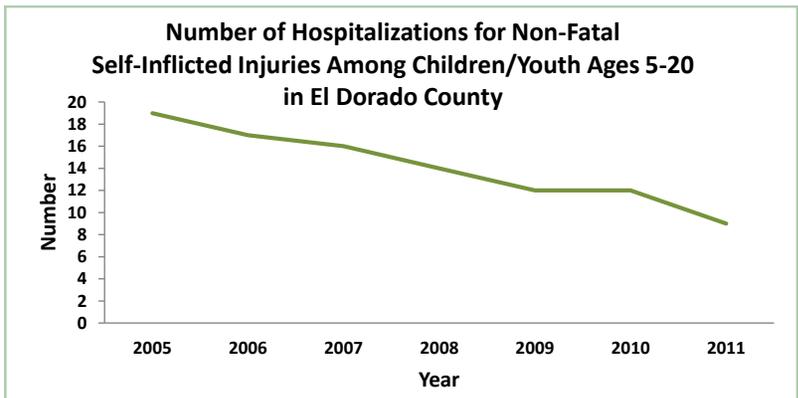
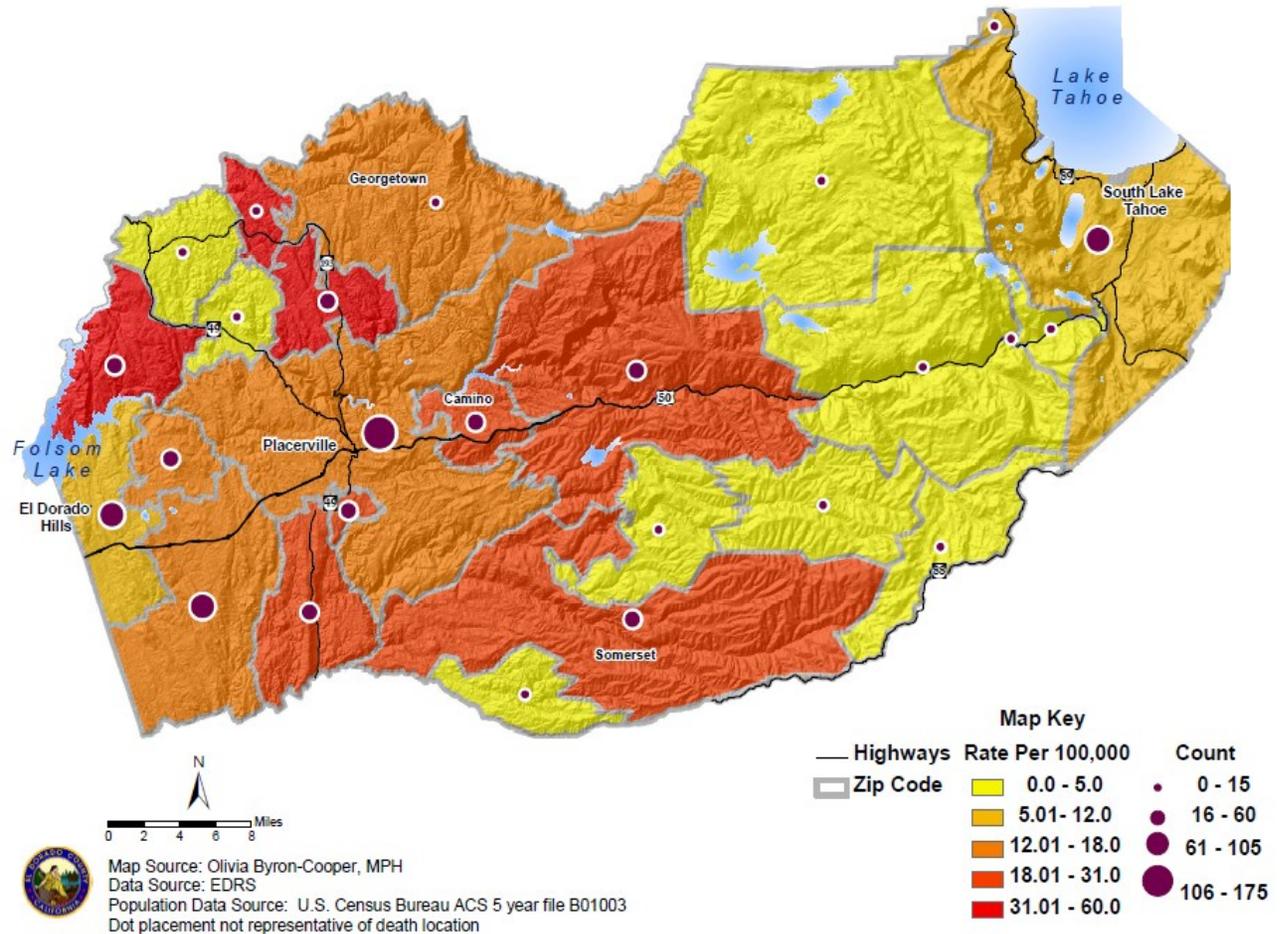
Age Adjusted Unintentional Injury Death Rate per 100,000 Population

El Dorado County	45.55
California	30.20
HP 2020 Goal	36.0

Age Adjusted Lung Disease Death Rate per 100,000 Population

El Dorado County	41.42
California	38.55

Suicide Rates and Counts in El Dorado County by Zip Code, 2008-2012



* Age-adjustment is a statistical process applied to rates of disease, death, injuries or other health outcomes which allows communities with different age structures to be compared.

California Dept. of Public Health, Office of Statewide Health Planning and Development, Patient Discharge Data; CDC, WISQARS (May 2013).

INDICATORS/GOALS

Prostate Cancer (age adjusted death Rate per 100,000)

Primary Service Area	25.5
California	22.2
HP 2020 Goal	21.2

Unintentional Injury (age adjusted death rate per 100,000)

Primary Service Area	47.3
California	30.9
HP 2020 Goal	36.0

Drug Induced Deaths (age adjusted death rate per 100,000)

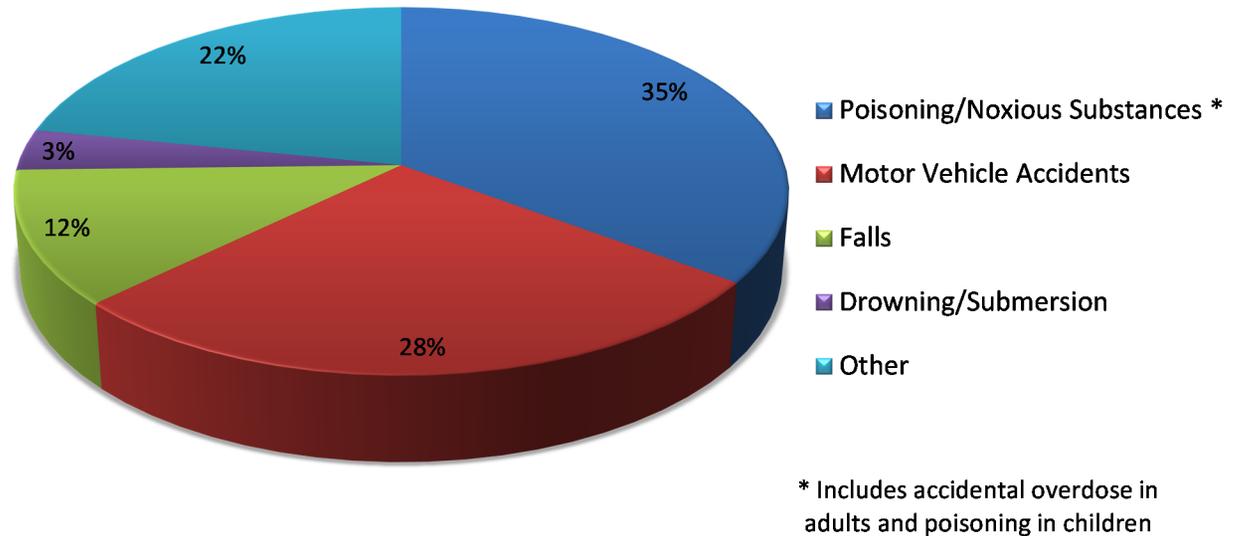
Primary Service Area	17.3
California	11.1
HP 2020 Goal	11.3

Percent Binge Drinker (single occasion 5+ drinks men, 4+ drinks women)

Primary Service Area	28.6
California	15.8
HP 2020 Goal	24.3

Leading Causes of Accidental Death

Primary Service Area, 2006-2008



Source: CDC WONDER Online Query System

According to the 2012 Professional Research Consultant survey conducted in the primary service area, 57% of men aged 18-39 consider themselves binge drinkers.

All indicators for the East Slope come from the 2012 Professional Research Consultants Community Needs Assessment report. The study area for the survey effort (referred to as the "Primary Service Area" in this report) includes these residential ZIP Codes: 95375, 95721, 95735, 96150, 96155, 96156, 96158, 89413, 89448 and 89449. This community definition was determined because >80% of Barton's patients (excluding tourists) originate from this area.

West Slope Specific Indicators

Priority health needs for the Marshall Medical Center Health Service Area:

1. Access to primary and preventive services
2. Limited mental health services; lack of access to mental health services
3. Lack of access to specialty and follow up care
4. Lack of access to inpatient and outpatient substance abuse treatment
5. Limited transportation options
6. Lack of access to dental care
7. Lack of coordination of care among providers; no case management services
8. Limited or no nutrition literacy/ access to healthy and nutritious foods, food security
9. Lack of safe and/or affordable places to exercise
10. Perceptions of limited cultural competence in health care and related systems

All indicators for the West Slope come from the 2013 Valley Consultants Community Needs Assessment report. In this report, five communities of concern were identified that have a high vulnerability to poor health outcomes. The areas of concern on the Western Slope are:

Community	Zip Code	Population
Diamond Springs	95619	4842
El Dorado	95623	3806
Georgetown	95634	3232
Placerville	95667	36726
Pollock Pines	95726	8842

For all tables, the values in bold are those which meet or exceed any of the reported benchmarks or comparison rates.

	Zip Code	Mortality	ED Visits	Hospitalizations
Heart Disease Rates per 10,000	95619	22.2	136.3	187.2
	95623	12.8	144.2	156.1
	95634	18.5	87.9	98.9
	95667	22.3	123.4	127.1
	95726	18.2	102.8	157.6
	El Dorado County	11.5	113.3	111.2
	California	11.5	93.1	218.4
	HP 2020	10.1	--	--

Zip Code Key:

Community	Zip Code	Population
Diamond Springs	95619	4842
El Dorado	95623	3806
Georgetown	95634	3232
Placerville	95667	36726
Pollock Pines	95726	8842

	Zip Code	ED Visits	Hospitalizations
Substance Abuse Rates per 10,000	95619	747.0	347.7
	95623	620.8	243.6
	95634	433.5	206.0
	95667	504.8	206.5
	95726	567.2	269.3
	El Dorado County	442.3	158.8
	California	232.0	143.8

	Zip Code	ED Visits	Hospitalizations
Hypertension Rates per 10,000	95619	616.1	460.2
	95623	485.6	385.2
	95634	372.6	325.9
	95667	458.8	329.4
	95726	425.2	403.6
	El Dorado County	392.6	301.1
	California	365.6	380.9

	Zip Code	ED Visits	Hospitalizations
Chronic Obstructive Pulmonary Disease (COPD), Asthma, and Bronchitis Rates per 10,000	95619	629.0	374.3
	95623	454.0	310.6
	95634	260.7	239.5
	95667	389.5	255.4
	95726	393.1	301.4
	El Dorado County	282.3	187.5
	California	202.3	156.8

	Zip Code	ED Visits	Hospitalizations
Self –Inflicted Injury Rates per 10,000	95619	26.3	5.1
	95623	12.1	5.6
	95634	5.6	7.9
	95667	8.4	4.6
	95726	16.9	2.5
	El Dorado County	10.7	3.9
	California	7.9	4.3

DATA SOURCES

Indicator	Source	Years used	Web Address
Teen birth rate per 1,000 females	County Health Rankings and Roadmaps	2004-2010	http://www.countyhealthrankings.org/app#/california/2013/eldorado/county/outcomes/overall/snapshot/by-rank
Use of birth control to prevent pregnancy	AskCHIS	2003	http://healthpolicy.ucla.edu/CHIS/Pages/default.aspx
Proportion of women who receive early and adequate prenatal care	Family Health Outcomes Project	2009-2011	http://familymedicine.medschool.ucsf.edu/fhop/
Rate of domestic violence calls	RAND	2009-2011	http://ca.rand.org/stats/
Substance use hospitalizations per 1000 pregnant females	Family Health Outcomes Project	2009-2011	http://familymedicine.medschool.ucsf.edu/fhop/
Rate of deaths ages 15-19	Family Health Outcomes Project		http://familymedicine.medschool.ucsf.edu/fhop/
Percentage of adults aged 18 and over who reported binge drinking in past month	AskCHIS	2005	http://healthpolicy.ucla.edu/CHIS/Pages/default.aspx
Attempted to stop smoking in past 12 months	Community Commons	2010	http://assessment.communitycommons.org/CHNA/Report.aspx?page=5&id=352
Percentage of teens who have ever tried marijuana, cocaine, sniffing glue, other drugs	AskCHIS	2011-2012	http://healthpolicy.ucla.edu/CHIS/Pages/default.aspx
Prostate cancer age adjusted death rate	Barton Community Needs Assessment	2006-2008	http://www.bartonhealth.org/main/community-health.aspx
Unintentional injury age adjusted death rate	Barton Community Needs Assessment	2006-2008	http://www.bartonhealth.org/main/community-health.aspx
Drug induced deaths age adjusted	Barton Community Needs Assessment	2005-2007	http://www.bartonhealth.org/main/community-health.aspx
% Binge Drinker (5+ drinks men, 4+ drinks women)	Barton Community Needs Assessment	2010	http://www.bartonhealth.org/main/community-health.aspx
Age adjusted prostate cancer incidence rate per 100,000	Community Commons	2006-2010	http://assessment.communitycommons.org/CHNA/Report.aspx?page=6&id=614
Age adjusted colon and rectum cancer incidence rate per 100,000	Community Commons	2006-2010	http://assessment.communitycommons.org/CHNA/Report.aspx?page=6&id=612
Heart disease prevalence	Community Commons	2006-2010	http://assessment.communitycommons.org/CHNA/Report.aspx?page=6&id=609
Ever diagnosed with skin cancer (adults)	AskCHIS	2001-2005	http://healthpolicy.ucla.edu/CHIS/Pages/default.aspx
Age adjusted suicide death rate per 100,000	Community Commons	2006-2010	http://assessment.communitycommons.org/CHNA/Report.aspx?page=6&id=629
Age adjusted motor vehicle death rate per 100,000	Community Commons	2006-2010	http://assessment.communitycommons.org/CHNA/Report.aspx?page=6&id=626
Age adjusted unintentional injury death rate per 100,000	California Department of Public Health Vital Records	2011	http://www.apps.cdph.ca.gov/vsq/default.asp

DATA SOURCES CONTINUED

Indicator	Source	Years used	Web Address
Age adjusted lung disease death rate per 100,000	Community Commons	2006-2010	http://assessment.communitycommons.org/CHNA/Report.aspx?page=6&id=654
Heart Disease	Marshall Needs Assessment	Mortality—2010 ED visits and Hospitalizations-2011	https://www.marshallmedical.org/upload/docs/CHNA%20Marshall%20final.pdf
Substance Abuse	Marshall Needs Assessment	2011	https://www.marshallmedical.org/upload/docs/CHNA%20Marshall%20final.pdf
Hypertension	Marshall Needs Assessment	2011	https://www.marshallmedical.org/upload/docs/CHNA%20Marshall%20final.pdf
COPD, Asthma, and Bronchitis	Marshall Needs Assessment	2011	https://www.marshallmedical.org/upload/docs/CHNA%20Marshall%20final.pdf
Self Inflicted Injury	Marshall Needs Assessment	2011	https://www.marshallmedical.org/upload/docs/CHNA%20Marshall%20final.pdf