

# COMMUNITY HEALTH ASSESSMENT



COUNTY OF SAN LUIS OBISPO  
HEALTH AGENCY  
PUBLIC HEALTH DEPARTMENT

JULY 2018

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# WELCOME

The power of data to guide actions toward improving community health is immense.

Accurate, relevant information helps us determine how to most effectively direct limited resources and where to find assets we can leverage to make positive change. It helps us understand who is most vulnerable to health threats and what demands most need our attention.

For these reasons and more, we are pleased to share this community health assessment with you. This report will serve as a resource for all of us who are working to promote health and wellness in San Luis Obispo County.

The assessment paints a point-in-time picture of the health status of the county and highlights the important social, economic, and health conditions that face our community. For those interested in specific issues, the report offers details on our local context, as well as state and national comparisons.

We hope this report will provide a powerful launching point for realistic, well-informed conversations and actions to improve the health of our community. We look forward to working alongside local leaders—from community organizations to academia, philanthropy, government, and business—to use this assessment in working toward our shared goals.

Together, we can use this data to inform our pursuit of a stronger, healthier San Luis Obispo County.

To Health,



Penny Borenstein, MD, MPH  
Health Officer / Public Health Director  
County of San Luis Obispo



*photo credit: William Rumbler*



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# INTRODUCTION

A community health assessment is both a process and a product. It is the process of gathering a broad range of information from many diverse sources in order to understand important trends and factors influencing the health of the community. As a product, it reports the information gathered through that process. It is also about sharing that information and using it to develop strategies to improve the health of the community.

## Two-Part Planning Effort

The County of San Luis Obispo Public Health Department is working with community partner organizations on a two-part planning effort to improve the health of San Luis Obispo County residents. The Community Health Assessment report represents the first part of that collaborative effort: identifying the health issues of the county and their larger context. The Public Health Department and community partners then use the community health assessment to inform discussions and identify priority areas for part two of the collaborative effort: a community health improvement plan.

## Collaborative Process

In January 2017, the Public Health Department reached out to partner organizations to discuss participating in a community health assessment based on the framework and standards established by the Public Health Accreditation Board. In all, close to 200 individual residents provided information or actively participated in the development of the community health assessment. This included community stakeholders and representatives of organizations across multiple sectors.

The Public Health Department engaged participants through surveys, meetings, workshops, and focus groups to gauge their perceptions of the community's health, areas for health improvement, factors that contribute to health challenges, and existing community resources available to improve health. See Appendix 2: Methods of Data Collection for a list of local organizations that participated in the community health assessment, as well as a summary of comments submitted by partners on a draft of this report.

## Scope of the Assessment

How a community defines health influences what is included in a community health assessment. This community has defined health broadly in recognition of the range of factors that can influence the community's health. These factors include clinical care issues such as access to medical services; behaviors such as diet and exercise; social and economic factors such as housing and employment opportunities; and parts of the physical environment such as water and air quality.

Community stakeholders and representatives from multi-sector organizations selected the following nine priority areas to include in the assessment:

- Social Determinants of Health
- Access to Health Care
- Maternal, Child & Adolescent Health
- Infectious Disease
- Chronic Disease
- Health Behaviors
- Injuries
- Social & Emotional Wellness
- Environment

These nine priority areas include 37 specific health indicators.

This community health assessment is organized as a reference document. Readers can quickly navigate to any of nine health categories or directly to one of the 37 health indicators. Indicators are based on Healthy People 2020, a set of science-based, 10-year national objectives for improving the health of all Americans, and on factors either unique to this region or of noted interest to community members (depending on data availability, reliability, and validity). In addition to relevant statistical data, the report addresses the impact and context for each indicator. For those who want to dive deeper, a comprehensive catalogue of indicators is available in Appendix 4: Indicators at a Glance. In addition, the SLO Health Counts data hub ([www.SLOHealthCounts.org](http://www.SLOHealthCounts.org)) serves as a complementary resource to this report.

The report is informed by primary data from the Public Health Department and secondary data from national, state, and other local sources. While broad in scope, the report does not focus deeply on any one indicator. Some indicators which merited examination are not addressed in the report due to data limitations and information gaps. Due to the relatively small population size of San Luis Obispo County, data may be grouped in multiple years when working with statistically small sample sizes. Please see Appendix 2: Methods of Data Collection for a further description of how and what information was collected and analyzed for the community health assessment.

The report includes perspectives and insights from residents across San Luis Obispo County, including those who are part of neighborhood organizations, schools and colleges, advocacy groups, nonprofits, community clinics, employers, hospitals, law enforcement organizations and the faith community, as well as community members who have been traditionally underrepresented. Together, these voices provide important insights into many of the broad array of issues, assets and concerns that shape a community's health.

The community health assessment also looks at the capacity of the public health system to provide essential public health services, which are the fundamental framework for activities that protect and promote the health and well-being of communities. A community's existing capacity to support residents' well-being is also relevant. This includes formal elements of the public health system (such as clinics), services provided by businesses and community groups,

and natural assets such as open space for physical activity. Please see Appendix 3: Health Assets and Resources for a map of the physical assets, such as parks, clinics, and fresh food markets, community partners identified as supporting health.

## Highlights

In this report, many readers will find information significant to their areas of interest or concern. Among the findings, several stand out as especially notable.

Areas of strength:

- **Lower rate of diabetes:** The rate of adults with diabetes in San Luis Obispo County is nearly half the national rate. 5.6 percent of local adults have diabetes, compared to 9.3 percent statewide and 10.5 percent nationwide.
- **Higher rate of breastfeeding initiated at birth:** In San Luis Obispo County, 97.6 percent of mothers initiated breastfeeding in the hospital in 2016, higher than the national and state averages, and higher than the Healthy People 2020 goal of 81.9 percent.
- **Lower rate of teen births:** The teen birth rate is 14.1 per 1,000, compared to 21 per 1,000 statewide and the Healthy People 2020 target of 36.2 per 1,000.

Areas for improvement:

- **Insufficient access to Denti-Cal Providers:** The ratio of Denti-Cal providers to beneficiaries has been classified by the state as below standard. Denti-Cal patients report waiting months for critical dental care.
- **High rate of teens who consider suicide:** 18 percent of eleventh graders surveyed had seriously considered suicide in the past 12 months. This rate is similar to the state average.
- **Insufficient affordable housing:** Only 15.4 percent of homes for sale in San Luis Obispo County are affordable for median-income families. Most renters spend more than one-third of their income on housing.

## Health Equity

The ultimate aim of health improvement planning is not only to achieve goal-driven health measures for the population as a whole, but also to ensure all residents are equally able to benefit from this achievement. This means eliminating health disparities based on poverty, employment, education, race, ethnicity, urban or rural location, and other such factors.

The indicators in this report show measures or patterns of health attainment for the population of San Luis Obispo County as a whole. In the context of a community that often compares favorably to state and national indicators, it is critical to recognize that these measures may vary significantly for sub-groups within that whole. In some cases, it is possible that positive overall patterns—an indicator showing improvement over time, for example—may mask challenges or unfavorable outcomes for a particular population or group.



*photo credit: Paula Moreno*

Using data to identify such disparities is a valuable part of health improvement planning. In some cases where data is available, the indicators highlight patterns for sub-groups (such as residents who primarily speak Spanish) as well as the population as a whole. In a county of this size, however, meaningful data sources and statistical tools focused on health equity are often limited or unavailable. That makes it all the more important to consider possible health equity implications when reviewing the data and charting health improvement efforts.

## Adverse Childhood Experiences

As communities work toward health equity, researchers are seeking to understand the factors that shape health outcomes over a lifetime. A growing body of research points to adverse childhood experiences (ACEs) as among those key factors. While the first study connecting ACEs with health outcomes was published nearly 20 years ago, this connection is only more recently emerging as a valid and powerful factor in understanding health.

Research on ACEs shows a strong link between childhood trauma and chronic disease in adults, including physical as well as social and emotional problems. The predictive value of an ACEs “score” (the degree of trauma experienced as a child) has been shown to remain valid regardless of other socioeconomic or ethnic indicators. The related practice of trauma-informed care aims to mitigate the effect of ACEs on long-term health outcomes.

Because this field is only recently gaining prominence, local ACEs data is not available for this report. It will be critical to maintain a keen lens on the ACEs construct as health improvement planning continues in years ahead, and in particular to consider ways the community may deploy trauma-informed care to help ensure every child has the opportunity to become a healthy adult.

## Next Steps

The findings in this report helped inform discussion at a February 2018 convening of stakeholders and community leaders. The purpose of the convening was to begin to establish goals and strategies to achieve collective impact through a five-year plan for countywide health improvement. Convening participants worked on identifying common goals, developing strategies for improvement, identifying opportunities to amplify and support each other’s work, and creating or enhancing meaningful partnerships. The Community Health Improvement Plan (CHIP) is now under development and is expected to follow shortly on the heels of this Community Health Assessment.

“Our county has significant health assets, from beautiful natural resources to the dedicated people working on the ground every day to support our health. But we still face real challenges to ensuring everyone in San Luis Obispo County has the opportunity to be healthy.”

~ Dr. Penny Borenstein, Health Officer

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# DEMOGRAPHICS

## Geography

San Luis Obispo County is located along the Pacific Coast, approximately 200 miles north of Los Angeles and 235 miles south of San Francisco. It is one of California's 27 original counties created in 1850. The county includes seven cities, though most of the county's 3,326 square miles are unincorporated. The majority of residents live along the coast or along the corridor of Highway 101. The eastern region is sparsely populated with vast areas of agricultural and undeveloped government lands between small, unincorporated towns. Key industries in the county include tourism, education, energy, agriculture and government.

The county has four distinct geographic regions—North Coast, North County, San Luis Obispo, and South County—all of which have distinct characteristics, population densities, age groupings and other features.

## Population

San Luis Obispo County had a total population of 277,977 in 2016.<sup>1</sup> With a population of 46,117, the City of San Luis Obispo is the largest city in the county; it is also the county seat.<sup>2</sup> The population density of the county, estimated at 81.7 persons per square mile, is less than the average population density of the state (239.1 persons per square mile) and the nation (87.4 persons per square mile).<sup>3</sup>

## Age

Age patterns in a community have important implications for disease patterns and demand for health care services. They also can have important impacts on the economy and workforce.

In San Luis Obispo County, residents under the age of 20 account for a relatively smaller share of the population (23.1 percent)

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1 California Department of Finance. (2017). E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2017 with 2010 Census Benchmark. [www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5](http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5).

2 California Department of Finance. (2016). Reports and Periodicals.

3 U.S. Census Bureau. (2017). QuickFacts on San Luis Obispo County, California and the United States. <https://www.census.gov/quickfacts/fact/table/sanluisobispocountycalifornia,CA,US/PST045217>.

compared to the state (26.4 percent).<sup>4</sup> Regional analysis reports this number has been falling in recent years, alongside a loss of early- to mid-career population (ages 30 to 44).<sup>5</sup>

On the other hand, seniors account for a relatively higher share of the population as compared to the state. Those over the age of 60 accounted for nearly one-quarter of the population in San Luis Obispo County (24.5 percent), compared to the state (18.3 percent).<sup>6</sup> Regional analysis reports that this number has been continuing to increase in recent years.<sup>7</sup>

## Race/Ethnicity

The majority of residents (69.2 percent) identify as white, followed by 22.3 percent as Hispanic/Latino, 3.9 percent as Asian and 2.0 percent as African American.<sup>8</sup> In a comparison of race/ethnicity make-up, San Luis Obispo County has a higher percentage of non-Hispanic white residents compared to the state of California (37.7 percent), and a lower percentage of Hispanic/Latino, African American and Asian individuals compared to the state of California.

## Language

Residents who do not speak English can face linguistic difficulties and barriers in many areas, including health. These barriers are most common among households that are in “linguistic isolation,” which the U.S. Census Bureau defines as a household in which no member 14 years old or older speaks English “very well.” It is important to recognize and accommodate non-English speaking residents as they may require additional support in outreach, health education, and service delivery from health providers. In San Luis Obispo County, 3.5 percent of all households report being linguistically isolated.<sup>9</sup>

Eighty-three percent of residents of San Luis Obispo County speak English as the primary language in their household, and over 13 percent speak Spanish as their primary language. Over 20 percent of Paso Robles residents speak Spanish at home. Roughly two percent of county residents speak Chinese or Tagalog, and another two percent speak other Indo-European languages.<sup>10</sup>

4 U.S. Census Bureau. (2017). American Community Survey 2012-2016 5 Year Estimates. Table B01001: Sex by Age. [https://factfinder.census.gov/bkml/table/1.0/en/ACS/16\\_5YR/B01001/0400000US06|0500000US06079](https://factfinder.census.gov/bkml/table/1.0/en/ACS/16_5YR/B01001/0400000US06|0500000US06079).

5 San Luis Obispo Council of Governments (SLOCOG). (2017). 2050 Regional Growth Forecast for San Luis Obispo. [www.slocog.org/programs/data-services/regional-growth-forecast](http://www.slocog.org/programs/data-services/regional-growth-forecast).

6 U.S. Census Bureau. (2017). 2012-2016 American Community Survey 5-Year Estimates. Table B01001: Sex by Age. [https://factfinder.census.gov/bkml/table/1.0/en/ACS/16\\_5YR/B01001/0400000US06|0500000US06079](https://factfinder.census.gov/bkml/table/1.0/en/ACS/16_5YR/B01001/0400000US06|0500000US06079).

7 San Luis Obispo Council of Governments (SLOCOG). (2017). 2050 Regional Growth Forecast for San Luis Obispo. [www.slocog.org/programs/data-services/regional-growth-forecast](http://www.slocog.org/programs/data-services/regional-growth-forecast).

8 U.S. Census Bureau. (2017). QuickFacts on San Luis Obispo County, California and the United States. <https://www.census.gov/quickfacts/fact/table/sanluisobispocountycalifornia,CA,US/PST045217>.

9 U.S. Census Bureau. 2010-2014 American Community Survey 5-Year Estimates. <https://factfinder.census.gov>.

10 U.S. Census Bureau. 2010-2015 American Community Survey 5-Year Estimates. <https://factfinder.census.gov>.



### San Luis Obispo County Regions



County Regions	
North Coast	Baywood, Cambria, Cayucos, Harmony, Los Osos, Morro Bay, Ragged Point and San Simeon
North County	Atascadero, Bee Rock, California Valley, Camp Roberts, Cholame, Creston, Heritage Ranch, Lake Nacimiento, Oak Shores, Paso Robles, Pozo, Klau, San Miguel, Santa Margarita, Shandon and Templeton
San Luis Obispo	City of San Luis Obispo
South County	Avila Beach, Arroyo Grande, Halcyon, Grover Beach, Nipomo, Oceano, Pismo Beach and Shell Beach

### Population by Jurisdiction, San Luis Obispo County

Jurisdiction	Population
Arroyo Grande	17,731
Atascadero	30,879
Grover Beach	13,397
Morro Bay	10,722
Paso Robles	31,398
Pismo Beach	8,181
San Luis Obispo	46,117
Unincorporated Areas	119,552
<b>Total</b>	<b>277,977</b>

Source: California Department of Finance, 2016.

## SocioNeeds Index

The SocioNeeds Index is a measure of socioeconomic need that is correlated with poor health outcomes. This tool, developed by Conduent Healthy Communities Institute and made available on the SLO Health Counts data hub ([www.SLOHealthCounts.org](http://www.SLOHealthCounts.org)), provides a snapshot of how current socioeconomic needs vary within San Luis Obispo County.

All ZIP codes in the U.S. are given an index value from 0 (low need) to 100 (high need). For example, a ZIP code with an index value of 50 would be average, as compared with the rest of the country. To help identify areas of highest need within the community, ZIP codes are ranked from 1 to 5 based on their index value, color-coded and displayed on an interactive map at [www.SLOHealthCounts.org](http://www.SLOHealthCounts.org).

This index combines multiple socioeconomic indicators into a single composite value. As a single indicator, the index can serve as a concise way to explain which areas are of highest need. The index is calculated from six indicators, one each from the following topics: poverty, income, unemployment, occupation, education, and language. The indicators are weighted to maximize the correlation of the index with premature death rates and preventable hospitalization rates.

In San Luis Obispo County, areas ranked as having highest need include the campus of California Polytechnic State University (Cal Poly), likely because of comparatively low student income and employment rates, and portions of Oceano, San Miguel, and Shandon. Conversely, areas ranked as having the lowest need include portions of Shell Beach, Cayucos, Harmony, Arroyo Grande, and Creston. See map on page 10 for more detail.

## Populations with Special Needs

Disabled individuals comprise a vulnerable population that requires targeted services and outreach by community and health care providers. Underemployment and poverty are also major problems facing individuals with disabilities.

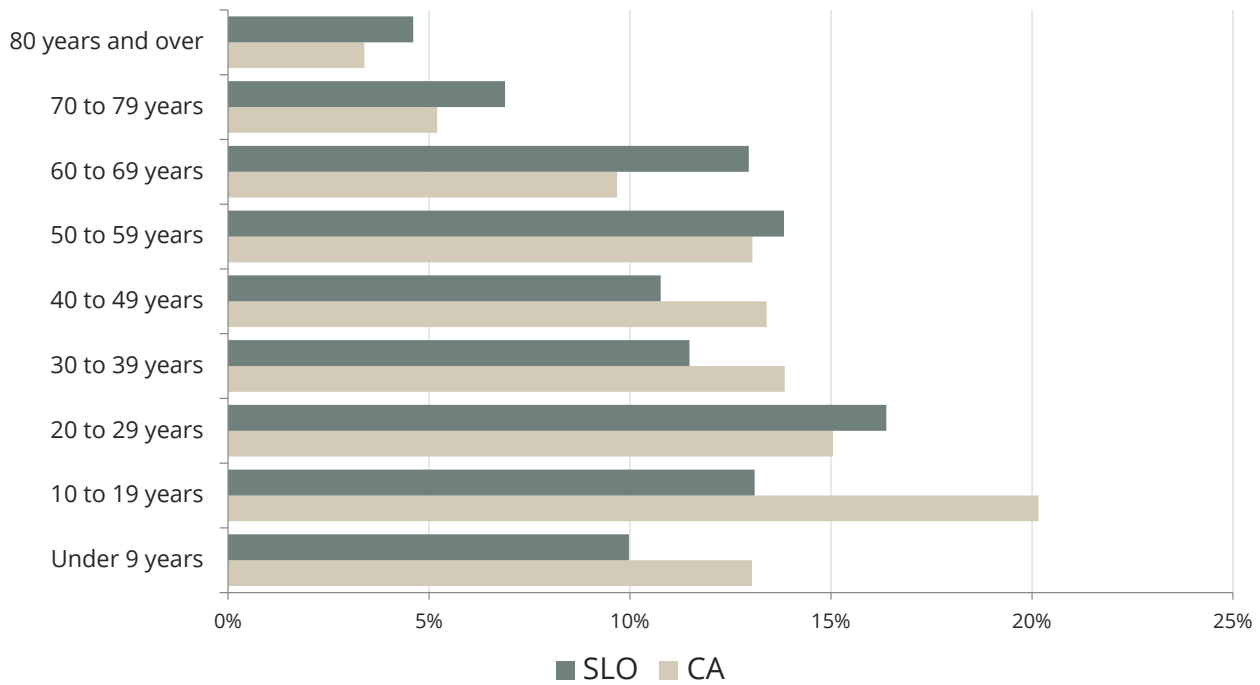
According to the Centers for Disease Control and Prevention (CDC), more than 50 million people (approximately 20 percent of the population) in the U.S. have a disability, and, of those, more than 34 million (>12 percent) live with a severe disability.

In San Luis Obispo County, 25.6 percent have a disability.<sup>11</sup> These are individuals who are limited in any activity because of physical, mental, or emotional problems.

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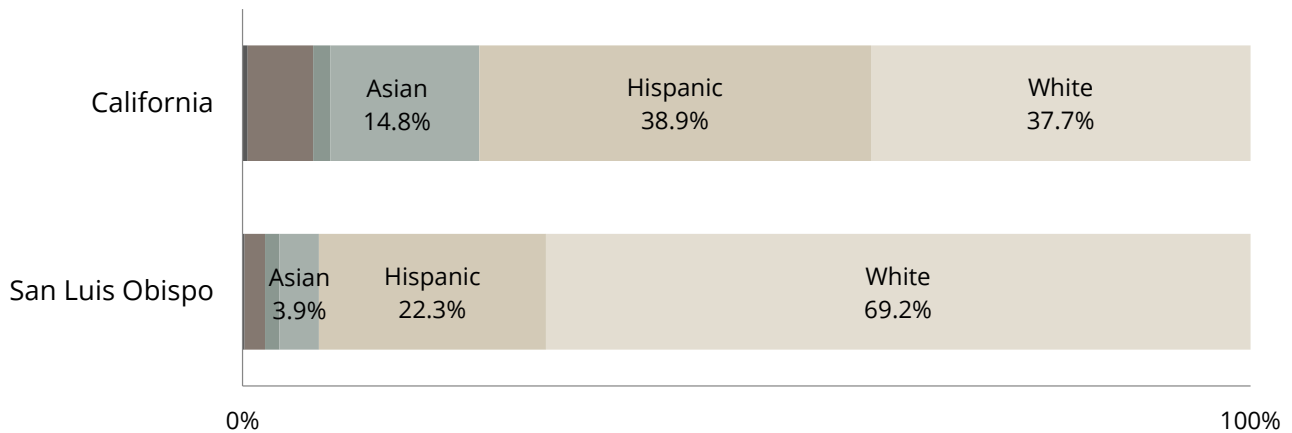
11 UCLA Center for Health Policy Research. AskCHIS. 2014-2016 Pooled average. Disability status due to physical, mental or emotional condition: Adults. (San Luis Obispo County). <http://ask.chis.ucla.edu>.

### Age Distribution, San Luis Obispo County and California



Source: American Community Survey 2012-2016 5 Year Estimates. Table B01001: Sex by Age.

### Population Race and Ethnicity, San Luis Obispo County and California



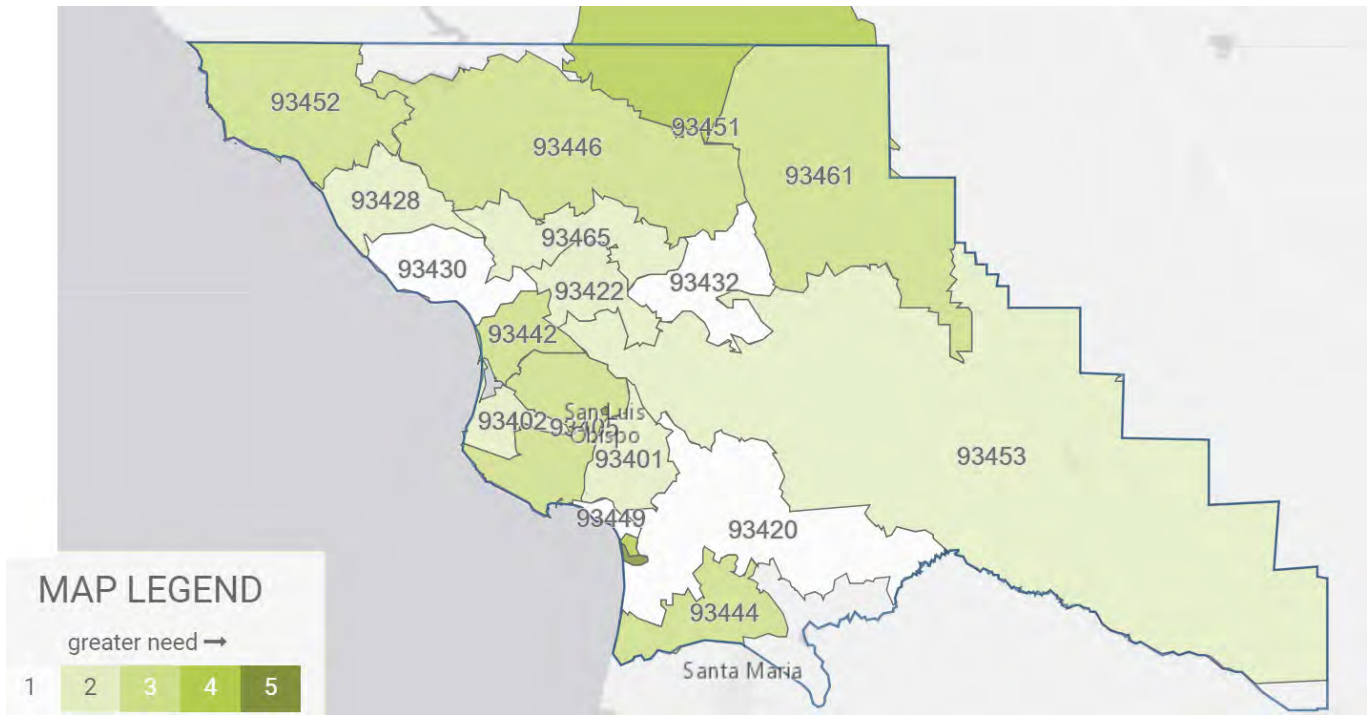
Source: American Community Survey 2012-2016 5-Year Estimates.

### Households by Type, San Luis Obispo County

Household Type	Percent
Nonfamily Households	36.9%
Family Households	63.1%
Married-Couple Family	50.1%
Female Householder Family	8.8%
Male Householder Family	4.2%

Source: U.S. Census Bureau, 2010-2015 American Community Survey, 1-Year Estimates.

SocioNeeds Index, San Luis Obispo County, 2018



Source: Conduent Healthy Communities Institute, available at [www.slohealthcounts.org](http://www.slohealthcounts.org)

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# SOCIAL DETERMINANTS OF HEALTH

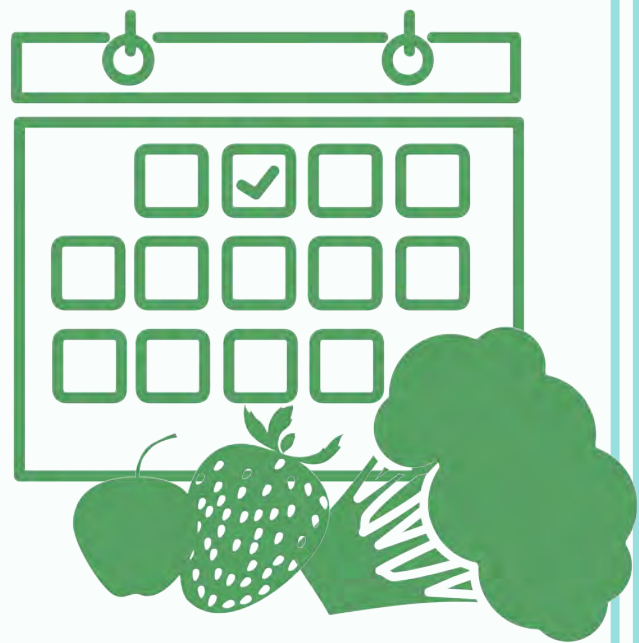


*photo credit: Sarah Trauger*

### **Good News Spotlight**

#### **CalFresh Alliance: Progress on Food Security through Collaboration**

*The San Luis Obispo County CalFresh Alliance came together in 2015 with a clear goal: to increase participation in CalFresh among residents. Together, partners from multiple sectors work to make it easier for residents to enroll in CalFresh—and stay enrolled if needed. While big-picture data on enrollment trends will not be available for several years, specific changes are already making a difference for people in need of food assistance. One simple yet powerful example is same-day enrollment. Thanks to this effort, residents who qualify can complete their enrollment and purchase nutritious food the same day they apply.*



# SOCIAL DETERMINANTS OF HEALTH

Health is about more than just medical care. Safe affordable housing, clean drinking water, healthy affordable food, access to education and employment that offers a livable wage are essential components for living a healthy life; all of these factors affect the overall health of the community. Policies recognizing that there is more to health and well-being than health care alone contribute to a flourishing society. Increased health contributes to increased productivity, a more efficient workforce, and reduced expenditure on health care services.

Recent studies examining diseases in the context of social conditions are generating a better understanding of how poverty, neighborhood violence, substandard housing conditions, family instability, and other stresses can contribute to illnesses, like asthma, high blood pressure and others. The research is not only leading to a more accurate understanding of why health patterns vary along class and racial lines, but why anti-poverty efforts, even more than medication, offer the most promise for healthier communities.<sup>12</sup>

## Educational Attainment

### *Why this Matters*

Research suggests that educational attainment is one of the strongest predictors of health.<sup>13</sup> More education is consistently associated with greater earning potential, higher life expectancy, and lower levels of certain chronic and infectious diseases. Completion of formal education is a key pathway to employment and access to healthier and higher paying jobs that can provide food, housing, transportation, health insurance, and other basic necessities for a healthy life.<sup>14</sup>

12 Unnatural Causes Website: THE BIGGEST ASTHMA TRIGGER OF THEM ALL? New studies indicate how poverty itself is inflammatory. [www.unnaturalcauses.org/assets/uploads/file/Chen\\_percent20and\\_percent20asthma\\_percent20article.pdf](http://www.unnaturalcauses.org/assets/uploads/file/Chen_percent20and_percent20asthma_percent20article.pdf).

13 Freudenberg N, Ruglis J. (2007). Reframing school dropout as a public health issue. *Prev Chronic Dis* 2007;4(4). [https://www.cdc.gov/pcd/issues/2007/oct/07\\_0063.htm](https://www.cdc.gov/pcd/issues/2007/oct/07_0063.htm).

14 Robert Wood Johnson Foundation. (2013). Why Does Education Matter So Much to Health? [www.rwjf.org/content/dam/farm/reports/issue\\_briefs/2012/rwjf403347](http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2012/rwjf403347).

### *In San Luis Obispo County*

San Luis Obispo County has a higher percentage of residents who have their high school diploma (90.1 percent) compared to the state (82.1 percent).<sup>15</sup> The county also has a higher percentage of residents with a Bachelor's degree or higher (34.1 percent) compared to the state (32.0 percent).<sup>16</sup>

In the county, 91.5 percent of students receive their high school diploma within four years of their first enrollment in 9th grade.<sup>17</sup> This meets the Healthy People 2020 goal of 87 percent. In addition, 88 percent of students pass the English-Language Arts section of the California High School Exit Exam (CAHSEE), and 89 percent pass the Math section.<sup>18</sup>

## Housing

### *Why this Matters*

The availability of affordable, safe, stable, quality housing is central to the health of a community. This includes the physical conditions within homes; conditions in the neighborhoods surrounding homes; and housing affordability.

Quality physical conditions within homes protect individuals and families from harmful exposures (e.g. mold, lead, injuries, air pollutants) and provide them with a sense of privacy, security, stability and control, which can impact health. Conditions in neighborhoods (e.g. safe places for play, employment opportunities, low crime, healthy foods, high levels of trust) can also affect an individual's sense of control, stability and stress levels and their exposure to violence. Lastly, affordable housing (when a family spends less than one-third of its income to rent or buy a residence) enables low and moderate income families to put more of their financial resources toward basic necessities, like nutritious food, medical care, and reliable child care.<sup>19</sup>

### *In San Luis Obispo County*

Fifty-nine percent of San Luis Obispo County residents reported spending one-third or more of their household income on housing costs in 2016.<sup>20</sup> Spanish-speaking individuals and renters experienced greater housing challenges, with 86.8 percent of Spanish-speaking individuals spending more than one-third of their income on housing costs (57.1 percent spending over half) and 76.4 percent of renters (versus 47.9 percent of home owners).

In 2015, 2-1-1 San Luis Obispo County, a local information line which links people to safety net services, received 3,473 total calls for assistance. The single greatest request, with 33 percent of call volume, was for housing and utilities.

Among 225 communities in the U.S., San Luis Obispo County ranked as the 6th least affordable

15 U.S. Census Bureau. (2017). 2012-2016 American Community Survey, 5-year estimates. <https://www.census.gov/quickfacts/fact/table/sanluisobispocountycalifornia,CA,US/IPE120216#viewtop>.

16 Ibid.

17 California Department of Education. (2015). Cohort Outcome Data for the Class of 2014-2015, SLO County. <https://dq.cde.ca.gov/dataquest>.

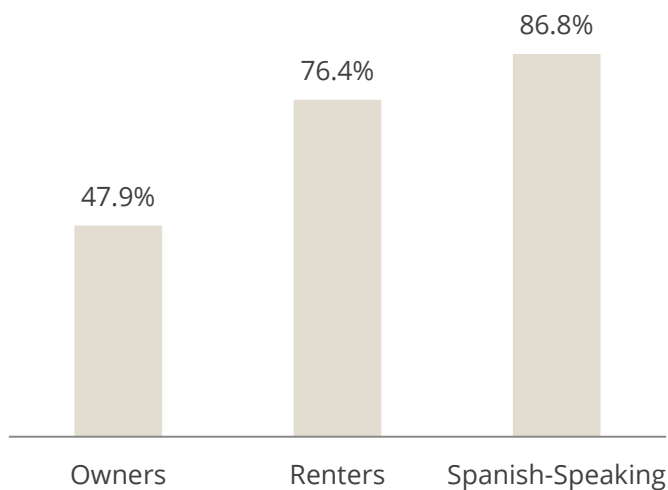
18 California Department of Education. (2015). High School Exit Exam Office; Taken from ACTION for Healthy Communities Vital Signs – Understanding San Luis Obispo County. <http://actionslo.org>.

19 Robert Wood Johnson Foundation. (2011). Housing and Health. [https://www.rwjf.org/content/dam/farm/reports/issue\\_briefs/2011/rwjf70451](https://www.rwjf.org/content/dam/farm/reports/issue_briefs/2011/rwjf70451).

20 ACTION for Healthy Communities. (2016). Vital Signs – Understanding San Luis Obispo County. <http://actionslo.org>.

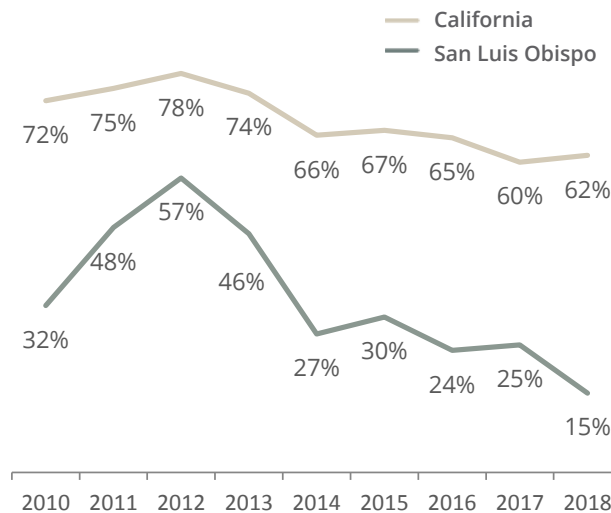


Individuals Spending More than One-Third of Income on Housing, San Luis Obispo County



Source: ACTION for Healthy Communities Telephone Survey, 2016.

Percentage of Homes Affordable for Median-Income Families



Source: National Association of Home Builders, 2016.

National Affordability Rankings: Least Affordable Metro Areas in U.S.

Rank	Metro Area	Homes Affordable for Median Income	Median Family Income	Median Sales Price
1	San Francisco-Redwood City-South San Francisco, CA	9.2%	\$119,600	\$1,260,000
2	Los Angeles-Long Beach-Glendale, CA	9.5%	\$68,000	\$589,000
3	Salinas, CA	10.7%	\$69,100	\$550,000
4	Anaheim-Santa Ana-Irvine, CA	11.9%	\$93,000	\$720,000
5	Santa Cruz-Watsonville, CA	12.2%	\$81,400	\$710,000
<b>6</b>	<b>San Luis Obispo-Paso Robles-Arroyo Grande, CA</b>	<b>15.4%</b>	<b>\$80,600</b>	<b>\$558,000</b>
7	Napa, CA	15.7%	\$88,500	\$635,000
8	San Jose-Sunnyvale-Santa Clara, CA	16.6%	\$125,200	
9	San Diego-Carlsbad, CA	18.6%	\$81,800	\$530,000
10	San Rafael, CA	22.5%	\$139,000	\$975,000
11	Oakland-Hayward-Berkeley, CA	23.5%	\$103,000	\$670,000
12	Oxnard-Thousand Oaks-Ventura, CA	24.8%	\$96,000	\$562,000
13	Santa Maria-Santa Barbara, CA	25.8%	\$79,600	\$549,000
14	Merced, CA	26.6%	\$48,200	\$270,000
15	Stockton-Lodi, CA	28.5%	\$63,700	\$365,000

Source: National Association of Home Builders, Housing Opportunity Index, 2018 First Quarter Report.

area for housing in the first quarter of 2018, a slight improvement from the third least affordable in 2009.<sup>21</sup>

This lack of affordable housing options is compounded by a similarly low number of income-restricted affordable housing units. The county currently has 3,275 income-restricted affordable rental housing units for low- to moderate-income households.<sup>22</sup> These units are dispersed throughout the county and are managed by a network of nonprofit and private entities. The nonprofit housing developers in San Luis Obispo County include the San Luis Obispo Housing Trust Fund, Peoples' Self-Help Housing, Housing Authority of San Luis Obispo, Paso Robles Housing Authority, and Transitions-Mental Health Association (TMHA). Currently, none of these agencies have affordable housing available.

Affordable housing scarcity, alongside a variety of other issues, can lead individuals to become homeless. The 2017 San Luis Obispo County Homeless Point-in-Time Count found 1,125 individuals in San Luis Obispo County who met the HUD definition of homelessness.<sup>23</sup> This represents a decrease of 26 percent from 2015.<sup>24</sup> Of those counted, 780 (69 percent) were unsheltered (sleeping outdoors, on the street, in parks, in vehicles, etc.) and 345 (31 percent) were considered sheltered (i.e. emergency shelter or transitional housing).<sup>25</sup> Eight percent were under the age of 25. Twenty-six percent were between the ages of 25 and 40, 54 percent were between the ages of 41 and 60, and 12 percent were 61 years or older.<sup>26</sup>

## Income and Poverty

### *Why this Matters*

Economic insecurity is often associated with poor health. Poverty increases the risk of many conditions, including poor nutrition, low birth weight, cognitive and developmental delays, decreased mental well-being, poor academic achievement, unemployment, lack of access to health care, and inadequate housing. Low socioeconomic status is also associated with differences in life expectancy of 15-20 years in many California cities, according to the California Endowment.<sup>27</sup>

### *In San Luis Obispo County*

From 2011-2015, 14,375 households in San Luis Obispo County were living in poverty, 14.8 percent of all households.<sup>28</sup> San Luis Obispo County saw a slight increase in the percentage of children living below the federal poverty level from 13 percent in 2010 to 15 percent in 2015, while adults

21 National Association of Home Builders. (2018). Housing Opportunity Index, 2018 1st Quarter report. [www.nahb.org/en/research/housing-economics/housing-indexes/housing-opportunity-index.aspx](http://www.nahb.org/en/research/housing-economics/housing-indexes/housing-opportunity-index.aspx).

22 Community Action Partnership of San Luis Obispo County (CAPSLO). (2017). Comprehensive Community Needs Assessment. <https://www.capslo.org/images/pdf/events/cap2016-2017.pdf>.

23 Applied Survey Research. (2017). San Luis Obispo County Homeless Census & Survey 2017 Comprehensive Report. <http://www.slocounty.ca.gov/getdoc/97678e2e-81b9-44e4-86d5-5d16a0f5e261/2017-Homeless-Census-and-Survey.aspx>

24 Ibid.

25 Ibid.

26 Ibid.

27 The California Endowment. <http://www.calendow.org/news/your-zip-code-lifetime>.

28 U.S. Census Bureau. (2016). 2010-2015 American Community Survey, 1-year estimates.

### Number of Housing Units by Type, San Luis Obispo County

	Total Units	Single Detached	Single Attached	Two to Four	Five+	Mobile Homes
2012	118,075	80,025	6,455	9,039	11,880	10,676
2017	121,049	82,168	6,597	9,179	12,371	10,734

Source: California Department of Finance. (2017). E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2017. <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5>.

### Income-Restricted Affordable Housing Units by Region, San Luis Obispo County

Region	City	# of units by bedroom size					Total Units
		Studio	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	
Central	San Luis Obispo	46	268	176	106	18	614
North Coast	Cambria			7	14		21
	Los Osos		113	9			122
	Morro Bay	9	73	19	8		109
North County	Atascadero	1	145	442	14		602
	Paso Robles	34	323	665	133	9	1164
	Templeton		32	58	34		124
South County	Avila	8	17	3			28
	Arroyo Grande		171	37	27		235
	Nipomo			67	101	38	206
	Oceano		5	14	6	1	26
	Pismo Beach		2	17	5		24
<b>County Totals</b>		<b>98</b>	<b>1149</b>	<b>1514</b>	<b>448</b>	<b>66</b>	<b>3275</b>

Source: Community Action Partnership of San Luis Obispo County. CAPSLO, 2017. Comprehensive Community Needs Assessment.

### Total Homeless Census Population by Region, San Luis Obispo County

	North County		North Coast		San Luis Obispo		South County		Total County	
	2015	2017	2015	2017	2015	2017	2015	2017	2015	2017
<b>Unsheltered</b>	452	139	141	102	324	222	206	317	1123	780
<b>Sheltered</b>	177	114	5	0	158	189	52	42	392	345
<b>Total</b>	<b>629</b>	<b>253</b>	<b>146</b>	<b>102</b>	<b>482</b>	<b>411</b>	<b>258</b>	<b>359</b>	<b>1515</b>	<b>1125</b>

Source: Applied Survey Research, 2015-2017. San Luis Obispo County Homeless Census.

and seniors had a smaller increase during the same time period.<sup>29</sup>

While the Federal Poverty Level, a metric developed in the 1960s, bases its formula solely on the cost of food, it does not consider other factors such as child care, transportation, medical needs, and housing costs, which can vary considerably across the country. For this reason, the state of California uses another measure to estimate poverty: the Self-Sufficiency Standard. The Self-Sufficiency Standard provides a threshold income needed for families to meet their basic needs without public or private assistance. It provides a more comprehensive measure of income adequacy by taking into account housing, child care, health care, transportation, food, taxes, and economic differences between counties. It also better assesses changing costs over time compared to federal poverty estimates.

In 2014, 24,781 households (35.3 percent of all households) in San Luis Obispo County were living below the Self-Sufficiency Standard.<sup>30</sup> A single adult in San Luis Obispo County would need to earn \$11.98 per hour and work 40 hours a week in 2014 to be self-sufficient, whereas a single adult with a teenager and a school-aged child would need to earn \$21.28 per hour.<sup>31</sup>

Self-perception of health status and well-being is also a powerful indicator of the health status of a community. When ACTION telephone survey respondents were asked to rate their overall health, those who had less than \$300 in a savings account were far more likely to rate their health as “Fair” or “Poor” (48.95 percent) as compared to their counterparts with more savings (22.35 percent).

ACTION telephone survey respondents were asked if they went without any basic needs in the last year. Overall, 5.6 percent reported going without health care and 3.8 percent went without food. Spanish-speaking respondents had much higher levels of difficulty: nearly 17 percent went without health care in the last year, followed by nearly 16 percent who went without housing, and 11.2 percent without food. When Spanish-speaking respondents were asked why they went without these basic needs, the majority responded they had “no money to pay for it.”

## Employment

### *Why this Matters*

A well-paying job with income stability makes it easier for workers to live in healthier neighborhoods, provide quality education for their children, secure child care services, and buy more nutritious food—all of which have substantial impacts on health. This includes not only base salary, but also the benefits that come with stable employment, including insurance, vacation and sick time, and family leave. Higher earning translates to a longer lifespan—since 1977, the life expectancy of male workers retiring at age 65 has risen 5.8 years for top earners, but only 1.3 years for their lower-earning counterparts.<sup>32</sup>

29 U.S. Census Bureau. (2016). 2010-2015 American Community Survey, 1-year estimates.

30 Insight Center for Community Economic Development. (2016). The Self-Sufficiency Standard for Individuals and Families in San Luis Obispo County, CA, 2014. <https://insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california>.

31 Ibid.

32 Social Security Administration. Office of Policy. Trends in Mortality Differentials and Life Expectancy for Male Social Security-Covered Workers, by Average Relative Earnings; (2007) <https://www.ssa.gov/policy/docs/workingpapers/wp108.html>.

### Self-Sufficiency Standards, San Luis Obispo County, 2014

Expense Type (Monthly)	Single Adult	Single Adult + 2 Children	2 Adults + 2 Children
Housing	\$941	\$1,215	\$1,215
Child Care	\$0	\$514	\$1,600
Food	\$244	\$646	\$765
Transportation	\$278	\$287	\$543
Health Care	\$137	\$452	\$482
Miscellaneous	\$160	\$311	\$461
Taxes	\$348	\$536	\$914
Earned Income Tax Credit	\$0	\$0	\$0
Child Care Tax Credit	\$0	-\$50	-\$100
Child Tax Credit	\$0	-\$167	-\$167

Self-Sufficiency Wage			
Hourly Per Adult	\$11.98	\$21.28	\$16.23
Monthly	\$2,109	\$3,745	\$5,713
Annually	\$25,305	\$44,935	\$68,560

Source: Insight Center for Community Economic Development. (2016). *The Self-Sufficiency Standard for Individuals and Families in San Luis Obispo County, CA, 2014*. <https://insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california>

### Responses to: "In any given month during the past year, did you go without ... ?"

Basic Need	Overall	Homeless	Spanish-Speaking
Health care	5.6 %	31.6 %	16.9 %
Food	3.8 %	42.1 %	11.2 %
Child Care	1.3 %	5.3 %	9.0 %
Utilities	0.9 %	29.8 %	4.5 %
Housing	1.9 %	70.2 %*	15.7 %
Other	0.2 %	5.3 %	1.1 %
Did Not Go Without Basic Needs	88.7 %	15.8 %	69.7 %

Source: ACTION for Healthy Communities Telephone Survey, 2016.

\* The 2017 San Luis Obispo County Homeless Point-in-Time Count found 1,125 individuals in San Luis Obispo County who met the HUD definition of homelessness. Of those counted, approximately 70 percent were unsheltered (sleeping outdoors, on the street, in parks, in vehicles, etc.) and approximately 30 percent were sheltered (such as in an emergency shelter or transitional housing). These survey results reflect a similar pattern.

### *In San Luis Obispo County*

Compared to the state of California, San Luis Obispo County had a lower percentage of unemployment during the past decade. In December 2017, the unemployment rate in San Luis Obispo County was 3.1 percent, compared to a statewide average of 4.2 percent and a nationwide average of 3.9 percent.<sup>33</sup> The highest unemployment rate in the county was 6.5 percent in San Miguel, while the lowest unemployment rate was 1.7 percent in Cayucos during this same period.<sup>34</sup>

However, many jobs are in low-paying industries, many without benefits such as health insurance—and these are the sectors that are growing. The leisure and hospitality industries have been the largest contributors to the county's overall growth from 2016 to 2017, increasing payrolls by 4.5 percent (800 jobs).<sup>35</sup> This is because the county is a prime destination for visitors. Other industries leading employment gains include information services, construction, education, and health. Health services employment will continue to play an important role as the county's aging population drives the demand for health-related services.<sup>36</sup>

Surveyed residents were asked if they were concerned about employment opportunities in their community. Rates were quite high across the county: 67.8 percent of respondents in North Coast reported being “very concerned” or “somewhat concerned,” as did 68.5 percent in North County, 74 percent in San Luis Obispo, and 74.3 percent in South County.<sup>37</sup>

## Food Security

### *Why this Matters*

Access to affordable, healthy food is a critical component for health and well-being. Food insecurity is associated with malnutrition, particularly as it relates to inadequate consumption of nutritious foods such as fresh fruit and vegetables. Individuals living in food insecure households face more health challenges and are more likely to suffer from chronic diseases such as obesity, type 2 diabetes, and pulmonary disease.

### *National Context*

Forty-two million people face hunger in the U.S., including 13 million children and 5.4 million seniors.<sup>38</sup>

### *In San Luis Obispo County*

Twenty-seven percent of San Luis Obispo County residents whose income is less than 200 percent of the Federal Poverty Level reported they were not able to afford enough food in 2014.<sup>39</sup>

33 State of California Employment Development Department. (2017). Unemployment Rate and Labor Force Summary for San Luis Obispo County. <http://www.labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html>.

34 Ibid.

35 Ibid.

36 Beacon Economics. (2016). 2016 Central Coast Economic Forecast.

37 ACTION for Healthy Communities. (2016). Vital Signs – Understanding San Luis Obispo County. <http://actionslo.org>.

38 Feeding America. <http://www.feedingamerica.org/hunger-in-america/hunger-and-poverty-facts.html>.

39 UCLA Center for Health Policy Research. AskCHIS. 2014. Food security (ability to afford enough food): Adults. (San Luis Obispo County). <http://ask.chis.ucla.edu>.

### Employment by Sector, San Luis Obispo County, 2017

Job Sector	# of Jobs
Service Industry (retail, food)	102,000
Local, State & Federal Government	25,100
Trade, Transportation, and Utilities	21,200
Leisure and Hospitality Services	18,500
Education and Health Services	15,400
Mining and Construction	7,500
Manufacturing	6,800
Farm	4,800
Finance, Insurance, Real Estate	4,100
Information Services	1,400
<b>Total All Industries</b>	<b>121,100</b>

Source: California Employment Development Department. Industry Employment and Labor Force, March 2017.

### Leisure and Hospitality-Related Industry Estimates of Wages, San Luis Obispo County, 2016

Occupation	Mean Annual Wage
Food Preparation and Serving-Related	\$26,554
Maids and Housekeeping Cleaners	\$22,903
Landscaping and Grounds Keeping	\$28,736
San Luis Obispo County average/mean	\$46,030
National average/mean	\$48,308

Source: U.S. Department of Labor, Bureau of Labor Statistics. (2017). Occupational Employment and Wages in San Luis Obispo-Paso Robles-Arroyo Grande - May 2016.

### Percentage of School-Aged Children Enrolled in Free and Reduced-Price Meal Program, San Luis Obispo County, 2016

Jurisdiction	Population
Shandon Joint Unified	75.8 %
County Office of Education	74.4 %
Coast Unified	63.1 %
<b>California Average</b>	<b>58.9 %</b>
San Miguel Joint Union	54.2 %
Lucia Mar Unified	51.6 %
Paso Robles Joint Unified	51.1 %
Pleasant Valley Joint Union Elementary	45.5 %
<b>SLO County Average</b>	<b>44.2 %</b>
San Luis Coastal Unified	36.6 %
Atascadero Unified	35.0 %
Cayucos Elementary	34.3 %
Templeton Unified	16.9 %

Source: California Department of Education, Data Reporting Office, Free and Reduced Price Meals, San Luis Obispo County (2016); Taken from ACTION for Healthy Communities report, 2016.

Many of these residents turn to programs like CalFresh (food stamps) and school meal programs. In 2013, 43,893 individuals were eligible to receive CalFresh based on their income, but only 18,524 did so.<sup>40</sup> This is one of the lowest utilization rates in the state, with San Luis Obispo County ranking 51 out of 58 counties.<sup>41</sup> School meal program participation varied across the county, with an average of 44.2 percent of students participating from 2015-2016.<sup>42</sup> This was lower than the state overall, which remained at 58.5 percent during the same time period.<sup>43</sup>

In 2016, approximately 46,000 San Luis Obispo County residents faced hunger, a 4.5 percent increase from 2013 (44,000).<sup>44</sup> Of those facing hunger, 40 percent are youth, age 18 or younger, and 20 percent are seniors, often on a fixed income.<sup>45</sup>

Even with rates lower than the state, food security remains a problem in the county. Twenty-three of 53 census tracts (122,873 people) in the county still live within USDA-defined food deserts. Food deserts are defined as parts of the country with limited access to fresh fruit, vegetables, and other healthy foods, a significant share of residents are more than 1 mile (urban) or 10 miles (rural) from the nearest supermarket.<sup>46</sup>

## Violence

### *Why this Matters*

Violence affects people in all stages of life. Violence includes physical acts such as rape, robbery, aggravated assault and homicide, as well as emotional and psychological violence that can occur within homes, schools and neighborhoods. In addition to serious effects on individuals and families, violence negatively impacts communities by diverting valuable resources, reducing productivity, decreasing property values, and disrupting social services.

Studies have shown that violence contributes to poor physical and mental health. Victims of violence are at increased risk of depression, substance abuse, anxiety, reproductive health problems, and suicidal behavior.<sup>47</sup> Additionally, exposure to violent crime in neighborhoods has been linked with higher rates of hypertension and other negative health outcomes.<sup>48</sup>

### *National Context*

Violence and crime have been persistent problems nationally, but the U.S. saw major reductions in most types of violent crime between 1994 and 2014. Nonetheless, certain groups are more

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40 County of San Luis Obispo Department of Social Services. (2017). Request for Proposal #1411, CalFresh Outreach.

41 California Food Policy Advocates. (2016). San Luis Obispo County Nutrition and Food Insecurity Profile. <https://cfpa.net/county-profiles>.

42 California Department of Education, Data Reporting Office, Free and Reduced Price Meals, San Luis Obispo County (2016); Taken from ACTION for Healthy Communities report, 2016.

43 Ibid.

44 Community Action Partnership of San Luis Obispo County (CAPSLO). (2017). Comprehensive Community Needs Assessment. <https://www.capslo.org/images/pdf/events/cap2016-2017.pdf>.

45 Ibid.

46 U.S. Department of Agriculture. Food Access Research Atlas. <https://www.ers.usda.gov/data/fooddesert>.

47 Krug, E.G., Dalhberg, L.L., Mercy, J.A., Zwi, A.B., & Lozano, R. (Eds.). (2002). World report on violence and health. World Health Organization, Geneva, Switzerland. From [http://www.who.int/violence\\_injury\\_prevention/violence/world\\_report/en/summary\\_en.pdf](http://www.who.int/violence_injury_prevention/violence/world_report/en/summary_en.pdf).

48 McClure, et al. (2015). Violent Crime Exposure and Pediatric Cardiovascular Health: A Spatial and Hierarchical Analysis for Low Income Children Living in Boston. <http://paa2015.princeton.edu/abstracts/150497>.



likely to be victims of violence and crime, including adolescents, who face higher rates of robbery, assault, rape and other sexual assault than do adults.<sup>49</sup>

Violence (both physical and emotional) can also occur within homes and schools. Nationally, the rate of substantiated child abuse was 9.2 cases per 1,000 population. This type of abuse can lead to cognitive, emotional, and behavioral problems, like anxiety, depression, substance abuse, delinquency, difficulty in school, and early sexual activity.<sup>50</sup> New research shows that 38 percent or more of children nationwide have had at least one Adverse Childhood Experience (ACE), such as the death or incarceration of a parent, witnessing or being a victim of violence, or living with someone who has been suicidal or had a drug or alcohol problem.<sup>51</sup>

Nationally, bullying in the school and cyber settings has also received significant attention, with 20.2 percent of eleventh grade students reporting harassment or bullying on school property within the past 12 months and 15.5 percent reporting cyber bullying (including by e-mail, chat rooms, instant messaging, websites, or texting) in the past 12 months.<sup>52</sup>

The prevalence of guns in a community can also have an effect on crime. Each year, 33,000 people in the U.S. die as a result of gun violence, and almost 85,000 more suffer non-fatal gun injuries.<sup>53</sup>

### ***In San Luis Obispo County***

The top three public safety concerns for residents surveyed in 2016 included crime (72 percent), child abuse (71 percent), and family violence (66 percent). The majority (81 percent) of respondents felt “very safe” in their neighborhood in 2016. Among Spanish-speaking respondents, only 39 percent felt “very safe” in their neighborhood.

The rate of violent crime in San Luis Obispo County rose from 251.9 crimes per 100,000 residents in 2011 to 409.6 crimes per 100,000 residents in 2015.<sup>54</sup> This violent crime rate is greater than the national average of 383.2 per 100,000 population, but lower than California’s rate of 426.5 per 100,000 population.<sup>55</sup> Among reported violent crimes, homicide and robbery have both decreased in San Luis Obispo County since 2010, while aggravated assault and rape have increased. The rate of homicide in San Luis Obispo County was 1.75 deaths per 100,000 population. The highest rate of violent crime by area in 2014 in San Luis Obispo County was Pismo Beach, at 51.5 per 1,000 residents, with the lowest in Atascadero at 17.5 per 1,000 residents.

There were 642 domestic violence calls to law enforcement in the county in 2015, up from 551

49 Baum, K. (2005). Juvenile victimization and offending, 1993-2003 (NCJ 209468): U.S. Bureau of Justice Statistics. <http://bjs.ojp.usdoj.gov/content/pub/pdf/jvo03.pdf>.

50 National Center for Injury Prevention and Control. (2016). Child abuse and neglect: Consequences. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov/ViolencePrevention/childmaltreatment/consequences.html>.

51 RWJF. Traumatic Experiences Widespread Among U.S. Youth, New Data Show (2017). <https://www.rwjf.org/en/library/articles-and-news/2017/10/traumatic-experiences-widespread-among-u-s-youth--new-data-show.html>.

52 Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance System (2015). <https://nccd.cdc.gov/youthonline/App/Default.aspx>.

53 American Public Health Association (APHA). Preventing Gun Violence Fact Sheet (2016). [https://www.apha.org/~media/files/pdf/factsheets/160317\\_gunviolencefs.ashx](https://www.apha.org/~media/files/pdf/factsheets/160317_gunviolencefs.ashx).

54 California Department of Justice. (2016). OpenJustice Data Portal. Crime Statistics. <https://openjustice.doj.ca.gov/crime-statistics>.

55 Ibid.

calls in 2014.<sup>56</sup> Of those calls, 368 involved a weapon, an increase from 339 calls involving a weapon in 2014. Domestic violence is typically underreported so these numbers are likely an underrepresentation. RISE, a service provider for survivors of domestic violence in San Luis Obispo County, served 966 individuals (882 women; 84 men) in 2015–2016. This is a 69 percent increase from 301 individuals served in 2012–2013.

Sexual assault, especially on college campuses, has also been of concern in the county and nationally. In 2016, California Polytechnic State University (Cal Poly) reported 17 cases of sexual assault, including rape, statutory rape, and fondling.<sup>57</sup> At least five of those occurred off campus. This is an increase from the previous year, when a total of 9 cases (on- and off-campus) were reported. According to the FBI's Uniform Crime Reporting (UCR) program, 284 rapes were reported in the county from 2014 to 2016.<sup>58</sup> Almost half of those were reported in the city of San Luis Obispo.<sup>59</sup> In 2016, the San Luis Obispo Police Department reported a total of 38 rapes, higher than the total number of rapes (21) reported that year by the SLO County Sheriff's Office, which serves unincorporated areas, and nearly five times higher than Paso Robles, the next most populous city.<sup>60</sup>

The rate of substantiated child abuse cases in San Luis Obispo County, 11.4 per 1,000, is higher than both the state (8.0 per 1,000) and the nation (9.2 cases per 1,000).<sup>61</sup> The vast majority of cases were classified as "general neglect."

Within schools in San Luis Obispo County, 32 percent of eleventh graders had been bullied in the past year, higher than the national average of 20.2 percent. During the same year, 19 percent reported they had been victims of cyber bullying, higher than the national average of 15.5 percent.<sup>62</sup>

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56 California Department of Justice, Criminal Justice Statistics Center. (2010–2015). Domestic Violence-Related Calls for Assistance.

57 Cal Poly University. (2017). 2017 Annual Security Report. Jeanne Clery Disclosure of Campus Security Policies & Campus Crime. <https://afd.calpoly.edu/police/safety/reports/cleryreport.pdf>.

58 FBI. (2016). Uniform Crime Reporting (UCR) program. <https://ucr.fbi.gov/crime-in-the-u.s/2017/preliminary-report/tables/table-4/state-cuts/alabama-through-california.xls>.

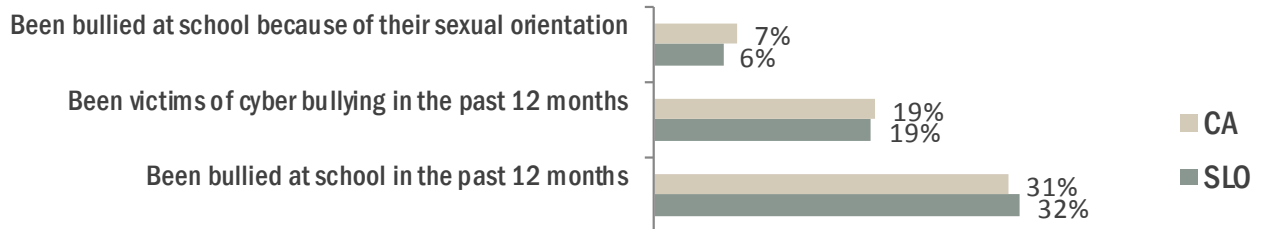
59 Ibid.

60 Ibid.

61 Webster, D., et al. Child Welfare Services Reports for California, U.C. Berkeley Center for Social Services Research (Jun. 2016); Annie E. Casey Foundation, KIDS COUNT (Jul. 2016). [http://cssr.berkeley.edu/ucb\\_childwelfare](http://cssr.berkeley.edu/ucb_childwelfare).

62 WestEd. (2015-2016). California Healthy Kids Survey Main Report. <http://chks.wested.org/reports>.

11th-Grade Students Who Report They Have ...



Source: California Healthy Kids Survey, 2013-2014, 2015-2016.

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# ACCESS TO HEALTH SERVICES



*photo credit: Kristin Steer*

### **Good News Spotlight**

#### **With Affordable Care Act, More Residents Have Health Coverage**

*The Affordable Care Act (ACA) went into effect in January 2014, allowing millions of uninsured people nationwide to obtain comprehensive health coverage. The percentage of San Luis Obispo County residents with health insurance jumped as the law went into effect, increasing from 84 percent in 2010 to 90 percent in 2016. This means more than 16,000 County residents who lacked health insurance now have comprehensive health coverage that allows them to see a primary care doctor or specialist, have surgery if needed, fill prescriptions, and get regular screenings to catch illness early, when it can be treated most effectively.*



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# ACCESS TO HEALTH SERVICES

Access to health services means the ability to get the care needed for the best health outcomes. Access includes being able to afford health services, having those services nearby, and being able to receive those services in a reasonable amount of time.

Individuals who lack a dependable source of health care often have more difficulties obtaining needed care, receive fewer preventive health services, and are more likely to wait until their conditions worsen before seeking treatment.

Dignity Health's 2016 Community Health Needs Assessment ranked access to health care as its number one significant community need.<sup>63</sup> Reasons cited in the report included lack of providers, lack of walk-in clinics and clinics with extended hours, and lack of health insurance.

## Access to Primary Care

### *Why this Matters*

Access to primary health care is essential for monitoring healthy growth and development and preventing everyday illnesses from developing into more serious health concerns. People with a dependable source of primary care are more likely to access preventive services, resulting in better health outcomes for individuals and fewer health disparities in society overall. People with a dependable source of primary care are also more likely to get the education and referrals needed for on-time health screenings, such as mammograms and colonoscopies. These screenings can help find problems early, when a patient's chances for treatment and cure are better.

Primary care clinicians include allopathic physicians (MDs), osteopathic physicians (DOs), nurse practitioners (NPs), and physician assistants (PAs).

### *National and State Context*

With the 2010 passage of the Affordable Care Act (ACA), the U.S. has seen an estimated decline of 11 million uninsured adults since

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<sup>63</sup> Dignity Health French Hospital Medical Center. (2016). Community Health Needs Assessment - June 2016.

the coverage expansions took effect.<sup>64</sup> The remaining uninsured are more likely to be young, Latino, low-income, and/or work for small-sized employers.<sup>65</sup> While expanded coverage is a critical component to ensure access to care, a sufficient health care workforce is also critical.

According to a 2017 research report on California's primary care workforce, the number of employed primary care clinicians in the state in 2015 was 124 per 100,000 population<sup>66</sup> This number includes 71 physicians, 27 nurse practitioners, and 26 physician assistants. The average number of employed primary care clinicians per 100,000 population in the U.S. was 143 in 2015, which is notably higher than in California. This number includes 70 physicians, 42 nurse practitioners, and 31 physician assistants.<sup>67</sup> The same report forecasts that California is expected to face a statewide shortfall of primary care providers in the next 15 years, with acute shortages in the Central Valley, Central Coast and Southern Border areas, due to the uneven distribution of care across the state.

### ***In San Luis Obispo County***

The estimated number of primary care clinicians in San Luis Obispo County is 143 per 100,000 population, which includes 86 physicians and 57 non-physician primary care clinicians per 100,000.<sup>68</sup> Other factors besides the number of licensed physicians affect availability, such as location, language spoken, insurance plans accepted, and capacity.

From 2014–2016, 85.3 percent of California Health Interview Survey respondents in San Luis Obispo County reported they had a usual place to go for health care, about the same as the statewide average.<sup>69</sup> Among adult county residents surveyed, 85 percent reported they had visited the doctor in the past year, higher than the statewide average of 81 percent.

Six percent of residents surveyed in the ACTION for Healthy Communities report responded they had gone without health care in the past year.<sup>70</sup> Spanish-speaking respondents had higher levels of difficulty accessing care, with 17 percent reporting going without health care in the last year. Of those who reported going without health care, the majority said it was because they did not have the money to pay for it. Barriers to accessing care among homeless individuals included lack of transportation (33 percent) and not knowing where to get health care (22 percent).

64 Affordable Care Act Tracking Survey. <http://acatracking.commonwealthfund.org>.

65 Ibid.

66 Janet Coffman, PhD, Igor Geyn, Kristine Himmerick, PhD, PA-C. Healthforce Center at UCSF. California's Primary Care Workforce: Current Supply, Characteristics, and Pipeline of Trainees. February 2017. [https://healthforce.ucsf.edu/sites/healthforce.ucsf.edu/files/publication-pdf/Research-Report\\_CA-Primary-Care-Workforce.pdf](https://healthforce.ucsf.edu/sites/healthforce.ucsf.edu/files/publication-pdf/Research-Report_CA-Primary-Care-Workforce.pdf).

67 Ibid.

68 Primary care physician counts vary significantly according to the reporting source. The HRSA AHRF Dashboard indicates a total of 240 PCPs in San Luis Obispo County in 2015, while the CHCF counts, which include only physicians providing 20 or more hours of patient care per week, reports a total of 153 PCPs for the county. Health Resources and Services Administration. Area Health Resource File. Workforce Data Dashboard. 2015. <https://datawarehouse.hrsa.gov/topics/ahrf.aspx>. California Health Care Foundation. August 2017. (Using data from Medical Board of California, 2015). Indicates a total of 153 PCPs in San Luis Obispo County <https://www.chcf.org/publication/california-maps-how-many-primary-care-and-specialist-physicians-are-in-your-county>.

69 California Health Interview Survey. 2014-2016. SLO Health Counts. Last Updated January 2018. People with a Usual Source of Health Care. [www.slohealthcounts.org](http://www.slohealthcounts.org).

70 ACTION for Healthy Communities. (2016). Vital Signs – Understanding San Luis Obispo County. <http://actionslo.org>.

## Number of Primary Care Clinicians in San Luis Obispo County, per 100,000 Residents



# 143

**primary care clinicians**  
per 100,000 residents

The HRSA estimates that 100 primary care physicians per 100,000 residents is optimal.

Primary care clinicians include allopathic physicians (MDs), osteopathic physicians (DOs), nurse practitioners (NPs), and physician assistants (PAs) providing primary care.

## Providers in San Luis Obispo County and California, per 100,000 Residents

Primary Care Clinicians	SLO County	CA
Primary care physicians	86/100,000	78/100,000
Non-physician primary care providers	57/100,000	46/100,000
Total Primary Care Clinicians	143/100,000	124/100,000
Mental health providers	118/100,000	54/100,000

Source: Health Resources and Services Administration, U.S. Department of Health and Human Services.

## On-Time Health Screenings, San Luis Obispo County and California

Screening Type	SLO County	CA
Percent of adults age 50+ who have ever had a sigmoidoscopy/colonoscopy	80.1%	76.3%
Percent of women age 21-65 years with Pap test in past 3 years	83.1%	84.1%
Percent of women age 40+ with mammogram in past 2 years	78%	76.4%
Percent of adults who visited a dentist in the past year	73.9%	69.2%

Source: UCLA Center for Health Policy Research. California Health Interview Survey (CHIS). <http://ask.chis.ucla.edu>.



## Access to Behavioral Health Care

### *Why this Matters*

Making sure that individuals have access to effective services and treatment for mental and substance use disorders can improve lives and communities. For many, it can dramatically reduce or eliminate the risk of suicide, legal troubles, family conflict, employment issues, and further mental and physical health problems. Mental illness and substance use disorders are common and recurrent in the U.S., but only a subset of these individuals actually receive services. Several factors contribute to barriers to accessing or maintaining necessary treatment, including lack of perceived need for treatment, stigma, financial need, inconvenience due to work schedule and/or transportation, and lack of local providers and services.

### *National and State Context*

Federal and state laws mandating parity in coverage of mental and physical illness, together with coverage expansion under the ACA, have made more services available, especially for Californians due to the expansion of Medi-Cal eligibility.

A national review found that in 2016, approximately 19 million adults in the U.S. met the criteria for a substance use disorder in the past year, representing 7.8 percent of the population aged 18 or older. Of the 19 million adults with a past year substance use disorder, just 2 million received any substance use treatment in the past year.<sup>71</sup> The study found that 95.5 percent of the adults who were classified as needing substance use treatment but did not receive specialty substance use treatment did not think that they needed treatment. Common reasons for not receiving substance use treatment among adults who recognized their need for treatment included not being ready to stop using alcohol or illicit drugs or having no health care coverage and not being able to afford the cost of treatment.<sup>72</sup>

Regarding mental health services, the same study indicated about 43.1 percent of the 44.7 million adults reporting any mental illness in the past year received mental health services in the past year, which was similar to the percentages in most years from 2008 to 2015.<sup>73</sup> Included in the 44.7 million adults who experienced mental illness in the past year, were 10.4 million adults with serious mental illness. Of the 10.4 million adults with serious mental illness, 64.8 percent received mental health services in the past year, which was similar to the estimates in all years between 2008 and 2015.

### *In San Luis Obispo County*

Among San Luis Obispo County adult respondents of the California Health Interview Survey who said they had needed to see a professional for problems with emotions or drugs/alcohol in the past year, 48.3 percent said they had received professional treatment and 51.7 percent said they had not.<sup>74</sup> This is lower than the statewide average of 59.2 percent of respondents reporting they

71 Substance Abuse and Mental Health Services Administration. NSDUH Data Review. September 2017. Receipt of Services for Substance Use and Mental Health Issues among Adults: Results from the 2016 National Survey on Drug Use and Health. <https://www.samhsa.gov/data/sites/default/files/NSDUH-DR-FFR2-2016/NSDUH-DR-FFR2-2016.htm>.

72 Ibid.

73 Ibid.

74 UCLA Center for Health Policy Research. California Health Interview Survey (CHIS), Mental and Emotional Health Data, San Luis Obispo County. Topic: Sought help for self-reported and/or alcohol-drug issue (s). 2014-2016 pooled average. <http://ask.chis.ucla.edu>.

had received the behavioral health care they needed.

In 2016, 17 percent of ACTION survey respondents experiencing homelessness and 8 percent of Spanish-speaking individuals reported that they or someone in their family had needed to talk to a mental health professional but could not due to lack of money or insurance.<sup>75</sup>

Acute psychiatric beds provide short-term care for people who experience a psychiatric crisis and require 24-hour care. A 2015 report prepared by a local behavioral health collaborative noted a significant shortage of acute inpatient psychiatric beds throughout California, including San Luis Obispo County.<sup>76</sup> There are 28 county-based psychiatric health facilities in the state, including San Luis Obispo County's 16-bed psychiatric health facility, the only inpatient psychiatric unit in the county. The report cited a 2015 California Hospital Association analysis that concluded the absolute minimum number of public psychiatric beds to meet current needs (excluding beds in California state hospitals, such as Atascadero State Hospital in San Luis Obispo County) is 50 per 100,000 population. San Luis Obispo County has approximately 5.8 beds per 100,000 population and, based on the above ratio, would need an additional 124 beds to meet current needs.

The 2015 report by the local behavioral health collaborative also noted a long-identified need for residential treatment and withdrawal support for low-income and Medi-Cal covered residents as part of a continuum of care for those with substance use disorders. Land and location have been significant barriers to the establishment of a local facility.<sup>77</sup>

## Access to Dental Care

### *Why this Matters*

Access to appropriate and timely dental care and routine check-ups can help prevent oral diseases, like tooth decay, which are among the most common chronic conditions in the U.S. If left untreated, oral diseases can financially burden households, cause pain and disability, and affect attendance at work and school. Oral signs and symptoms may provide the first clues to the presence of other diseases such as diabetes, autoimmune disorders, human immuno-deficiency virus (HIV), and nutritional deficiencies. Oral conditions may not only reflect general health, but may adversely affect other chronic conditions. A person's ability to access oral health care is associated with factors such as education level, income, race, and ethnicity.

### *National and State Context*

Nearly one-third, or 31.6 percent, of all adults in the U.S. and 18.6 percent of children have untreated tooth decay, or tooth caries.<sup>78</sup> In 2016, 67.1 percent of adults in California visited a

75 ACTION for Healthy Communities. (2016). Vital Signs – Understanding San Luis Obispo County. Mental Health, Access. p. 91. <http://actionslo.org>.

76 Diringer, Joel, San Luis Obispo Behavioral Health Integration Project (B-HIP). Integrating Behavioral Health and Primary Care Services in San Luis Obispo County: Assessing the Shifting Landscape. June 2015. <http://diringerassociates.com/wp-content/uploads/2012/05/B-HIP-Report-8-11-15-FINAL.pdf>.

77 Ibid.

78 National Center for Health Statistics. Health, United States, 2016: With Chartbook on Long-term Trends in Health. Hyattsville, MD. 2017. Table 60. Untreated dental caries, by selected characteristics: United States, selected years 1988–1994 through 2011–2014 [https://www.cdc.gov/nchs/data/health\\_us/16.pdf#060](https://www.cdc.gov/nchs/data/health_us/16.pdf#060).

dental office in the past year, slightly higher than the U.S. average of 66.4 percent.<sup>79</sup>

California children miss 874,000 days of school each year due to dental problems, and tooth decay is the most common chronic condition experienced by children—far more common than asthma.<sup>80</sup>

In California, the Medi-Cal Dental Program, called Denti-Cal, covers diagnostic, preventive, and restorative dental services to approximately 13 million Medi-Cal beneficiaries. There is a significant shortage of Denti-Cal providers, primarily due to low reimbursement rates to providers, and consequently, Denti-Cal members often experience challenges accessing care.

### ***In San Luis Obispo County***

There are fewer dentists in San Luis Obispo County (77.11 per 100,000 population) compared to the statewide average (80.2 per 100,000 population).

In San Luis Obispo County, only 45 percent of children with Denti-Cal had a dental visit in 2015-2016, similar to the state percentage. The California Department of Health Care Services classified the Denti-Cal provider to beneficiary ratio as ‘Below Standard’ based on meeting 61 to 90 percent of the state’s standard for Denti-Cal provider to beneficiary ratio.<sup>81</sup> This finding was echoed by local stakeholder interviews with low-income individuals who noted limited availability of dental appointments with dentists taking Denti-Cal, having to travel far distances when an appointment is available, and waiting months for critical dental care.<sup>82</sup>

While Denti-Cal may not be meeting local need, surveyed residents of all insurance backgrounds reported a more optimistic outlook. Two-thirds (69 percent) of adult survey respondents had a routine dental checkup in the past year. Among survey respondents experiencing homelessness, 30 percent indicated that dental care is a major problem for them personally, which is a decrease from 56 percent in 2013.<sup>83</sup>

## Access to Specialty Care

### ***Why this Matters***

Primary-care patients often require additional physician expertise to address their health issues and are referred to a specialist. Specialists include orthopedists, neurologists, radiologists, cardiologists, psychiatrists, oncologists, and other specialties. But many residents in San Luis Obispo County, some of whom may be facing the greatest challenges to health, have difficulty accessing specialty care. Lack of timely specialty care can result in adverse medical outcomes and potentially higher costs from avoidable emergency department visits and hospitalizations.

79 Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2016. <https://www.cdc.gov/brfss/brfssprevalence>.

80 California Department of Public Health. Oral Health Program. Status of Oral Health in California: Oral Disease Burden and Prevention 2017. [https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/DCDB/CDPH%20Document%20Library/Oral%20Health%20Program/Status%20of%20Oral%20Health%20in%20California\\_FINAL\\_04.20.2017\\_ADA.pdf](https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/DCDB/CDPH%20Document%20Library/Oral%20Health%20Program/Status%20of%20Oral%20Health%20in%20California_FINAL_04.20.2017_ADA.pdf).

81 California Department of Health Care Services. (2017). Denti-Cal Provider Outreach And Utilization Improvement Plan. <http://www.dhcs.ca.gov/services/Documents/MDS/2017DentiCalProviderOutreachPlan.pdf>.

82 Community Action Partnership of San Luis Obispo County (CAPSLO). (2017). Comprehensive Community Needs Assessment. <https://www.capslo.org/images/pdf/events/cap2016-2017.pdf>.

83 ACTION for Healthy Communities. (2016). Vital Signs – Understanding San Luis Obispo County. <http://actionslo.org>.

### ***In San Luis Obispo County***

San Luis Obispo County's mid-sized population and distance from major metropolitan areas are key challenges to recruiting and retaining quality specialists. Focus groups described long wait times for specialty care appointments and the burden of traveling out of the area, sometimes hundreds of miles, to see a specialist. Accessing local specialty care for children and veterans was even more challenging.

## **Insurance Coverage**

### ***Why this Matters***

Families and individuals without health insurance coverage frequently have unmet health needs, experience delays in receiving appropriate care, receive fewer preventive services, and have a higher rate of hospitalizations.<sup>84</sup> Children who have health insurance perform better in school, have higher school attendance rates, are more likely to have a regular dependable source of primary care, and are less likely to be hospitalized for conditions that could have been treated by a primary care physician.<sup>85</sup>

### ***National and State Context***

Insurance coverage expansion through the Affordable Care Act (ACA) went into effect in January 2014, allowing millions of uninsured individuals nationwide to obtain health coverage. California opted to fully implement the law—expanding Medi-Cal (California's Medicaid program) to low-income single adults without dependent children and creating a state-based insurance marketplace, Covered California. Medi-Cal coverage further expanded in May 2016, covering all children meeting income requirements regardless of immigration status. The share of Californians with no health insurance dropped nearly 10 percentage points, hitting a historic low of 7.3 percent in 2016, compared with about 17 percent in the years prior to 2014. Low-income Californians saw the largest gains in coverage: among those with family incomes below \$50,000, the share without health insurance fell more than 15 points to about 11% in 2016.<sup>86</sup> However, 2.9 million Californians remain uninsured.

### ***In San Luis Obispo County***

Ninety percent of residents surveyed reported having health insurance in 2016, an increase from 84 percent in 2010.<sup>87</sup> Over half (54 percent) of Spanish-speaking individuals had health insurance in 2016, while 79 percent of respondents experiencing homelessness reported having health insurance.<sup>88</sup>

84 U.S. Department of Health and Human Services. (2011). Healthy People 2020 objectives. From <http://healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=1>.

85 Bernstein J, Chollet D, Peterson S. (2010). How Does Insurance Coverage Improve Health Outcomes? ISSUE BRIEF 2010. From [http://www.mathematica-mpr.com/~media/publications/pdfs/health/reformhealthcare\\_ib1.pdf](http://www.mathematica-mpr.com/~media/publications/pdfs/health/reformhealthcare_ib1.pdf).

86 Public Policy Institute of California. The Affordable Care Act in California. <http://www.ppic.org/publication/the-affordable-care-act-in-california>.

87 ACTION for Healthy Communities. (2016). Vital Signs – Understanding San Luis Obispo County. <http://actionslo.org>. United States Census Bureau. 2012-2016 American Community Survey 5-Year Estimates. [https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_16\\_5YR\\_DP03&prodType=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_DP03&prodType=table).

88 ACTION for Healthy Communities. (2016). Vital Signs – Understanding San Luis Obispo County. <http://actionslo.org>.

Covered California provides health insurance with subsidies to 11,580 residents in San Luis Obispo County.<sup>89</sup> In addition, approximately 62,800 people in San Luis Obispo County were enrolled in Medi-Cal in January 2016, 18,417 (29.3 percent) of whom were eligible due to the Medicaid/Medi-Cal expansion program.<sup>90 91</sup> CenCal Health administers Medi-Cal managed care in San Luis Obispo County. As of December 2017, CenCal Health reported Medi-Cal enrollment in the county was 54,217. Almost one-third of children and adolescents under the age of 20 and 19.5 percent of the county's total population are covered by CenCal's Medi-Cal managed care.<sup>92</sup>

Obtaining insurance coverage is critical, but it may not remove all barriers to care. In focus groups conducted by the Public Health Department and CAPSLO, residents reported long wait times for appointments with doctors who were accepting new patients, difficulty skipping work to attend appointments, and concerns about affordability; some Spanish-speaking patients reported a lack of comfort with the “many questions” related to a Social Security card or other documentation.<sup>93</sup>

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89 Dietz, M., Lucia, L., Kominski, G., & Jacobs, K. (2016). ACA repeal in California: Who stands to lose? UC Berkeley Center for the Labor Research and Education, UCLA Center for Health Policy Research, 12, 1-10. <http://healthpolicy.ucla.edu/publications/search/pages/detail.aspx?PubID=1597>.

90 Graves, S. (2016). Medi-Cal reaches millions of people across California, but faces uncertain future. California Budget & Policy Center Fact Sheet. From <http://calbudgetcenter.org/resources/medi-cal-reaches-millions-people-across-california-faces-uncertain-future>.

91 Dietz, M., Lucia, L., Kominski, G., & Jacobs, K. (2016). ACA repeal in California: Who stands to lose?

92 CenCal Health Member Demographics 2017. <https://www.cencalhealth.org/~media/files/pdfs/members/msmemberdemographicreportall-plans20171201.pdf?la=en>

93 Community Action Partnership of San Luis Obispo County (CAPSLO). (2017). Comprehensive Community Needs Assessment. <https://www.capslo.org/images/pdf/events/cap2016-2017.pdf>.

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# MATERNAL, CHILD & ADOLESCENT HEALTH

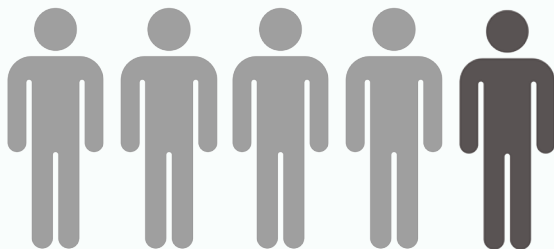


*photo credit: Central Coast Breastfeeding Coalition*

### **Good News Spotlight**

#### **Supporting Mothers Who Face Depression and Anxiety After Pregnancy**

*Perinatal Mood and Anxiety Disorders (PMAD), often referred to more generally as postpartum depression, includes a wide range of emotional and physiological reactions following childbirth. To support mothers facing these serious symptoms, the Public Health Department launched an initiative with local OB/GYN practitioners to move toward universal screening for PMAD. This helps ensure new mothers experiencing PMAD receive the care they need.*



15-20 percent of postpartum women experience severe depression or anxiety, also called PMAD, following childbirth.

# MATERNAL, CHILD & ADOLESCENT HEALTH

Beginning life as a healthy baby provides one of the best opportunities for lifelong health. For this reason, health at birth is closely analyzed, including such factors as birthweight, breastfeeding, premature birth, births to teens, and prenatal care.

## Prenatal Care

### *Why this Matters*

Early prenatal care (care in the first trimester of a pregnancy) allows women and their health care providers to identify and, when possible, treat or correct health problems during the initial stages of fetal development. It also allows health care providers to educate mothers on important health issues, such as their diet and nutrition, exercise, immunizations, weight gain, and abstaining from drugs and alcohol. Increasing the number of women who receive prenatal care, and who do so early in their pregnancies, can improve birth outcomes and lower health care costs by reducing the likelihood of complications during pregnancy and childbirth.

Quality prenatal care is essential to preventing preterm births (births prior to 37 weeks gestation) and low birth weight. Premature babies are more likely to suffer from intellectual disabilities, respiratory problems, visual problems, hearing loss, and feeding and digestive problems.

### *National Context*

Nationally, early prenatal care has increased steadily since the 1970s. However, certain groups are still more likely to have late or no prenatal care, including American Indian and Alaska Native women (11 percent), black women (10 percent), Hispanic women (8 percent), and teen mothers (10 percent).<sup>94</sup>

### *In San Luis Obispo County*

For years, San Luis Obispo County mothers (80.5 percent) have been less likely than mothers across the state (83.3 percent) to access prenatal care in the first trimester.<sup>95</sup> Babies born to mothers who do not receive prenatal care are three times more likely to have a low

<sup>94</sup> Child Trends Databank. (2015). *Late or no prenatal care*. <https://www.childtrends.org/?late-or-no-prenatal-care>.

<sup>95</sup> California Department of Public Health. (2018). County Health Status Profiles 2018. 2014-2016 average. <https://www.cdph.ca.gov/Programs/CHSI/Pages/County-Health-Status-Profiles.aspx>.



birth weight and five times more likely to die than those born to mothers who do get care.<sup>96</sup>

Even with lower rates of prenatal care in the first trimester, only 8 percent of babies were born preterm in 2013.<sup>97</sup> This is lower than the Healthy People 2020 target of 11 percent and the California average of 8.8 percent. Additionally, only 6.1 percent of all babies in the county were born with low birth weight (under 2500g, or 5.5 lbs) from 2014-2016, lower than the statewide average of 6.8 percent.<sup>98</sup> This is also lower than the Healthy People 2020 target of 7.8 percent.

## Breastfeeding

### *Why this Matters*

Breastfeeding is widely acknowledged to provide the most complete form of nutrition for infants, with a range of benefits impacting health, growth, immunity and development. The American Academy of Pediatrics recommends exclusive breastfeeding for the first six months of an infant's life and breastfeeding in conjunction with introduction of complementary foods until at least one year of age. Feeding only breastmilk for at least the first three months of life has been associated with significantly fewer ear infections, respiratory tract infections and gastrointestinal infections.<sup>99</sup>

### *National and State Context*

Nationally, 81.1 percent of mothers initiated breastfeeding at birth.<sup>100</sup> At 6 months, however, the national rate drops to 51.8 percent and then further, to 30.7 percent at one year.<sup>101</sup> In California, 94.0 percent of mothers initiated breastfeeding in the hospital in 2016, meeting the Healthy People 2020 goal of 81.9 percent.<sup>102</sup>

High initiation rates show that most mothers want to breastfeed and are trying to do so. However, the sharp declines in breastfeeding rates at 6 and 12 months of age indicate that many mothers still face obstacles in achieving the desired duration and exclusivity targets. These rates suggest that mothers may not be getting the support they need, in part from health care providers, family members, or employers.

### *In San Luis Obispo County*

In San Luis Obispo County, 97.6 percent of mothers initiated breastfeeding in the hospital in 2016, higher than the state's overall average.<sup>103</sup> At three months post-delivery, 74.8 percent of mothers

96 U.S. Department of Health and Human Services. Maternal and Child Health Bureau, Health Resources and Services Administration, Prenatal services. <http://www.mchb.hrsa.gov/programs/womeninfants/prenatal.html>.

97 Lucille Packard Foundation for Children's Health. Summary: Low Birthweight and Preterm Births. <http://www.kidsdata.org/topic/56/low-birthweight-and-preterm-births/summary>.

98 California Department of Public Health. (2018). County Health Status Profiles 2018. 2014-2016 average. <https://www.cdph.ca.gov/Programs/CHSI/Pages/County-Health-Status-Profiles.aspx>.

99 U.S. Department of Health and Human Services. (2011). The Surgeon General's Call to Action to Support Breastfeeding. <https://www.surgeongeneral.gov/library/calls/breastfeeding/calltoactiontosupportbreastfeeding.pdf>

100 Centers for Disease Control. (2016). Breastfeeding Report Card. <https://www.cdc.gov/breastfeeding/pdf/2016breastfeedingreportcard.pdf>.

101 Ibid.

102 California Department of Public Health. Newborn Screening (NBS) Program. <https://www.cdph.ca.gov/Programs/CFH/DMCAH/Pages/Topics/In-Hospital-Breastfeeding-Initiation-Data.aspx>.

103 California Department of Public Health. Newborn Screening (NBS) Program. <https://www.cdph.ca.gov/Programs/CFH/DMCAH/Pages/Topics/In-Hospital-Breastfeeding-Initiation-Data.aspx>.

*Teen Births, by Age of Mother, San Luis Obispo County*

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Under 15	*	*	*	*	*	5	*	*	*	*	*
15	7	6	11	7	5	12	7	7	5	5	*
16	19	19	22	14	13	17	13	11	10	10	10
17	35	40	39	28	28	36	24	26	20	21	16
18	49	51	72	68	56	57	33	40	42	36	34
19	80	84	89	95	66	76	67	67	64	61	59
Total	192	201	236	215	170	203	147	154	142	133	121

Source: County of San Luis Obispo Public Health Department.  
 Note: Counts less than 5 are masked to preserve patient confidentiality.

*Infants Whose Mothers Received Prenatal Care in the First Trimester, San Luis Obispo County and California*

	2010-12	2011-13	2012-14	2013-15	2014-16
California	83.6%	83.6%	83.5%	83.3%	83.3%
SLO County	80.4%	80.1%	80.3%	80.2%	80.5%

Source: California Department of Public Health, Center for Health Statistics, Birth Statistical Master Files (Mar. 2015). Kidsdata.org.  
 California Department of Public Health: 2014-2016 Birth Records.  
 Note: National Healthy People 2020 target is 77.9 percent.

were still breastfeeding (46.4 percent exclusively).<sup>104</sup> Rates are 6 and 12 months of age were unavailable at the county level.

## Teen Births

### *Why this Matters*

Children born to teen mothers are more likely to be born prematurely, at a low birth weight, or to die as infants, compared with children born to mothers in their twenties and early thirties.<sup>105</sup> They generally have poorer academic and behavioral outcomes than do children born to older mothers, and are more likely to have a teen birth themselves.<sup>106</sup> In addition, teen mothers are less likely to finish high school or go on to college, more likely to be dependent on public programs, and more likely to be a single parent.<sup>107 108</sup>

### *National and State Context*

Nationally, teen births have been estimated to cost approximately \$28 billion annually in lost productivity and increased burdens on the health care, child welfare, and prison systems.<sup>109</sup>

The rate of teen births has been declining steadily over the past several years. In 2015, there were 17.6 births per 1,000 women aged 15-19 in California, a 62 percent decline from just 15 years earlier (46.7 births per 1,000 females in 2000).<sup>110</sup> This decrease in teen births was seen across all racial and ethnic groups, with teen birth rates dropping for Hispanic teens (77.3 to 27.0), African-American teens (59.1 to 19.7), white teens (22.3 to 6.9), and Asian teens (15.0 to 2.9).<sup>111</sup>

Despite these improving trends, however, disparities still exist. African-American and Hispanic adolescents were still 3 to 4 times more likely to give birth than white adolescents. Teen birth rates also varied considerably by location, from a low of 6.7 in Marin County to a high of 43.1 in Del Norte County.<sup>112</sup>

### *In San Luis Obispo County*

From 2013-2015, the average annual teen birth rate in San Luis Obispo county was 14.1 per 1,000 women (15 to 19 years old), lower than the state's rate of 21.0 per 1,000 women in 2013-14 and lower than the Healthy People 2020 goal of 36.2 per 1,000 adolescents.<sup>113</sup> Given the small number

104 California Department of Public Health. (2017). Maternal and Infant Health Assessment (MIHA) Survey, 2013-2014. <https://www.cdph.ca.gov/Programs/CFH/DMCAH/MIHA/Pages/Data-and-Reports.aspx?Name=SnapshotCo>.

105 Mathews, T. J., MacDorman, M. F., & Thoma, M. E. (2013). Infant mortality statistics from the 2013 period linked birth/infant death data set. *National Vital Statistics Reports*, 64(9). [http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64\\_09.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_09.pdf).

106 Moore, K.A., Morrison, D.R., and Greene, A.D., (1997). Kids having kids: Economic costs and social consequences of teen pregnancy. <http://webarchive.urban.org/publications/901199.html>.

107 Hofferth, S. L., Reid, L., & Mott, F. L. (2001). The effects of early childbearing on schooling over time. *Family Planning Perspectives*, 33(6), 259-267.

108 Hoffman, S. D. (2008). Consequences of teen childbearing for mothers: Updated estimates of the consequences of teen childbearing for mothers. In S. D. Hoffman, & R. A. Maynard (Eds.), *Kids having kids: Economic costs and social consequences of teen pregnancy* (2nd ed., pp. 74-92). Washington, DC: The Urban Institute Press.

109 Hoffman, S. D., & Maynard, R. A. (Eds.). (2008). *Kids having kids: Economic costs and social consequences of teen pregnancy* (2nd ed.). Washington, DC: The Urban Institute Press.

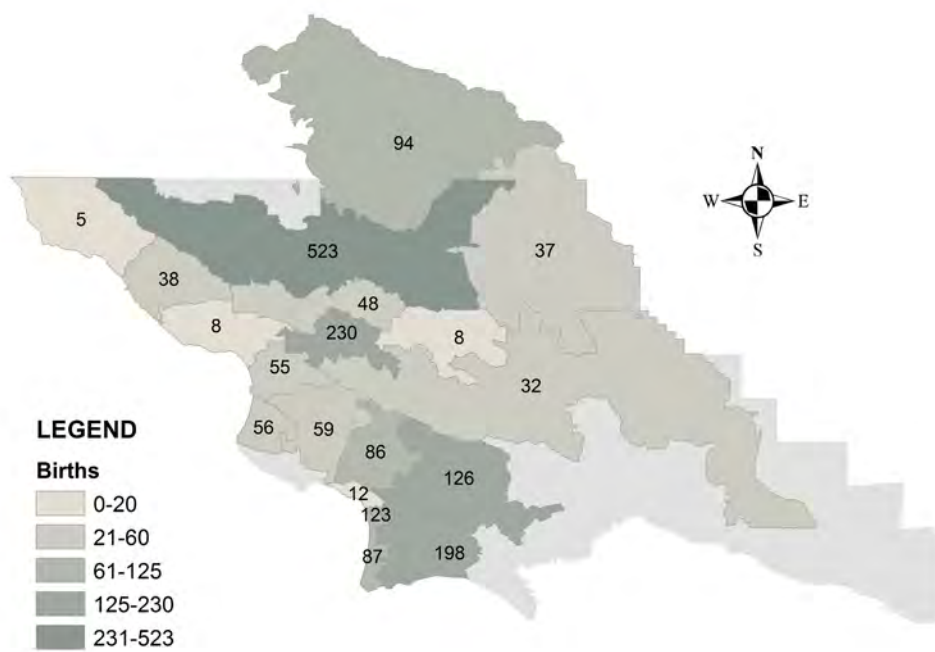
110 California Department of Public Health. California's Adolescent Birth Rate Drops to Another Record Low (2017). <https://www.cdph.ca.gov/Programs/OPA/Pages/NR17-082.aspx>

111 Ibid.

112 Ibid.

113 California Department of Public Health. County Health Status Profiles. <https://www.cdph.ca.gov/Programs/CHSI/Pages/County-Health-Status-Profiles.aspx>.

Teen Births, by ZIP Code in San Luis Obispo County, 2006-2016



Source: County of San Luis Obispo Public Health Department.

Infant Mortality, Cases per Year, San Luis Obispo County

Year	Cases
2010	17
2011	15
2012	19
2013	15
2014	15
2015	11

Source: California Department of Public Health, Birth and Death Records. Center for Health Statistics and Informatics; CDC Wonder. Linked Birth/Infant Death Records, 2007-2015.

of teen births, a breakdown of rates by race and ethnicity (as was provided at the state level) was unavailable at the county level.

## Infant Mortality

### ***Why this Matters***

In addition to the tragic loss of a young life, infant mortality is a key measure of a nation's health, reflecting socioeconomic conditions, public health practices, maternal health, and access to quality medical care. Infant mortality can result from a variety of circumstances, including birth defects, short gestation and low birthweight, pregnancy complications, and Sudden Infant Death Syndrome (SIDS).

### ***National and State Context***

California's infant mortality rate declined by 37 percent between 1994 and 2015, from 7 infant deaths per 1,000 live births to 4.4 per 1,000 - though rates range widely, from 2.8 (San Mateo) to 8.1 (Mendocino).<sup>114</sup>

Nationally, rates have declined as well, though it remains higher than other developed countries and still impacts certain groups more than others; for example, black mothers face infant mortality at more than double the rate for other ethnicities, both nationally and in California.<sup>115</sup>

### ***In San Luis Obispo County***

From 2013-2015, the infant mortality rate for San Luis Obispo County (4.9 per 1,000 births) was just slightly above the statewide average (4.6 per 1,000 births).<sup>116</sup> This rate includes all deaths to infants under 1 year of age. It is important to note that the low number of occurrences in San Luis Obispo County (e.g. 11 infant deaths in 2015) can lead rates to fluctuate year over year.

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114 Lucille Packard Foundation for Children's Health. <http://www.kidsdata.org>.

115 Ibid.

116 California Department of Public Health. (2018). County Health Status Profiles 2018. 2013-2015 average. <https://www.cdph.ca.gov/Programs/CHSI/Pages/County-Health-Status-Profiles.aspx>.

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# INFECTIOUS DISEASE

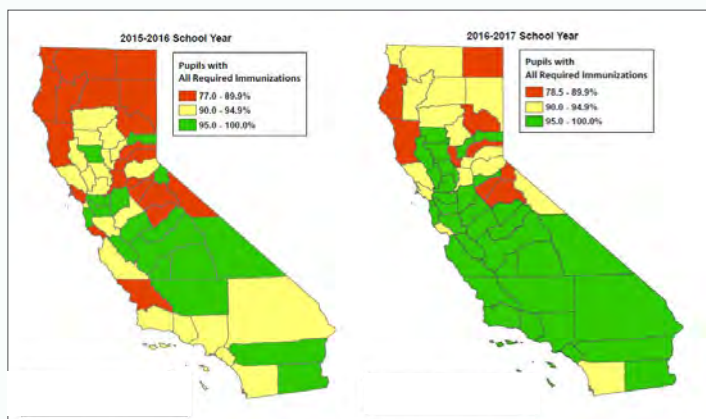


*photo credit: Tara Kennon*

### Good News Spotlight

#### Immunization Rates: Laws Can Make a Difference

*In 2016, a state law (SB277) eliminated the personal belief exemption from vaccine requirements for children enrolling in public or private school in California. The effect was immediately clear in San Luis Obispo County vaccination rates. In one year, the number of students starting child care with all required immunizations increased from 87.9 percent to 93 percent. The number of students starting kindergarten with all required immunizations increased from 89.7% to 95.6%. Most of the students who didn't yet have all required immunizations were in the process of completing a vaccine series.*



# INFECTIOUS DISEASE

Infectious, or communicable, diseases have a significant influence on illness and death in a community and are largely preventable or treatable. Examples of communicable diseases include those transmitted from human to human, from vectors (e.g., infected ticks or mosquitoes) to humans, and from contaminated food or water to humans.

## Sexually Transmitted Diseases (STDs)

### *Why this Matters*

The term STD refers to more than 25 infectious organisms that are transmitted primarily through sexual activity. Some are bacterial, such as chlamydia, syphilis, and gonorrhea; others are viral, such as hepatitis B, herpes, human immunodeficiency virus (HIV), and human papillomavirus (HPV); and still others are parasitic, such as trichomoniasis. Their health implications can range from mild to severe, with some causing only mild discomfort and others, if left untreated, causing infertility, pregnancy complications or life-threatening illness.

### *National and State Context*

The CDC estimates that there are approximately 20 million new STD infections each year—almost half of them among people ages 15 to 24.<sup>117</sup> Nationally, the most common STDs are chlamydia, gonorrhea, genital herpes, HPV and syphilis. California was ranked highest among all states in 2016 for the total number of cases for chlamydia, gonorrhea, syphilis, and congenital syphilis.<sup>118</sup> Bacterial STDs in California (chlamydia, gonorrhea, and syphilis) significantly increased in 2016. Important disparities persisted, with the highest rates found among young people, African-Americans, and men who have sex with men. Chlamydia remains the most frequently reported disease in California. In 2017, the rate of chlamydia was 552.1 cases per 100,000 Californians, a 9 percent increase over 2016. Gonorrhea cases increased 16 percent in 2017 to the rate of 190.5 per 100,000 Californians.<sup>119</sup>

117 Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2016. Atlanta: U.S. Department of Health and Human Services; 2017. <https://www.cdc.gov/std/stats16/default.htm>.

118 Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2016. Atlanta: U.S. Department of Health and Human Services; 2017. <http://www.cdc.gov/std/stats>.

119 California Dept of Public Health. Sexually Transmitted Diseases in California: 2017 Snapshot. <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/STDs-CA-2017Snapshot.pdf>



### ***In San Luis Obispo County***

Chlamydia was the most commonly diagnosed STD in San Luis Obispo County in 2017, with a rate of 445.9 cases per 100,000 population, up from 410.9 cases per 100,000 in 2016. This rate, while significantly lower than the state average of 552.1 cases per 100,000 population, has been steadily climbing over the past decade, nearly tripling compared to the 2004 rate of 176.9 cases per 100,000 population.<sup>120</sup> Gonorrhea was the county's second most common STD (after chlamydia), with a rate of 63.31 cases per 100,000 population in 2017, up from 11.3 cases per 100,000 population in 2010.<sup>121</sup>

## HIV/AIDS

### ***Why this Matters***

The human immunodeficiency virus (HIV) damages the immune system, eventually leading infected individuals to develop acquired immunodeficiency syndrome (AIDS), a chronic and potentially life-threatening condition. No effective cure exists for HIV, but increasingly effective treatments are allowing people with HIV to live longer, healthier, and more productive lives.

### ***National and State Context***

The total number of people living with HIV in the U.S. is increasing, but the number of new HIV infections has remained stable in recent years. The CDC estimates that there are approximately 1.1 million adults and adolescents living with HIV in the U.S.<sup>122</sup> Of those, they believe roughly 15 percent do not know they are infected. While new infections have continued to occur, with an estimated 37,600 new HIV infections reported annually, the estimated number of annual new infections has declined 10 percent from 2010 (41,900) to 2014 (37,600). California is experiencing a slower rate of decline at 2.9 percent from 2011 to 2015, while the rate of new diagnoses per 100,000 population declined by 6.1 percent, from 13.5 to 12.7 during the same time period.<sup>123</sup>

### ***In San Luis Obispo County***

HIV patterns in the county are similar to those at the national level, with newly acquired HIV infections hovering around a rate of 6.4 cases per 100,000 population from 2010-2015 (compared to a rate of 13.2 cases per 100,000 population at the state).<sup>124</sup> In January 2018, the total number of individuals living with HIV in San Luis Obispo County was 269.<sup>125</sup>

120 State of California, Department of Health Service; Sexually Transmitted Disease Control Branch. <http://www.cdph.ca.gov/data/statistics/Pages/STDDData.aspx>

121 State of California, Department of Health Service; Sexually Transmitted Disease Control Branch. <http://www.cdph.ca.gov/data/statistics/Pages/STDDData.aspx>

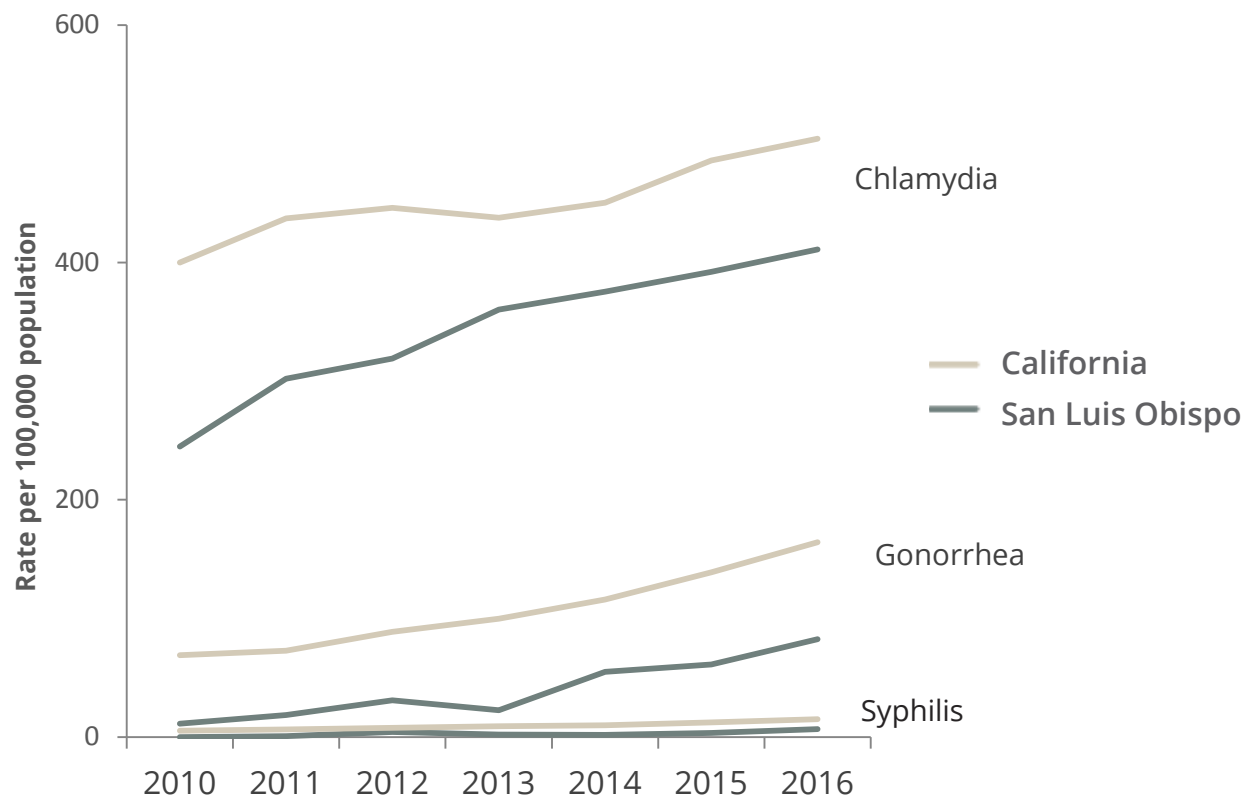
122 Centers for Disease Control and Prevention. (2016) HIV in the United States: *At A Glance*. <https://www.cdc.gov/hiv/statistics/overview/ata glance.html>

123 California Department of Public Health, Office of AIDS, California HIV Surveillance Report — 2015.

124 California Department of Public Health. (2017). Infectious Disease Cases by County, Year, and Sex. <https://data.chhs.ca.gov/dataset/infectious-disease-cases-by-county-year-and-sex/resource/741f25e1-db50-436a-a6a9-7b840176edbf>

125 County of San Luis Obispo Public Health Department, 2018.

Sexually Transmitted Diseases, San Luis Obispo County and California, 2010-2016



Source: California Department of Public Health, STD Control Branch.

## Hepatitis

### ***Why this Matters***

Hepatitis is inflammation of the liver, a vital organ that processes nutrients, filters the blood, and fights infections. When the liver is inflamed or damaged, its function can be affected. Hepatitis is most often caused by a virus, which can be spread in a variety of ways. Hepatitis A is typically caused by ingestion of contaminated food or water. Hepatitis B and C usually occur as a result of contact with infected body fluids. Hepatitis C is most commonly transmitted through injection drug use while, unlike hepatitis B, sexual transmission is rare. About 75-85 percent of persons infected with hepatitis C will develop chronic infection, and 1-5 percent of these individuals will die from cirrhosis or liver cancer.

### ***National Context***

In the U.S., the most common types of viral hepatitis are hepatitis A, B and C.<sup>126</sup> About 75 percent of all hepatitis C cases are among persons born 1945-1965 and about half of these individuals do not know that they are infected.

### ***In San Luis Obispo County***

The majority of hepatitis cases in the county are hepatitis C, with 358 cases reported in 2017. Hepatitis C cases occur across all age groups, with the risk highest for those who have multiple sexual partners or unprotected sex, inject illicit drugs, have been incarcerated, or have sexual contact with other men. While still a concern in the county, the virus has been steadily declining, with newly reported cases down from 692 cases in 2012.<sup>127</sup> Of note is that acute cases are inching up, with six cases of acute hepatitis C reported in 2017 compared with 0-2 cases each year 2012-2015. Acute hepatitis C refers to the first several months after someone is infected. Severity of acute infection can range from very mild illness to a serious condition requiring hospitalization. The increase in acute hepatitis C will need to be followed and may be related to increased transmission through injection drug use as a result of the opioid epidemic.

## Pneumonia and Influenza

### ***Why this Matters***

Pneumonia and influenza together are the eighth leading cause of death in the U.S. The two diseases are traditionally reported together because the symptoms and physiology that leads to death are similar and pneumonia is frequently a complication of influenza. Influenza is a contagious disease caused by a virus, while pneumonia is a serious bacterial infection of the lungs that develops when the immune system is weakened. The flu vaccine is recommended for all individuals six months and older; flu and pneumonia vaccines are especially recommended for persons most at risk from serious complications from influenza, including the very young, the elderly, and people with certain chronic medical conditions.

126 Centers for Disease Control and Prevention. Division of Viral Hepatitis and National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. What is Viral Hepatitis? <https://www.cdc.gov/hepatitis/abc/index.htm>

127 County of San Luis Obispo Public Health Department. (2017). [www.slopublichealth.org](http://www.slopublichealth.org).

*Annual Disease Counts, San Luis Obispo County, 2010-2017*

<b>Disease</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
HIV	18	20	11	12	7	12	16	7
AIDS	6	4	3	3	3	4	3	1
Campylobacteriosis	101	88	78	77	74	74	50	72
Chlamydia	673	815	862	963	1030	1072	1142	1249
Valley Fever	102	225	135	82	33	55	257	368
Cryptosporidiosis	24	13	7	5	9	5	9	8
E. Coli	13	4	8	13	14	12	16	16
Giardiasis	9	16	13	10	10	15	12	9
Gonorrhea	31	50	84	56	150	163	231	176
Hepatitis A	1	3	4	2	0	0	2	1
Hepatitis B (Chronic)	36	40	34	27	27	25	26	38
Hepatitis C (Community)	-	-	355	263	281	219	251	260
Hepatitis C (Correctional)	-	-	337	272	227	148	138	98
Lyme Disease	0	1	1	2	1	3	3	3
Measles (Rubeola)	0	0	0	0	0	0	0	2
Meningitis (Bacterial)	4	2	3	0	0	4	4	8
Meningitis (Viral)	35	12	3	17	12	21	13	12
MRSA	0	0	1	0	2	1	0	0
Pertussis	382	12	13	13	37	19	27	16
Rubella	0	0	0	0	0	0	0	0
Salmonella	33	20	43	39	37	46	42	29
Shigellosis	5	3	1	4	6	9	2	8
Syphilis (Primary/Secondary)	0	2	5	5	5	10	18	14
Tuberculosis	4	6	3	4	0	0	0	0

Source: County of San Luis Obispo Public Health Department.

### ***National Context***

It is estimated that during most influenza seasons, approximately 5 percent to 20 percent of the population is infected with influenza, although rates of infection vary among age groups and from one season to another depending on the strength of that year's circulating strain and vaccine effectiveness. Nationally, an estimated 200,000+ people are hospitalized each year due to influenza-related complications, with more deaths attributed to pneumonia than influenza.

### ***In San Luis Obispo County***

In San Luis Obispo County, from 2014-2016, less than half (41.0 percent) of people received their annual flu shot - lower than the state overall during the same period (44.6 percent).<sup>128</sup> Those under age 18 were more likely to get their flu shot (44.7 percent) compared to adults ages 18 and older (40.5 percent).<sup>129</sup> During 2000-2010, an average of 43 deaths per year occurred in San Luis Obispo County with a primary cause of influenza or pneumonia.<sup>130</sup>

## Vector-Borne Disease

### ***Why this Matters***

Vector-borne diseases account for 17 percent of all infectious diseases worldwide, causing over 1 million deaths annually.<sup>131</sup> They include dengue, malaria, Zika, West Nile virus, yellow fever, Lyme and others. They are spread through vectors, like mosquitoes, ticks, flies, sandflies, fleas, and others, which may transmit infectious diseases between humans or from animals to humans.

Distribution of these diseases is determined by a complex dynamic of environmental and social factors. The increasingly globally-connected world and environmental challenges such as climate change have had a significant impact on disease transmission in recent years, allowing diseases to emerge in countries where they were previously unknown.

### ***Global, National and State Context***

The Zika virus has been a particular concern in recent years, following an explosion of the virus in Latin America and the Caribbean. The disease, spread through the bite of an *Aedes* species mosquito (*Ae. aegypti* and *Ae. albopictus*), can cause certain birth defects, such as microcephaly, and Guillain-Barré Syndrome in adults.<sup>132</sup> Local transmission has been detected in some parts of Texas and Florida, but has not yet been detected in California.<sup>133</sup>

Lyme disease has also been a concern nationally and is the most commonly reported vector-borne illness in the U.S. The disease, spread through the bite of an infected black-legged tick, can cause fever, headache, fatigue, skin rash, and, if left untreated, can spread to joints, the heart, and

128 UCLA Center for Health Policy Research. AskCHIS. 2014-2016 Pooled average. Vaccinated for flu in past 12 months: Child, Teen, Adult. (San Luis Obispo County). <http://ask.chis.ucla.edu>.

129 Ibid.

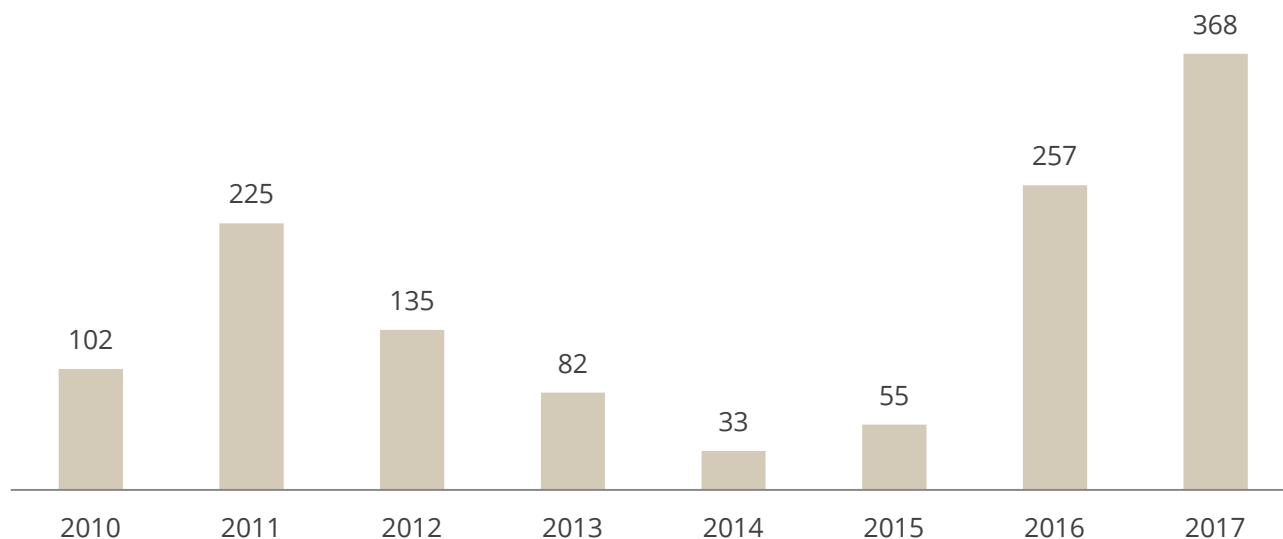
130 County of San Luis Obispo Public Health Department. (2017). <http://www.slocounty.ca.gov/Departments/Health-Agency/Public-Health/All-Public-Health-Services/Epidemiology-Data-Reports.aspx>.

131 World Health Organization. (2017). Vector-borne diseases overview. <http://www.who.int/mediacentre/factsheets/fs387/en>

132 Centers for Disease Control and Prevention.. About Zika: What we know. <https://www.cdc.gov/zika/about/index.html>.

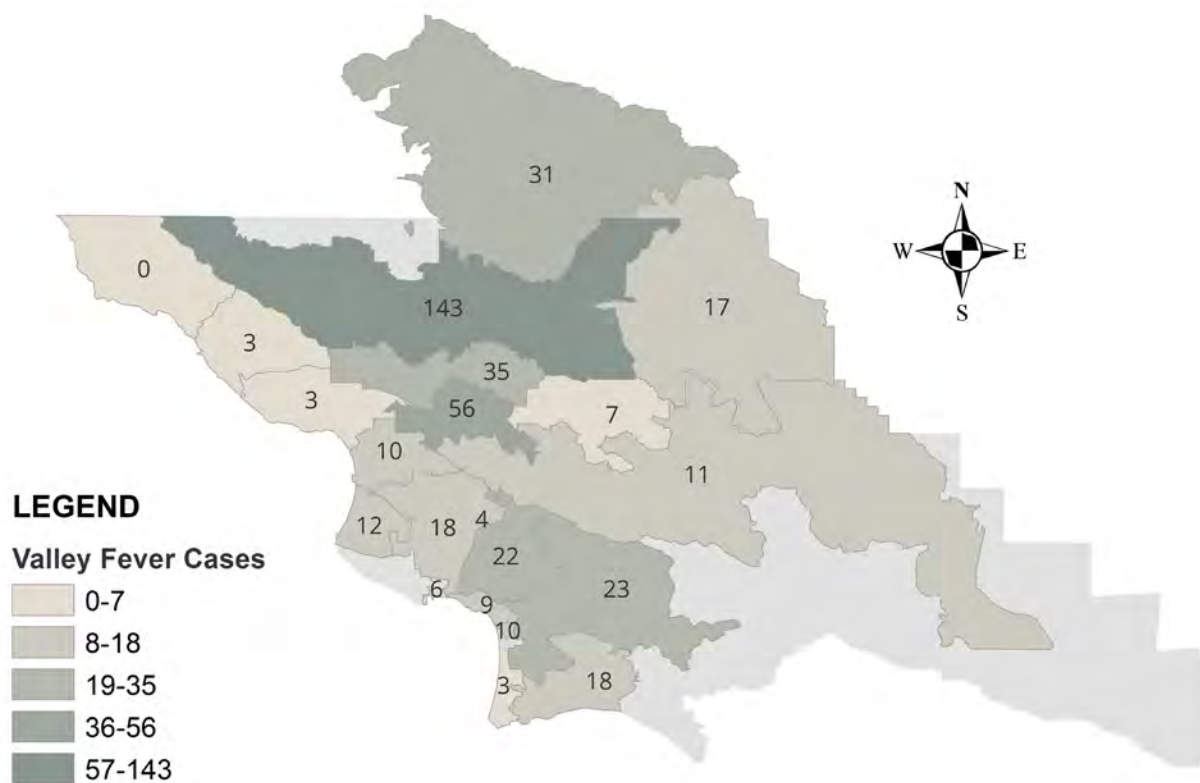
133 Centers for Disease Control and Prevention.. World Map of Areas with Risk of Zika. <https://wwwnc.cdc.gov/travel/page/world-map-areas-with-zika>.

### Valley Fever Cases, San Luis Obispo County, 2010-2017



Source: County of San Luis Obispo Public Health Department

### Valley Fever Cases by ZIP Code, San Luis Obispo County, 2012-2016



Note: Map reflects home address of residents with reported cases of Valley Fever, not necessarily the location where residents contracted Valley Fever.

Source: County of San Luis Obispo Public Health Department

the nervous system. In 2015, 95 percent of confirmed Lyme disease cases were reported from 14 states (Connecticut, Delaware, Maine, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and Wisconsin).<sup>134</sup>

Statewide cases of West Nile virus rose to 516 in 2017 from 442 in 2016.<sup>135</sup>

### ***In San Luis Obispo County***

The last reported case of human West Nile virus in San Luis Obispo County was confirmed in 2016, and West Nile virus continues to be present in the county, as testing of dead birds recently confirmed.<sup>136</sup>

The *Aedes* species mosquito has not yet been detected in San Luis Obispo, Santa Barbara or Monterey Counties, although it is present in 12 other California counties, including Kern County. One case of travel-related Zika reported in San Luis Obispo County in 2016.

The western black-legged tick, which transmits Lyme disease in California, has been found in 56 of 58 California counties. It is most commonly seen in Northern California along the coast and on the western slope of the Sierra Nevada range, and much less commonly in San Luis Obispo County.<sup>137</sup> From 2006 to 2015, there were 11 cases of confirmed Lyme disease among San Luis Obispo County residents, or an incidence rate of 0.40 per 100,000 population.<sup>138</sup> Statewide during the same period, there were 778 cases, or an incidence rate of 0.20 per 100,000 population.<sup>139</sup> Among the statewide 2015 total, 30 percent of patients with confirmed cases reported travel history with exposure outside of California, most commonly in the northeastern U.S.<sup>140</sup>

## Foodborne Illness

### ***Why this Matters***

Foodborne illness, or food poisoning, is a common public health problem. Each year, one in six Americans gets sick by consuming contaminated foods or beverages.<sup>141</sup> While most recover within days, some illnesses are severe and can even be deadly. Many different disease-causing microbes, or pathogens, can contaminate foods, including *Campylobacter*, *E. coli*, *Listeria*, *Norovirus*, *Salmonella*, *Shigella* and others.

### ***In San Luis Obispo County***

In San Luis Obispo County in 2017, reported cases of foodborne illness included 72 cases of *Campylobacter*, 16 cases of *E. coli*, no cases of *Listeria*, 29 cases of *Salmonella*, and 8 cases of

134 Centers for Disease Control and Prevention. (2017). Lyme Disease Data and Statistics. <https://www.cdc.gov/lyme/stats/index.html>

135 California Department of Public Health, UC Davis Arbovirus Research and Training, and Mosquito and Vector Control Association of California. (2017). Fight the Bite California West Nile Virus Website. <http://www.westnile.ca.gov>.

136 County of San Luis Obispo Public Health Department. (2017). [www.slopublichealth.org](http://www.slopublichealth.org).

137 California Department of Public Health. (2017). Lyme Disease Homepage. <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/LymeDisease.aspx>.

138 California Department of Public Health. (2015). Vector-Borne Disease Section Annual Report 2015. <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/VBDSAnnualReport15.pdf>.

139 Ibid.

140 Ibid.

141 Centers for Disease Control and Prevention. (2017). Food Safety Homepage. <https://www.cdc.gov/foodsafety/foodborne-germs.html>.

Shigella.<sup>142</sup> Data is not available on Norovirus, perhaps the most common cause of gastrointestinal (GI) disease and GI outbreak, because health care providers are not required to report it to the Public Health Department.

## Valley Fever

### ***Why this Matters***

Valley Fever (coccidioidomycosis) is an illness caused by breathing in a fungus which lives naturally in the soil in some areas of the Southwestern U.S., Mexico and South America. In California, the fungus is found in the Central Valley and San Luis Obispo County. When soil containing the fungus is disturbed, dust containing fungal spores may be inhaled into a person's lungs and the person may become infected. Anyone who lives, visits, or travels through the areas where the fungus is in the soil (endemic areas) may become infected with Valley Fever.

Seasonal rain during late winter and early spring causes the fungus to grow in the region's soil. When temperatures rise during the summer and that soil dries out, it can be picked up and lifted into the air by naturally occurring winds, dust storms, earthquakes, and man-made activities, such as construction, digging and cycling. Once airborne, and given the right conditions, the spores can travel miles, infecting those in its path.

Sixty percent of those infected have no symptoms or symptoms so mild that they do not seek medical attention. The remaining 40 percent develop an illness severe enough to prompt the person to seek medical care. Symptoms typically develop between seven and 20 days after coming in contact with the fungus and include flu-like symptoms such as cough, fever, headache, chills, sweats, chest pain and exhaustion. Of those diagnosed with Valley Fever, 1-5 percent experience a much more serious form of the disease in which the infection spreads to other parts of the body.

### ***National and State Context***

Valley Fever lives in the soils of San Luis Obispo County, the Central Valley region, and other areas within parts of Arizona, California, Nevada, New Mexico, Utah and South America. Two-thirds of all U.S. Valley Fever infections are contracted in Arizona. Nationally, Valley Fever is uncommon and is considered an "orphan disease."

The number of Valley Fever cases in California rose to a record level in 2016, with 5,372 reported (a rate of 13.7 cases per 100,000 population). This figure is a jump of 71 percent from the previous year and surpassed the previous peak in 2011, which had been the highest number of cases since Valley Fever was made reportable in 1995.<sup>143</sup> Historically, about three-quarters of cases have been in the state's heavily agricultural San Joaquin Valley.<sup>144</sup>

142 County of San Luis Obispo Public Health Department. (2017). [www.slopublichealth.org](http://www.slopublichealth.org).

143 California Department of Public Health. (2017). Valley Fever Cases Increase in California in 2016. <https://www.cdph.ca.gov/Programs/OPA/Pages/NR17-058.aspx>

144 California Department of Public Health. (2016). Valley Fever Fact Sheet. [https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH percent20Document percent20Library/ValleyFeverFactSheet.pdf](https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/ValleyFeverFactSheet.pdf)



## *In San Luis Obispo County*

San Luis Obispo County noted similar trends as the state, with a record high 368 cases reported in 2017.

## Vaccines and Immunizations

### *Why this Matters*

Immunizations are a successful and cost-effective measure to protect children and adults from numerous infectious diseases such as measles, mumps, and whooping cough. These diseases can result in extended work or school absences, hospitalizations, and even death.

Sufficient vaccination rates are necessary to achieve community immunity (also known as herd immunity). Community immunity is the idea that if a certain percentage of people are vaccinated from a disease, everyone in the community will be safe from the illness. Community immunity protects children too young to have received a vaccine, those with compromised immune systems, or others who have medical conditions that prevent them from receiving a vaccine. For some highly contagious infectious diseases, like measles, the CDC estimates that between 96 to 99 percent of people need to be immunized to establish community immunity.

### *In San Luis Obispo County*

Eighty-eight percent of children in public and private child care centers in San Luis Obispo County in 2015–16 had up-to-date immunizations. The percent of kindergarteners with all required immunizations (DTaP, OPV, MMR, Hib, HepB, VZV and PCV) in San Luis Obispo County was 95.6 percent for the 2016-2017 year, up from 89.7 percent in 2015-2016.<sup>145</sup> This is higher than the Healthy People 2020 goal of 80 percent, and the same as the California average of 95.6 percent.

#### Key to immunizations:

- DTaP: Diphtheria, tetanus, and pertussis (whooping cough)
- OPV: Oral polio vaccine
- MMR: Measles, mumps, rubella (German measles)
- Hib: Haemophilus influenzae, type B
- HepB: Hepatitis B
- VZV: Varicella zoster vaccine (chicken pox)
- PCV: Pneumococcal conjugate vaccine

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<sup>145</sup> California Department of Health Services, Immunization Branch. [https://archive.cdph.ca.gov/programs/immunize/Documents/2016-17\\_CA\\_KindergartenSummaryReport.pdf](https://archive.cdph.ca.gov/programs/immunize/Documents/2016-17_CA_KindergartenSummaryReport.pdf). Accessed Sept 2017.

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# CHRONIC DISEASE

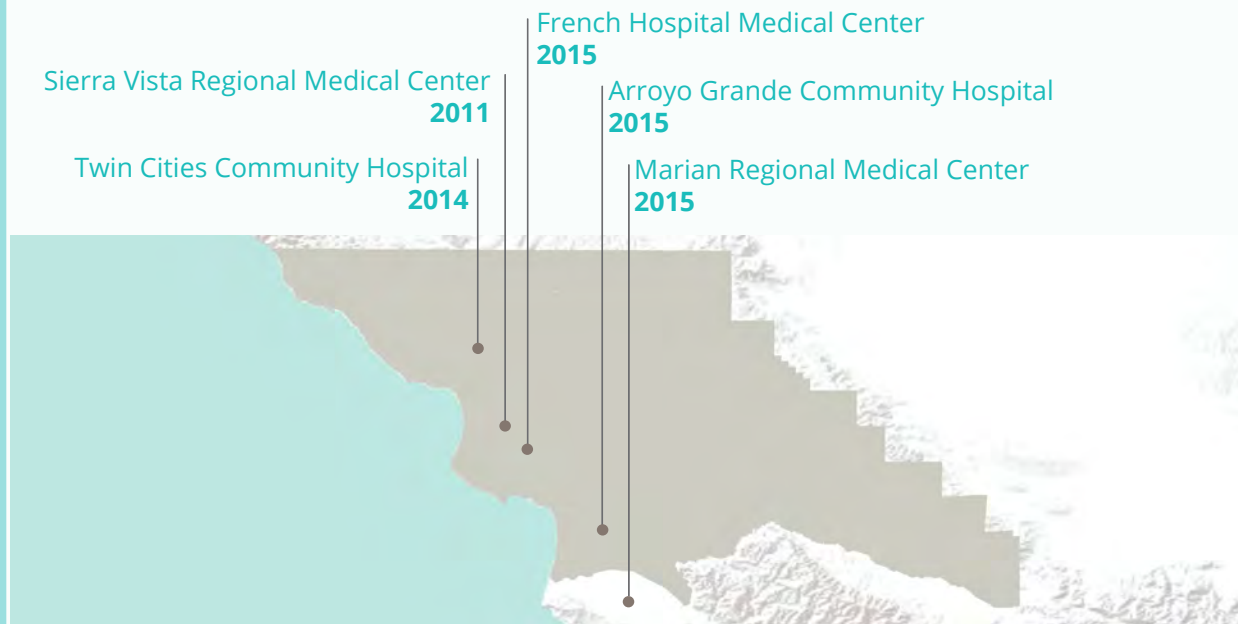


*photo credit: Barbara J. Schanz*

### **Good News Spotlight**

#### **Hospitals Step Up to Meet High Standards for Stroke Care**

*For years, the rate of people who died after having a stroke was higher in San Luis Obispo County than the state average—at times even the highest in California. In response, local hospitals took action to ensure stroke patients receive the best possible care. That meant training specialized staff, designating dedicated beds and units for stroke care, and purchasing special equipment for diagnosis and treatment. Paramedics received training on the knowledge and skills to quickly identify the signs of a stroke so they could rapidly administer needed medicine and care, reducing the delays that can lead to worse outcomes for the patient. These special efforts helped bring the county's rates down and earned national recognition for the hospitals. By 2015, all area hospitals received national certification as Primary Stroke Centers.*



# CHRONIC DISEASE

Chronic diseases and conditions—such as heart attacks and stroke, cancers, respiratory diseases and diabetes—are among the most common, costly, and preventable of all health problems. Because of this, the burden of chronic disease is a commonly used measure of community health status.

Monitoring the causes of death within a community is important for planning prevention programs and to help inform the public and health practitioners about health risks. In 2015, the top five leading causes of death in the U.S. were heart disease, cancer, chronic lower respiratory diseases, accidents (unintentional injuries), and stroke.<sup>146</sup> A little over half (55 percent) of deaths from 2005-2013 were due to three leading causes: heart disease, cancer, and stroke.<sup>147</sup>

The leading cause of death in San Luis Obispo County in 2005–13 was cancer. San Luis Obispo County had lower death rates per 100,000 population than California for heart disease (140.6 versus 163.2), Alzheimer’s (21.3 versus 25.9), and diabetes (12.9 versus 20.1).

## Cancer

### *Why this Matters*

Cancer is a genetic disease—that is, it is caused by changes to genes that control the way cells function, especially how they grow and divide. While some of the factors are inherited at birth, others are influenced by lifestyle and environmental factors. Cancer refers to many different types of disease characterized by uncontrolled growth and spread of abnormal cells. The principal danger of cancer is its tendency to metastasize, or invade neighboring tissues or organs, and to grow in other areas of the body. If this spread remains untreated, cancer cells invade vital organs, causing serious illness or death.

A person’s cancer risk can be reduced with healthy choices like avoiding tobacco, limiting alcohol use, protecting one’s skin from the sun and avoiding indoor tanning, eating a diet rich in fruits and vegetables, keeping a healthy weight, and being physically active.<sup>148</sup>

146 Centers for Disease Control and Prevention. National Center for Health Statistics, Leading Causes of Death. <https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm>.

147 County of San Luis Obispo Public Health Department. (2017). [www.slopublichealth.org](http://www.slopublichealth.org).

148 <https://www.cancer.gov/about-cancer/understanding/what-is-cancer>.

### ***In San Luis Obispo County***

For the last several years, cancer has been the leading cause of death in San Luis Obispo County (with 5,603 deaths attributed to cancer between 2005-2013), followed closely by heart disease. The most common types of cancer that contributed to these deaths were lung and bronchus, prostate, colon and rectum, breast, pancreas, ovary, liver, non-Hodgkin lymphoma, esophagus, melanoma, bladder, kidney, leukemia, and myeloma.<sup>149</sup>

## Heart Disease

### ***Why this Matters***

Heart disease is a term that encompasses a variety of different diseases affecting the heart. The most common type of heart disease, coronary heart disease, occurs when plaque builds up in the arteries that supply blood to the heart and the arteries narrow (atherosclerosis). As the arteries narrow, the flow of blood to the heart can slow or stop, causing chest pain, shortness of breath, a heart attack, or other symptoms.

Certain health behaviors, like smoking, eating an unhealthy diet, and not getting enough exercise, all increase the risk for heart disease. Having high cholesterol, high blood pressure, or diabetes also can increase the risk for heart disease.<sup>150</sup>

### ***National Context***

More than 600,000 Americans die of heart disease each year, making it the leading cause of death in the U.S. According to the CDC, coronary heart disease is the most common type of heart disease, costing over \$100 billion overall in health services, medication, and lost productivity.

### ***In San Luis Obispo County***

Heart disease is the second leading cause of death in San Luis Obispo County, with 5,546 deaths attributed to heart disease between 2005-2013.<sup>151</sup> Approximately 5.6 percent of adults aged 18 and older have ever been told by a doctor that they have heart disease or angina (lower than California at 6.3 percent).<sup>152</sup>

The age-adjusted death rate in the county due to heart disease was 140.6 deaths per 100,000 population.<sup>153</sup> Deaths for the most common type of heart disease, coronary heart disease, accounted for 66.1 deaths per 100,000 population in 2013-2015.<sup>154</sup> This was lower than the previous period for the county (90.5 deaths per 100,000 population in 2009-2011) and meets the

149 California Cancer Registry. Age-Adjusted Mortality Rates in CA, 2010-2014. <https://www.cancer-rates.info/ca>.

150 Centers for Disease Control and Prevention. Know the Facts about Heart Disease. [www.cdc.gov/heartdisease/docs/consumered\\_heartdisease.pdf](http://www.cdc.gov/heartdisease/docs/consumered_heartdisease.pdf).

151 County of San Luis Obispo Public Health Department. (2017). [www.slopublichealth.org](http://www.slopublichealth.org). Includes all deaths between 2005-2013 with ICD-10 codes of I00-I09, I11, I13, I20-I51.

152 UCLA Center for Health Policy Research. AskCHIS. 2014-2016 Pooled average. Ever diagnosed with heart disease: Adults. (San Luis Obispo County). <http://ask.chis.ucla.edu>.

153 County of San Luis Obispo Public Health Department. (2017). [www.slopublichealth.org](http://www.slopublichealth.org). Includes all deaths between 2005-2013 with ICD-10 codes of I00-I09, I11, I13, I20-I51.

154 California Department of Public Health. (2017). County Health Status Profiles 2017. <https://www.cdph.ca.gov/Programs/CHSI/CDPH/percent20Document/percent20Library/OHIRProfiles2017.pdf>.

### Cancers by Incidence, San Luis Obispo County, 2010-2014

Site	Total	Age-adjusted Rate
Breast	1198	72.6
Prostate (males only)	952	108.5
Lung and Bronchus	817	46
Melanoma of the Skin	712	42.4
Colon & Rectum	596	34.2
Urinary Bladder, invasive and in situ	367	21.1
Non-Hodgkin Lymphoma	350	20.5
In Situ Breast	253	14.8
Kidney and Renal Pelvis	205	12.4
Pancreas	182	10.4
Miscellaneous	180	9.8
Corpus Uteri (females only)	159	16.8
Thyroid	159	11
Liver and Intrahepatic Bile Duct	137	7.5
Lymphocytic Leukemia	126	7.4

Source: California Cancer Registry.

### Cancers by Mortality Rate, San Luis Obispo County, 2010-2014

Site	Total	Age-adjusted Rate
Lung and Bronchus	592	33.2
Prostate (males only)	158	19.8
Colon & Rectum	232	12.8
Miscellaneous	221	12.2
Breast (females only)	201	22.31
Pancreas	169	9.4
Ovary (females only)	79	8.2
Liver and Intrahepatic Bile Duct	95	5
Non-Hodgkin Lymphoma	86	4.8
Esophagus	85	4.7
Melanoma of the Skin	69	4
Urinary Bladder	74	3.9
Kidney and Renal Pelvis	65	3.7
Myeloid and Monocytic Leukemia	59	3.5
Myeloma	46	2.5

Source: California Cancer Registry.

Healthy People 2020 target of less than or equal to 103.4 deaths per 100,000 population.<sup>155</sup> It is also lower than the state of California (93.2 deaths per 100,000 population) and the nation (99.6 deaths per 100,000 population) over the same period.<sup>156</sup>

## Stroke

### *Why this Matters*

A stroke occurs when something blocks blood supply to part of the brain or when a blood vessel in the brain bursts, causing parts of the brain to become damaged or die. A stroke can cause lasting brain damage, long-term disability, or even death.<sup>157</sup>

### *National Context*

Stroke is the fifth leading cause of death in the U.S. and is a major cause of serious disability for adults. About 795,000 people in the U.S. have a stroke each year.<sup>158</sup> Certain groups are more at risk for a stroke. African Americans are 40 percent more likely than their non-Hispanic white peers to die from a stroke and several Southeastern states in the U.S. (Alabama, Arkansas, Georgia, Mississippi, North Carolina, South Carolina and Tennessee) have higher death rates due to stroke.<sup>159 160</sup>

### *In San Luis Obispo County*

In San Luis Obispo County, strokes are the third leading cause of death, accounting for an estimated 51.6 deaths per 100,000 population.<sup>161</sup> This is greater than the California average over the same time period (37.4 deaths per 100,000 population) and the Healthy People 2020 target of 33.8 deaths per 100,000 population.<sup>162</sup>

## Chronic Obstructive Pulmonary Disease (COPD)

### *Why this Matters*

Chronic lower respiratory diseases, most commonly chronic obstructive pulmonary disease (COPD), occur most often in older people. Between 80 and 90 percent of COPD is attributable to cigarette smoking, although exposure to air pollutants in the home and workplace, genetic factors, and respiratory infections also play a role.

155 California Department of Public Health. (2017). County Health Status Profiles 2017. <https://www.cdph.ca.gov/Programs/CHSI/CDPH/percent20Document/percent20Library/OHIRProfiles2017.pdf>.

156 California Department of Public Health. (2017). County Health Status Profiles 2017. <https://www.cdph.ca.gov/Programs/CHSI/CDPH/percent20Document/percent20Library/OHIRProfiles2017.pdf>.

157 Centers for Disease Control and Prevention. <https://www.cdc.gov/stroke/about.htm>.

158 Centers for Disease Control and Prevention. <https://www.cdc.gov/stroke>.

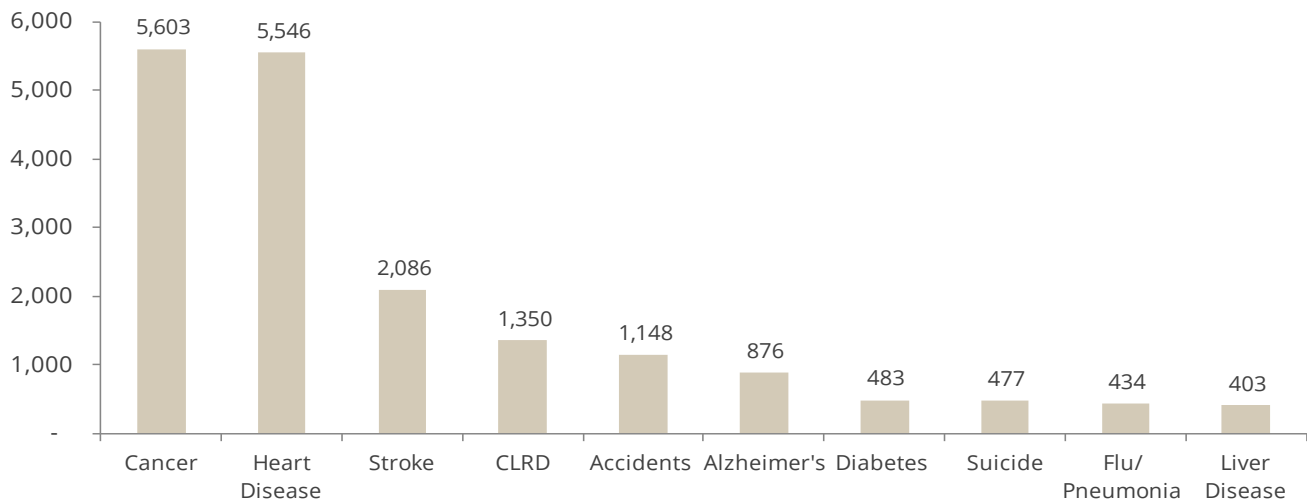
159 Families USA. Racial and Ethnic Health Disparities among Communities of Color Compared to Non-Hispanic Whites. <http://familiesusa.org/health-disparities>.

160 RWJF. Understanding Geographic Patterns of Stroke. <https://www.rwjf.org/en/library/articles-and-news/2011/07/understanding-geographic-patterns-of-stroke.html>.

161 County of San Luis Obispo Public Health Department. (2017). [www.slopublichealth.org](http://www.slopublichealth.org). Includes all deaths between 2005-2013.

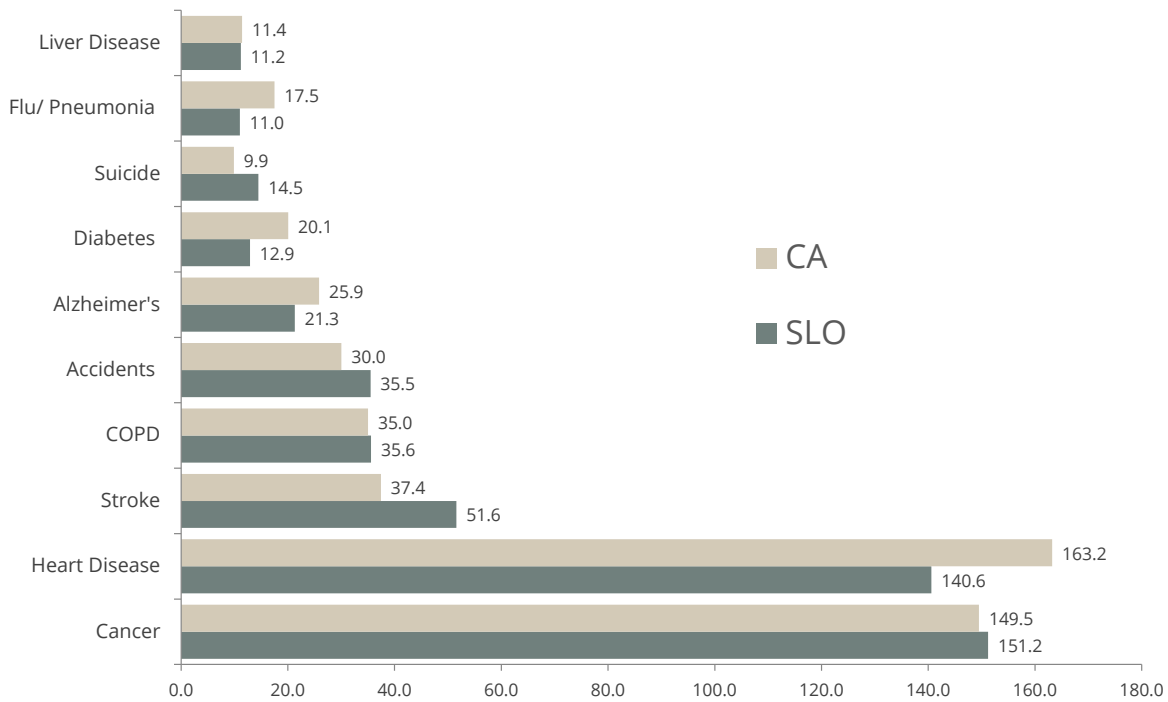
162 Ibid.

### Leading Causes of Death in San Luis Obispo County, 2005-2013



Source: County of San Luis Obispo Public Health Department. Death Records, 2005-2013.

### Leading Causes of Death, San Luis Obispo County and California, 2005-2013



Source: County of San Luis Obispo Public Health Department. Death Records, 2005-2013.



### ***National and State Context***

COPD is the third leading cause of death in the U.S. Almost 15.7 million Americans (6.4 percent) reported that they have been diagnosed with COPD.<sup>163</sup> The California age-adjusted death rate from COPD was 35.0 per 100,000 population, but ranged greatly across California counties (from a high of 77.4 in Yuba County to a low of 18.9 in San Francisco County).<sup>164 165</sup>

### ***In San Luis Obispo County***

The age-adjusted death rate from COPD in San Luis Obispo County was 35.6 per 100,000 population, about the same as the state overall.<sup>166</sup> A Healthy People 2020 goal for deaths due to COPD has not been established.

## Diabetes

### ***Why this Matters***

Diabetes is a disease that affects how the body turns food into energy. The food a person eats is broken down into sugar (glucose), which the insulin hormone then tells the body to use as energy. If a person has diabetes, the body either doesn't make enough insulin or can't use the insulin it makes as well as it should. There are three main types of diabetes: type 1, type 2, and gestational diabetes (diabetes while pregnant).<sup>167</sup>

Diabetes prevalence has increased steadily over the past decade across the U.S. The most common type of diabetes is type 2 diabetes, which accounts for about 90 percent to 95 percent of all diagnosed cases.<sup>168</sup>

People from minority populations are more likely to be affected by type 2 diabetes. Minority groups constitute 25 percent of all adult patients with diabetes in the U.S. Mexican-Americans and Puerto Ricans are twice as likely to have the disease as non-Hispanic whites of similar age.<sup>169</sup>

### ***National Context***

In 2016, the CDC estimated that 29 million Americans had diabetes (with 25 percent unaware that they had it). Approximately 86 million more are living with prediabetes, a serious health condition that increases a person's risk of type 2 diabetes and other chronic diseases. Over the past decade, diabetes has remained the seventh leading cause of death in the U.S.,<sup>170</sup> primarily from diabetes-associated cardiovascular disease. In the U.S., diabetes is the leading cause of non-traumatic amputations, blindness among adults aged 20-74, and end-stage renal disease. In 2007, total direct and indirect costs for diabetes in the U.S. was \$174 billion.

163 Centers for Disease Control and Prevention. (2017). Chronic Obstructive Pulmonary Disease (COPD). <https://www.cdc.gov/copd/index.html>.

164 California Department of Public Health. (2017). County Health Status Profiles 2017. <https://www.cdph.ca.gov/Programs/CHSI/CDPH%20Document%20Library/OHIRProfiles2017.pdf>.

165 County of San Luis Obispo Public Health Department. (2017). [www.slopublichealth.org](http://www.slopublichealth.org). Includes all deaths between 2005-2013.

166 Ibid.

167 Centers for Disease Control and Prevention. (2017). About Diabetes. <https://www.cdc.gov/diabetes/basics/diabetes.html>.

168 Ibid.

169 Healthy People 2020. (2017). 2020 Topics & Objectives: Diabetes <https://www.healthypeople.gov/2020/topics-objectives/topic/diabetes>.

170 Centers for Disease Control and Prevention. (2017). About Diabetes. <https://www.cdc.gov/diabetes/basics/diabetes.html>.

### ***In San Luis Obispo County***

The percentage of adults with diabetes in San Luis Obispo County was 5.6 percent, compared to 9.3 percent in the state and 10.5 percent nationally.<sup>171</sup> In San Luis Obispo County, it is estimated that 46 percent of adults have prediabetes or undiagnosed diabetes and 5 percent (approximately 14,070) have diagnosed type 2 diabetes.<sup>172</sup>

## Asthma

### ***Why this Matters***

Asthma is a serious and growing health problem. Air pollution and airborne allergens are two environmental triggers that can exacerbate asthma, disproportionately affecting low-income families who are often exposed to asthma triggers—including mold, mildew, and dust mites—inside their own homes.<sup>173</sup>

### ***National Context***

An estimated 16.4 million adults (14.0 percent) and 7.0 million children in the U.S. have been diagnosed with asthma at some point in their lives.<sup>174 175</sup> In California, 14.6 percent of adults and 15.2 percent of children and teens have ever been told they had asthma.<sup>176</sup>

### ***In San Luis Obispo County***

In San Luis Obispo County, 12.4 percent of adults and 13.8 percent of children and teens have ever been diagnosed with asthma.<sup>177</sup>

## Oral Health

### ***Why this Matters***

Oral diseases, like tooth decay, are among the most common chronic conditions in the U.S. Poor oral health disproportionately affects certain groups, including seniors (65+ years) who grew up without the benefit of community water fluoridation and other fluoride products, as well as the economically disadvantaged, uninsured, and members of racial and ethnic minorities.<sup>178</sup> Additionally, people with disabilities and other health conditions are more likely to have poor oral health.<sup>179</sup>

171 UCLA Center for Health Policy Research. AskCHIS. 2014-2016 Pooled average. Ever diagnosed with diabetes: Adults. (San Luis Obispo County). <http://ask.chis.ucla.edu>.

172 Babey, S., Wolstein, J., Diamant, A., & Goldstein, H. (2016). Pre-diabetes in California: Nearly half of California adults on path to diabetes. UCLA Center for Health Policy Research, Health Policy Brief. Los Angeles, CA. <http://healthpolicy.ucla.edu/publications/Documents/PDF/2016/prediabetes-brief-mar2016.pdf>.

173 California Department of Public Health. (2017). Office of Statewide Health Planning and Development, Preventable Hospitalizations in California, 1999-2008.

174 Centers for Disease Control and Prevention. (2018). Asthma. [www.CDC.gov/asthma](http://www.CDC.gov/asthma).

175 Behavioral Risk Factor Surveillance System (BRFSS). (2016). Asthma Data. <https://www.cdc.gov/brfss>.

176 UCLA Center for Health Policy Research. AskCHIS. 2014-2016 pooled average for adults, 2011-2016 pooled average for child and teens. Ever diagnosed with asthma: Child, Teen, Adults. (San Luis Obispo County). <http://ask.chis.ucla.edu>.

177 Ibid.

178 Centers for Disease Control and Prevention. [https://www.cdc.gov/oralhealth/oral\\_health\\_disparities/index.htm](https://www.cdc.gov/oralhealth/oral_health_disparities/index.htm).

179 U.S. Department of Health and Human Services, Healthy People 2020. Healthy People 2020. Accessed December 2015. From <https://www.healthypeople.gov/2020/topics-objectives/topic/oral-health>.

### ***National and State Context***

In the U.S., approximately 23 percent of children have at least one dental cavity by age 5.<sup>180</sup> By age eight, that number increases to 37 percent.<sup>181</sup> In California, 69.2 percent of adults had seen a dentist in the last year.<sup>182</sup>

These diseases have financial implications, with more than \$113 billion a year spent on costs related to dental care. They can also cause pain and disability for millions of Americans, and affect attendance at work and school.

### ***In San Luis Obispo County***

In San Luis Obispo County, 73.9 percent of adults had seen a dentist or dental hygienist in the last year, higher than the state average.<sup>183</sup> Additionally, 53.0 percent of adults in the county reported the condition of their teeth as 'excellent' or 'very good.'<sup>184</sup>

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180 National Health and Nutrition Examination Survey. (2015). Dental Caries and Sealant Prevalence in Children and Adolescents in the United States, 2011–2012. <https://www.cdc.gov/nchs/data/databriefs/db191.htm>.

181 Ibid.

182 UCLA Center for Health Policy Research. AskCHIS. 2014-2016 Pooled average. Time since last dental visit: Adults. (San Luis Obispo County). <http://ask.chis.ucla.edu>.

183 Ibid.

184 Ibid.

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# HEALTH BEHAVIORS



photo credit: Inger Appanaitis

### **Good News Spotlight**

#### **Cities in San Luis Obispo County Support Smoke-free Outdoor Spaces**

*When the Paso Robles City Council voted to ban smoking in outdoor public places in March 2017, it marked a milestone: today all cities in San Luis Obispo County protect residents with outdoor smoking bans. The cities of Pismo Beach, Arroyo Grande, Grover Beach, and Atascadero passed policies banning smoking in their recreational areas, and both San Luis Obispo and Morro Bay ban tobacco products in most areas of their cities, including parks, outdoor dining areas, and city sidewalks. The County also passed an ordinance in 2012 which banned smoking on County property, as well as most recreational areas in unincorporated areas.*



# HEALTH BEHAVIORS

According to the Centers for Disease Control and Prevention, four health risk behaviors—lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption—are responsible for much of the illness and death related to chronic diseases, including heart disease, cancer and stroke.<sup>185</sup>

## Tobacco

### *Why this Matters*

Living tobacco-free lowers a person’s risk of developing lung cancer, heart disease, and other diseases and causes of death. Tobacco-free living means avoiding use of all types of tobacco products, including cigarettes, cigars, smokeless tobacco, hookah, and electronic smoking devices (“e-cigarettes”), as well as living free from secondhand smoke exposure. Studies have also found that youth who smoke are more likely than non-smokers to engage in numerous high-risk behaviors including alcohol and other drug use, to be involved in violence and gangs, and experience school-related problems and disengagement.<sup>186</sup>

### *National and State Context*

The CDC reports that tobacco use is the single most avoidable cause of disease, disability and death in the U.S.<sup>187</sup> Research estimates that smoking alone contributes to one out of every five deaths in the U.S.<sup>188</sup>

The prevalence of smoking among adults in California has decreased significantly over the past decades, from 23.7 percent in 1988 to 10.5 percent in 2015.<sup>189</sup> Despite this success, large differences in smoking prevalence persist for adults and youth by race/ethnicity and among population groups by socioeconomic status, educational attainment, occupation, mental health status,

<sup>185</sup> Centers for Disease Control and Prevention. <https://www.cdc.gov/chronicdisease/overview>.

<sup>186</sup> World Health Organization, Tobacco Free Initiative (TFI). 2015. Health effects of smoking among young people. WHO. Accessed November 10, 2015. From [http://www.who.int/tobacco/research/youth/health\\_effects/en](http://www.who.int/tobacco/research/youth/health_effects/en).

<sup>187</sup> Centers for Disease Control and Prevention. (2017). Smoking and Tobacco Use Facts. [https://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/fast\\_facts/index.htm](https://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/index.htm).

<sup>188</sup> Ibid.

<sup>189</sup> California Tobacco Control Program. 2017-2021 Local Lead Agencies Comprehensive Tobacco Control Plan. <https://tcfcr.catcp.org/index.cfm?fuseaction=opportunities.viewOpp&oppID=54>.

sexual orientation, and geography. These high-risk groups suffered disproportionately from tobacco-related illnesses and death despite the progress made in reducing adult tobacco use in California.<sup>190</sup>

Even with these gains, California's smoking population still totals approximately 3.2 million people, with the number of smokers in the state exceeding the total population in 21 states.<sup>191</sup> The direct health care costs attributed to this tobacco use are \$13.29 billion annually in California, with taxpayers spending \$3.58 billion dollars each year to treat cancer and other smoking-related disease through Medi-Cal.<sup>192</sup>

### ***In San Luis Obispo County***

The percentage of San Luis Obispo County California Health Interview Survey respondents who smoked at the time of the survey increased from 12.5 percent (2012-2014 average) to 13.0 percent (2014-2016 average). This is higher than the California rate, which saw a decrease over this same time period, from 12.7 percent (2012-2014 average) to 12.2 percent (2014-2016 average).<sup>193</sup>

According to the 2015–2016 California Healthy Kids Survey, 19 percent of San Luis Obispo eleventh graders had ever smoked a whole cigarette, a decrease from 36 percent in 2007-09. Seven percent of San Luis Obispo eleventh graders smoked in the last 30 days (similar to the California average of 7.7 percent), which meets the Healthy People 2020 goal of 16 percent or lower.<sup>194</sup>

In the same survey, however, 39 percent of eleventh graders had ever used e-cigarettes or other vaping device, with 14 percent noting use in the last 30 days.<sup>195</sup> These trends show that while cigarette, cigar, smokeless, and pipe tobacco use continue to decline, sharp increases in e-cigarette and hookah use in recent years have offset overall progress.<sup>196</sup>

## Obesity, Diet and Exercise

### ***Why this Matters***

People who are overweight or obese, defined as having a body mass index (BMI) of 25 or higher, are at increased risk for heart disease, high blood pressure, type 2 diabetes, arthritis-related disabilities, some cancers, sleep disorders, depression, and other mental health disorders.<sup>197</sup>

190 California Department of Public Health, Tobacco Control Program. California Tobacco Facts and Figures 2016. Sacramento, CA. <https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CTCB/Pages/FactsandFigures.aspx>.

191 California Department of Public Health. (2015). California Tobacco Control Program. Adult Cigarette Smoking Prevalence California vs. Rest of the United States, 1988-2015. <https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CTCB/Pages/CaliforniaTobaccoControlBranch.aspx>. Accessed June 3, 2017. Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2016. 2016. <https://www.census.gov/data/tables/2016/demo/popest/state-total.html>. Accessed June 3, 2017.

192 Campaign for Tobacco Free Kids. Toll of Tobacco Use in the United States. 2017; [https://www.tobaccofreekids.org/facts\\_issues/toll\\_us/california](https://www.tobaccofreekids.org/facts_issues/toll_us/california).

193 UCLA Center for Health Policy Research. AskCHIS. 2014-2016 Pooled average. Current Smoking Status: Adults. (San Luis Obispo County). <http://ask.chis.ucla.edu>.

194 WestEd. (2015-2016). California Healthy Kids Survey Main Report. <http://chks.wested.org/reports>.

195 Ibid.

196 <https://www.fda.gov/downloads/TobaccoProducts/PublicHealthEducation/ProtectingKidsfromTobacco/UCM569880.pdf>.

197 Centers for Disease Control and Prevention, <http://www.cdc.gov/obesity/childhood/basics.html>.

In the past 30 years, obesity has more than doubled in children and tripled in adolescents.<sup>198</sup> Obese children are at high risk of becoming obese adults. They are also at risk for chronic diseases such as type 2 diabetes occurring at an earlier age.<sup>199</sup>

Many factors contribute to the nation's growing rates of overweight and obesity. Changes in food environments that make highly caloric and non-nutritious food and beverages more available and affordable have contributed to the increase, as have social and environmental changes that have reduced physical activity and largely replaced it with sedentary activities.

### ***National Context***

Obesity has increased dramatically in the U.S. in the past 20 years. Nearly two-thirds of U.S. adults—65.3 percent—were overweight or obese in 2015.<sup>200</sup> The medical costs associated with obesity were projected by the CDC to have risen to \$147 billion annually.<sup>201</sup>

### ***In San Luis Obispo County***

More than half (56.4 percent) of San Luis Obispo County adults are overweight or obese, lower than the state, at 64.2 percent.<sup>202</sup> While more than half of adults were overweight or obese, only 17 percent of children were overweight for their age.<sup>203</sup> Among seventh graders, 65.4 percent were at a healthy weight, compared to 62 percent of seventh-graders at the state level.<sup>204</sup>

In 2016, just over half (52 percent) of local residents surveyed reported participating in five or more days of physical activity for at least 30 minutes, an increase from 48 percent in 2010. Half (50 percent) reported eating five or more servings of fruits and vegetables every day.

198 Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of obesity and trends in body mass index among U.S. children and adolescents, 1999-2010. *Journal of the American Medical Association* 2012; 307(5):483-490.

199 Centers for Disease Control and Prevention. Basics of Childhood Obesity. <http://www.cdc.gov/obesity/childhood/basics.html>.

200 Behavioral Risk Factor Surveillance System (BRFSS). (2015). Overweight and Obesity Data. <https://www.cdc.gov/brfss>.

201 Centers for Disease Control and Prevention. (2017). Adult Obesity Facts. <https://www.cdc.gov/obesity/data/adult.html>.

202 UCLA Center for Health Policy Research. AskCHIS. 2014-2016 Pooled average. Body Mass Index: Child, Teen, Adult. (San Luis Obispo County). <http://ask.chis.ucla.edu>.

203 Ibid.

204 ChildrenNow. (2017). California County Scorecard: Children Who Are A Healthy Weight. <http://pub.childrennow.org/2016/indicator/weight>.



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# INJURIES



*photo credit: Ian Moore*

### **Good News Spotlight**

#### **Helping Seniors Prevent Falls**

*On any given day in San Luis Obispo County, five seniors are transported by ambulance to the hospital because of injuries related to a fall. Many are seriously injured and some become disabled, leading to costly medical expenses and diminished quality of life. In response, the Public Health Department and local partners launched a program in 2017 to help prevent falls and protect seniors' quality of life. It includes group instruction on how to prevent falls—with exercises focused on stability and balance—plus general education and in-home assessments where potential risks are mitigated through home modifications, such as handrails or grab bars. Local hospitals help identify seniors who are at high risk of falling.*



**group  
classes**



**coordination  
with hospitals**



**in-home  
assessments**

# INJURIES

Injuries affect everyone, regardless of age, race, or economic status. Each year, millions of people across the country are injured. They are faced with life-long mental, physical, and financial problems that can impact long-term quality of life and economic stability. Unintentional injuries are the leading cause of death for Americans ages 1 to 44.

Injuries can result from a variety of causes, intentional or unintentional, including motor vehicle accidents, poisonings, falls, bike accidents, fires, near-drownings and firearms. The leading cause of non-fatal hospitalization from injuries in the county is falls, followed by injuries related to motor vehicle accidents.<sup>205</sup>

There were an average of 108 accidental deaths each year in San Luis Obispo County between 2013-2015, with an age-adjusted rate of 35.5 deaths per 100,000 population, compared to 30.0 for California.<sup>206 207</sup> The majority of accidental deaths were due to motor vehicle accidents (41 percent), poisonings (22 percent), and falls (18 percent).<sup>208</sup>

During that period, males comprised 59 percent of the total number of accidental deaths, with those aged 20-29 experiencing the highest rates of accidental death overall, more than twice as likely to die from an accident as their female counterparts.<sup>209</sup>

## Motor Vehicle Accidents

### *Why this Matters*

Every day, millions of Americans are involved in motor vehicle accidents that result in injury or death, costing millions of dollars in medical bills and even more in lost work opportunity and disability.

205 California Office of Statewide Health Planning and Development, Inpatient Discharge Data, California Department of Public Health, Safe and Active Communities Branch, Report generated from <http://epicenter.cdph.ca.gov> on: July 25, 2017.

206 California Department of Public Health. (2017). County Health Status Profiles 2017. [https://www.cdph.ca.gov/Programs/CHSI/CDPH percent20Document percent20Library/OHIRProfiles2017.pdf](https://www.cdph.ca.gov/Programs/CHSI/CDPH%20Document%20Library/OHIRProfiles2017.pdf).

207 County of San Luis Obispo Public Health Department. (2017). [www.slopublichealth.org](http://www.slopublichealth.org). Includes all deaths between 2005-2013.

208 County of San Luis Obispo Public Health. Leading Causes of Accidental Death in San Luis Obispo County, 2000-2010. [https://www.slocounty.ca.gov/getattachment/ea732d69-72c0-437c-9a64-cb4510121fff/PH-Report\\_Leading-Causes-of-Accidental-Death-in-SLO-County\\_2000-2010.aspx](https://www.slocounty.ca.gov/getattachment/ea732d69-72c0-437c-9a64-cb4510121fff/PH-Report_Leading-Causes-of-Accidental-Death-in-SLO-County_2000-2010.aspx). Includes deaths between 2000-2010.

209 Ibid.

Proven interventions can improve these numbers, including increasing the use of car seats, booster seats, and seat belts; reducing drinking and driving; and improving teen driver safety.

## ***National and State Context***

Motor vehicle accidents are the leading cause of death among children ages 1-14 in the U.S., and account for approximately 48 percent of the deaths from unintentional injuries. More than 2.5 million Americans went to the emergency room—and nearly 200,000 were then hospitalized—for crash-related injuries in 2012. On average, each crash-related ER visit costs about \$3,300 and each hospitalization costs about \$57,000 over a person's lifetime.<sup>210</sup> In California, there were 8.3 deaths per 100,000 population caused by motor vehicle crashes (2013-2015 average).<sup>211</sup>

## ***In San Luis Obispo County***

Motor vehicle crashes are the leading cause of accidental death in most age groups. For San Luis Obispo County residents, there were 9.7 deaths per 100,000 population caused by motor vehicle crashes (2013-2015 average), higher than the state for the same time period.<sup>212</sup> These crashes included overturns or collisions with another vehicle, pedestrian, animal, road debris, or other stationary obstruction, such as a tree, pole or building.

San Luis Obispo ranked 23rd among the 58 California counties (i.e., 22 counties had a lower death rate due to motor vehicle crashes). Both California and San Luis Obispo County presently meet the Healthy People 2020 national objective of 12.4 or fewer deaths per 100,000 population.<sup>213</sup>

## **Bike and Pedestrian Accidents**

### ***Why this Matters***

Besides being recreational, bicycling and walking are important travel modes and healthy alternatives to motor vehicle transportation. The number of Americans bicycling and walking, also referred to as active transportation, is on the rise. Nationwide, the number of cyclists traveling to work have increased 64 percent from 2000 to 2012.<sup>214</sup> The majority of serious bicycling and pedestrian injuries and deaths are from collisions involving motor vehicles.

### ***National and State Context***

In 2015, 5,376 pedestrians were killed in traffic crashes in the U.S., a 9.5 percent increase from prior year figures and the highest number on record since 1996. More than two-thirds (70 percent) of pedestrians killed were males, and nearly half (48 percent) involved alcohol for either the driver or the pedestrian. An estimated 70,000 pedestrians were injured in traffic crashes.<sup>215</sup> In addition, 818 cyclist deaths were reported nationally, accounting for 2.3 percent of all traffic fatalities.

210 Centers for Disease Control and Prevention. Motor Vehicle Crash Injuries (2014). <https://www.cdc.gov/vitalsigns/crash-injuries>.

211 California Department of Public Health. (2017). County Health Status Profiles 2017. <https://www.cdph.ca.gov/Programs/CHSI/CDPH percent20Document percent20Library/OHIRProfiles2017.pdf>

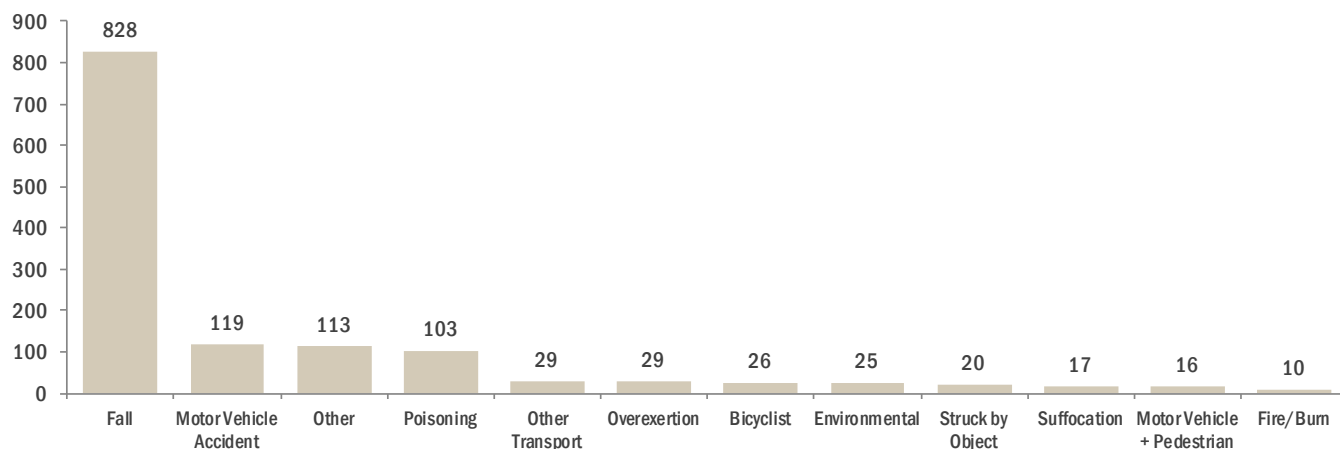
212 Ibid.

213 Ibid.

214 United States Department of Transportation. National Highway Traffic Safety Administration. Bicycle Safety Program. <https://www.nhtsa.gov/road-safety/bicycle-safety>.

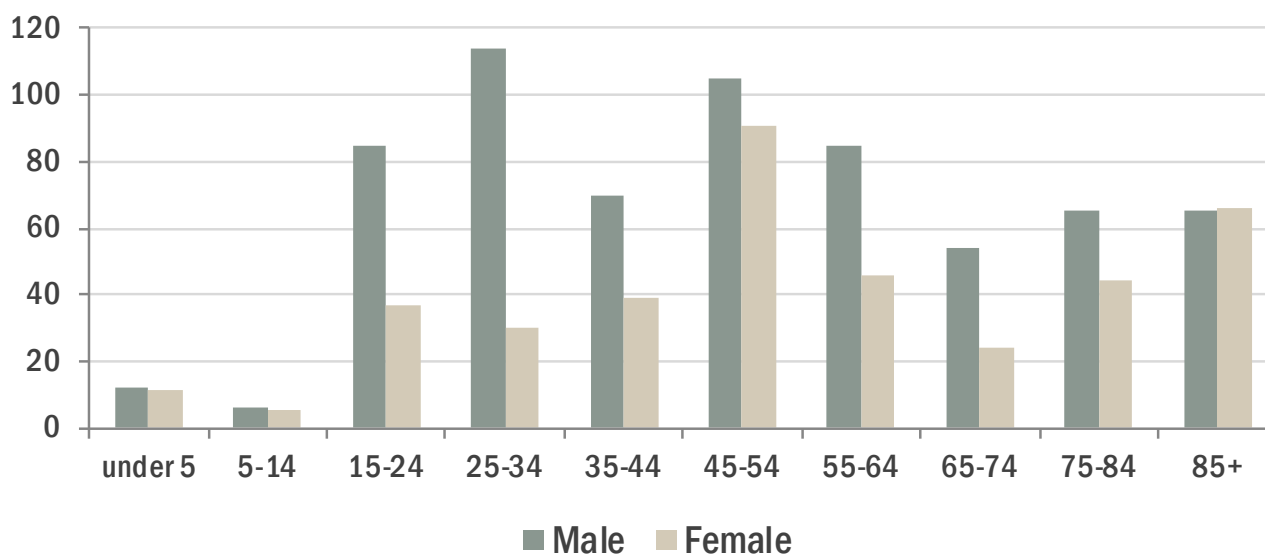
215 U.S. Department of Transportation. National Highway Traffic Safety Administration. Traffic Safety Facts: Pedestrians (2017). <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812375>.

### Non-Fatal Hospitalization from Unintentional Injuries, San Luis Obispo County, 2014



Source: California Department of Public Health, Safe and Active Communities Branch. California Office of Statewide Health Planning and Development, Inpatient Discharge Data, <http://epicenter.cdph.ca.gov>.

### Accidental Deaths by Age and Gender, San Luis Obispo County, 2005 - 2015



Source: California Department of Public Health, Safe and Active Communities Branch. California Office of Statewide Health Planning and Development, Inpatient Discharge Data, <http://epicenter.cdph.ca.gov>.

California had the second highest number of cyclist fatalities, with 129 of those deaths.<sup>216</sup>

### ***In San Luis Obispo County***

According to 2015 CA Office of Traffic Safety rankings, San Luis Obispo County ranks 31st out of 58 counties in the state for the rate of pedestrians who are injured or killed in accidents, and 6th out of 58 counties for the number of victims injured or killed in bicycle accidents.<sup>217</sup> Out of 1,499 total accidents, 191 (13 percent) involved alcohol.<sup>218</sup>

## Falls

### ***Why this Matters***

According to the CDC, each year millions of older Americans fall. Many of them are seriously injured, and some are disabled. Many people who fall, even if they are not injured, become afraid of falling again. They restrict their everyday activities and withdraw and often become depressed. As they become less active, they become weaker, which increases their chances of falling a second time.

### ***National Context***

Falls are the number one cause of ER visits for ages 1-14 and 25 and over, and the number two cause for ages 15-24, in the U.S.<sup>219</sup> This also dramatically affects the senior population, with 2.8 million older people treated every year in ERs for fall injuries. Research estimates that direct medical costs for fall-related injuries are \$31 billion annually.<sup>220</sup> With growing senior populations nationwide, these numbers are expected to increase in the coming years.

### ***In San Luis Obispo County***

Every day in San Luis Obispo County, an average of five seniors (ages 60 and older) are taken by ambulance to the emergency department with serious injuries due to falls.<sup>221</sup>

While motor vehicle crashes are the leading cause of accidental death in San Luis Obispo County for all age groups, fall-related injuries or complications were the leading cause of accidental death for persons over the age of 70.<sup>222</sup>

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216 U.S. Department of Transportation. National Highway Traffic Safety Administration. Traffic Safety Facts: Bicyclists and Other Cyclists (2017). <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812382>

217 California Office of Traffic Safety. 2015 OTS Collision Rankings. [http://www.ots.ca.gov/Media\\_and\\_Research/Rankings/default.asp](http://www.ots.ca.gov/Media_and_Research/Rankings/default.asp).

218 Ibid.

219 Centers for Disease Control and Prevention. Falls. <https://www.cdc.gov/HomeandRecreationalSafety/Falls/children.html>

220 Centers for Disease Control and Prevention. Important Facts about Falls. <https://www.cdc.gov/homeandrecrationalafety/falls/adultfalls.html>

221 Based on most recent ambulance transport data available (2014) from the County of San Luis Obispo Public Health Department Emergency Medical Services Division.

222 County of San Luis Obispo Public Health Department. Leading Causes of Accidental Death in San Luis Obispo County, 2000-2010. [https://www.slocounty.ca.gov/getattachment/ea732d69-72c0-437c-9a64-cb4510121fff/PH-Report\\_Leading-Causes-of-Accidental-Death-in-SLO-County\\_2000-2010.aspx](https://www.slocounty.ca.gov/getattachment/ea732d69-72c0-437c-9a64-cb4510121fff/PH-Report_Leading-Causes-of-Accidental-Death-in-SLO-County_2000-2010.aspx).

### Traffic Collision, by Type and County Ranking, San Luis Obispo County

TYPE OF COLLISION	VICTIMS KILLED OR INJURED	OTS RANKING*
Total Fatal and Injury	1,499	47/58
Alcohol Involved	191	41/58
Had Been Drinking Driver < 21	11	31/58
Had Been Drinking Driver 21 - 34	65	41/58
Motorcycles	112	31/58
Pedestrians	65	31/58

\* From California Office of Traffic Safety (OTS): Number 1 in the rankings is the highest, or "worst." So ... a ranking of 1/58 is the highest or worst, 27/58 is average, and 58/58 is the lowest or best.

Source: California Office of Traffic Safety. 2015 OTS Collision Rankings. [http://www.ots.ca.gov/Media\\_and\\_Research/Rankings/default.asp](http://www.ots.ca.gov/Media_and_Research/Rankings/default.asp).

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# SOCIAL & EMOTIONAL WELLNESS

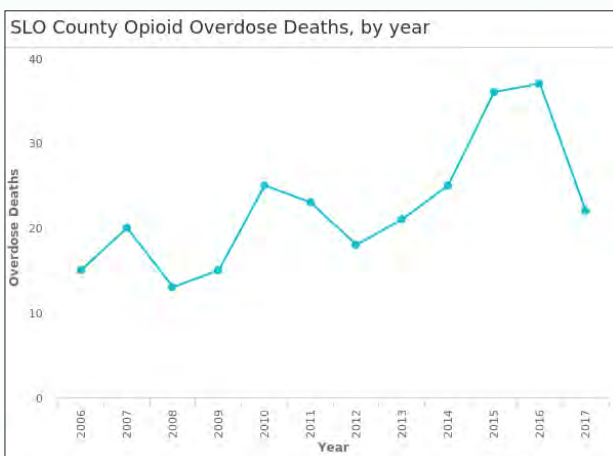




### **Good News Spotlight**

#### **SLO Opioid Safety Coalition: Turning a Corner?**

*Since January 2016, the SLO Opioid Safety Coalition has brought together community members, educators, people in recovery, law enforcement leaders, pharmacists, physicians, treatment professionals and others to address the opioid epidemic locally. In 2017, data revealed that opioid overdose deaths in San Luis Obispo County had decreased for the first time since 2012. While it is too soon to say if this drop will continue in coming years, coalition members are continuing the effort to curb opioid abuse and prevent overdose deaths.*



# SOCIAL & EMOTIONAL WELLNESS

Social and emotional wellness includes our emotional well-being (such as perceived life satisfaction), psychological well-being (such as self-acceptance and optimism) and social well-being (beliefs in the potential of people and society as a whole). Social and emotional wellness is essential to a person's well-being, family and interpersonal relationships, and ability to live a full and productive life. Social factors, such as feeling isolated and experiencing racism or bias-motivated harassment, also impact both mental and physical health.

## Mental Health

### *Why this Matters*

Mental health can affect all aspects of a person's life, including the ability to maintain good physical health. Mental health disorders span a wide range: they can affect thinking, mood, and behavior and can be caused both by biological factors, such as genetics, and life experiences. Some are acute and short-lived. Others are persistent and can lead to difficulty with functioning to the point of disability. It is important to recognize and address potential mental health issues before they become critical. Adults, children and adolescents with untreated mental illness are at higher risk for unsafe behaviors, including alcohol or drug abuse and suicide.

The Office of the U.S. Surgeon General notes that many of the social determinants of mental health are the same as the social determinants of general health—including adequate housing, safe neighborhoods, equitable jobs and wages, quality education, and equity in access to quality health care.<sup>223</sup>

### *National and State Context*

Approximately one in five adults in the U.S. (43.8 million) experiences mental illness in a given year, and one in 25 (9.8 million)

<sup>223</sup> U.S. Department of Health and Human Services. Mental Health: A Report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services; Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, 1999.

experiences a serious mental illness that substantially interferes with or limits one or more major life activities in a given year. One in five children ages 13 to 18 have, or will have a serious mental illness.<sup>224</sup> Depression is the most common mental health disorder in the U.S., affecting more than 26 percent of the U.S. adult population.<sup>225</sup>

The prevalence of mental illness among adults in California is slightly lower compared to the rest of the nation. Key findings published by the California Health Care Foundation report that nearly one in six adults in California experiences a mental illness of some kind every year, and one in 24 has a serious mental illness resulting in functional impairment that limits activities of daily life. A significant number of children and teenagers also experience mental health disorders. One in 13 children in California had a serious emotional disturbance that could interfere with home, learning, or getting along with people.<sup>226</sup>

Mental illness alone does not lead to a higher prevalence of criminality or violence, yet people with serious mental illness are particularly vulnerable to conditions that increase an individual's risk of arrest and incarceration, such as poverty, homelessness, and addiction. According to a report from the U.S. Department of Justice, prisoners and jail inmates were three to five times as likely to have a serious mental disorder as adults in the general population.<sup>227</sup> Among youth in the juvenile justice system, approximately 70 percent have at least one mental health condition and at least 20 percent live with a serious mental illness.<sup>228</sup>

The prevalence and severity of mental illness among inmates in California's prisons and jails is on the rise. Researchers have used the receipt of psychotropic medications as an indicator of serious mental illness among incarcerated individuals. Over 30 percent of inmates in California prisons currently receive treatment for a serious mental disorder, an increase of 150 percent since 2000.<sup>229</sup> In California's County jails, about 20 percent of the inmates receive psychotropic medication for a mental health disorder, an increase of 25 percent in the last five years.<sup>230</sup>

### ***In San Luis Obispo County***

Among adult county residents surveyed, 16.2 percent reported they needed professional help for emotional-mental and/or alcohol-drug issues in the past year,<sup>231</sup> and 6.4 percent reported

224 National Alliance on Mental Illness. Mental Health by the Numbers: Prevalence of Mental Illness. <https://www.nami.org/learn-more/mental-health-by-the-numbers>

225 Kessler RC, Chiu WT, Demler O, Walters EE. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry* 2005;62:617–627.

226 Ibid.

227 Glaze, L.E. & James, D.J. (2006). Mental Health Problems of Prison and Jail Inmates. Bureau of Justice Statistics Special Report. U.S. Department of Justice, Office of Justice Programs Washington, D.C. <http://bjs.ojp.usdoj.gov/content/pub/pdf/mhppji.pdf>.

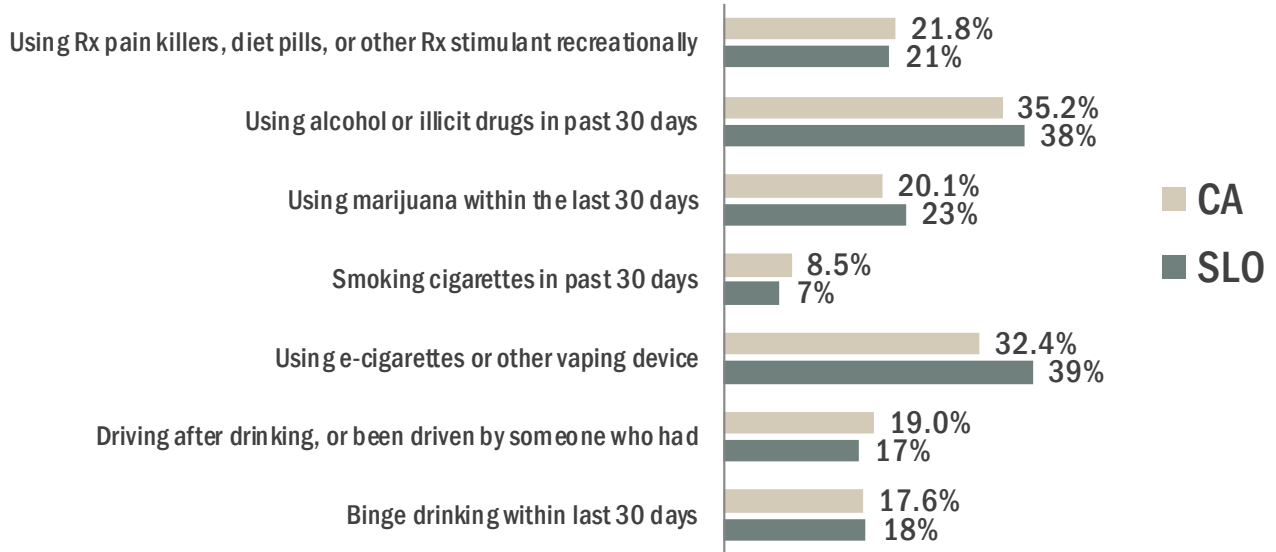
228 National Center for Mental Health and Juvenile Justice. (2007). Blueprint for Change: A Comprehensive Model for the Identification and Treatment of Youth with Mental Health Needs in Contact with the Juvenile Justice System. Delmar, N.Y: Skowyra, K.R. & Coccozza, J.J. [http://www.ncmhjj.com/wp-content/uploads/2013/07/2007\\_Blueprint-for-Change-Full-Report.pdf](http://www.ncmhjj.com/wp-content/uploads/2013/07/2007_Blueprint-for-Change-Full-Report.pdf).

229 Stanford Justice Advocacy Project. Confronting California's Continuing Prison Crisis: The Prevalence and Severity of mental Illness Among California Prisoners On The Rise. <https://www-cdn.law.stanford.edu/wp-content/uploads/2017/05/Stanford-Report-FINAL.pdf>.

230 Franco, K., Paunsh, D., Maxwell-Jolly, D. January 2018. California Health Policy Strategies, L.L.C..How Many Incarcerated Individuals Received Psychotropic Medication in California Jails: 2012-2017. [http://calhps.com/reports/PolicyBrief\\_PsychotropicMedications\\_CalHPS.pdf](http://calhps.com/reports/PolicyBrief_PsychotropicMedications_CalHPS.pdf).

231 UCLA Center for Health Policy Research. AskCHIS. Mental and Emotional Health, Access and Utilization. Adults: Needed help for emotional/mental health problems or use of alcohol/drug. (San Luis Obispo County). 2014-2016 pooled average. <http://ask.chis.ucla.edu>.

### 11th Grade Students in San Luis Obispo County Who Report ...



Source: California Healthy Kids Survey, 2015-2016.

### Children's Mental Health in San Luis Obispo County, California, and U.S.



1 in 3 eleventh graders in San Luis Obispo County noted persistent sad or hopeless feelings over the past 12 months that prevented them from doing their usual activities.

1 in 13 children in California had a serious emotional disturbance that could interfere with home, learning, or getting along with people.



1 in 5 children in the U.S. ages 13 to 18 have, or will have, a serious mental illness.

Sources: California Healthy Kids Survey, 2015-16; and ACTION for Healthy Communities. (2016). Vital Signs – Understanding San Luis Obispo County.

experiencing serious psychological distress in the past year.<sup>232</sup> Of those who indicated they needed help, 48.3 percent received professional help for emotional-mental and/or alcohol-drug issues in the past year.<sup>233</sup>

Youth are also greatly affected. In the 2015–2016 California Healthy Kids Survey, 33 percent of eleventh graders in San Luis Obispo County noted persistent sad or hopeless feelings over the past 12 months that prevented them from doing their usual activities.<sup>234</sup>

Like many other counties across the nation, San Luis Obispo County has high rates of inmates diagnosed with some level of mental illness in the County Jail. In early 2017, the tragic death in custody at the County Jail of a 36-year-old man with serious mental illness brought attention to flaws in the system for managing and caring for inmates with serious mental illness. The County Jail has an average daily population of approximately 600 inmates; of that, approximately 40 percent are taking psychotropic medication for a mental disorder, compared to an average of 20 percent among 45 other county jails in the state.<sup>235</sup> These higher rates may be attributable to the practice at the County Jail of reporting certain sleep aid medications in the same category as psychotropic medications used to treat symptoms related to serious mental illness. Researchers did note that higher rates of inmates taking psychotropic medications could suggest higher rates of mental illness among inmates, or differences in reporting data, or a more thorough mental health screening and assessment process.

## Substance Use Disorders

### *Why this Matters*

Substance use disorders contribute to costly social, physical, mental, and public health problems and have a major impact on individuals, families, and communities. Substance abuse can lead to disease and illness as well as high-risk behaviors associated with increased rates of teenage pregnancy, domestic violence, child abuse, motor vehicle crashes, crime and suicide.<sup>236</sup>

### *National and State Context*

In 2014, about 21.5 million (8.1 percent) of Americans ages 12 and older had a substance use disorder.<sup>237</sup> In California, 6.6 percent of individuals aged 12 or older in 2014–2015 had an alcohol use disorder in the past year, compared to 6.1 percent nationally.<sup>238</sup> Heroin use among the same

232 UCLA Center for Health Policy Research. AskCHIS. Mental and Emotional Health, Emotional Well-being, Adults: Likely has had serious psychological distress during past year. (San Luis Obispo County). 2014-2016 pooled average. <http://ask.chis.ucla.edu>.

233 UCLA Center for Health Policy Research. AskCHIS. Mental and Emotional Health, Access and Utilization. Adults: Needed help for emotional/mental health problems or use of alcohol/drug. (San Luis Obispo County). 2014-2016 pooled average; Sought help for self-reported mental/emotional and/or alcohol-drug issue(s). (San Luis Obispo County). 2014-2016 pooled average. <http://ask.chis.ucla.edu>.

234 San Luis Obispo County. California Healthy Kids Survey, 2015-16: Main Report. San Francisco: WestEd Health & Human Development Program for the California Department of Education. <http://chks.wested.org/reports>.

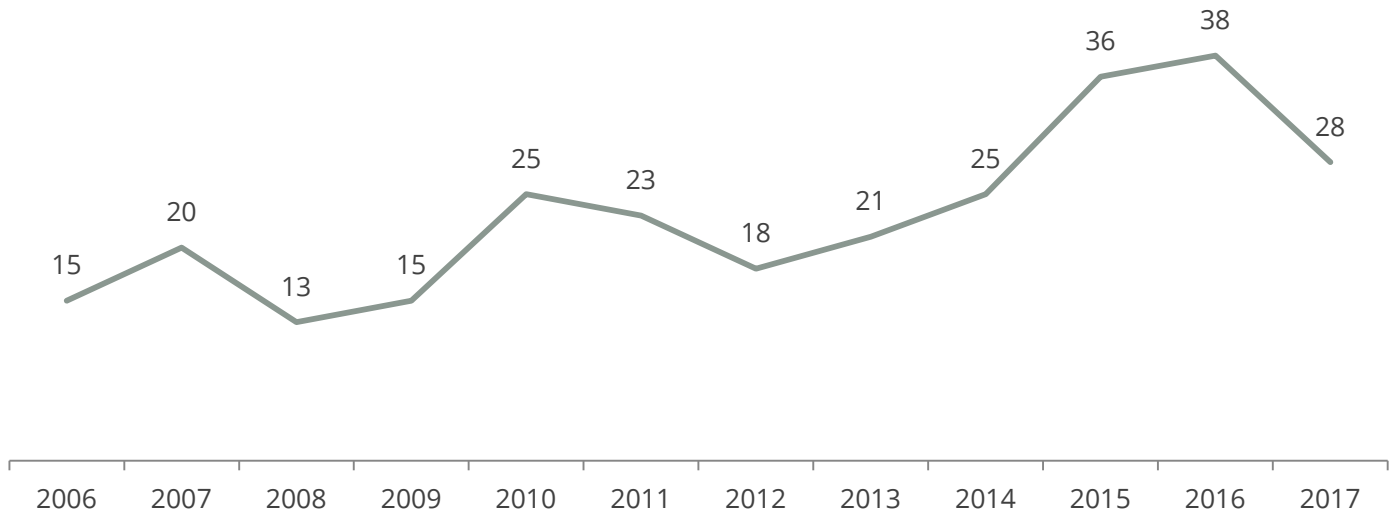
235 County of San Luis Obispo Health Agency provided the average daily population and the rate of inmates receiving psychotropic medications at the San Luis Obispo County Jail. Source of the comparative statewide rate: Franco, K., Paunsh, D., Maxwell-Jolly, D. January 2018. California Health Policy Strategies, L.L.C..How Many Incarcerated Individuals Received Psychotropic Medication in California Jails: 2012-2017. [http://calhps.com/reports/PolicyBrief\\_PsychotropicMedications\\_CalHPS.pdf](http://calhps.com/reports/PolicyBrief_PsychotropicMedications_CalHPS.pdf).

236 U.S. Department of Health and Human Services, Healthy People 2020. Healthy People 2020. <https://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse>.

237 SAMHSA. Mental and Substance Use Disorders. <https://www.samhsa.gov/disorders>.

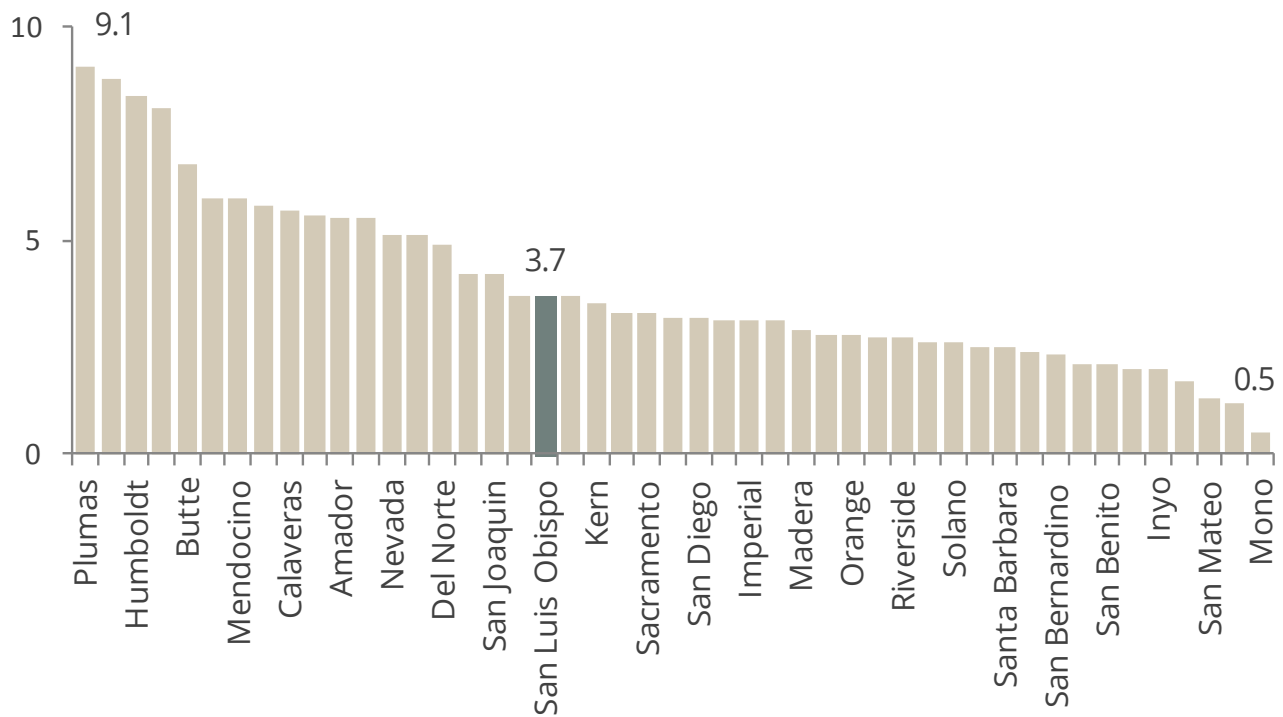
238 SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health, 2011–2012 to 2014–2015.

Deaths due to Opioids, San Luis Obispo County, 2006-2017



Source: California Department of Public Health. EpiCenter. County of San Luis Obispo Public Health Department.

Opioid Overdoses per 10,000 Residents, California Counties, 2006-2013



Source: California Department of Public Health. EpiCenter.

age group was 0.20 percent in California, lower than the corresponding national annual average of 0.33 percent.<sup>239</sup>

In California, 9.3 percent of adolescents aged 12–17 initiated alcohol use (i.e., used it for the first time) in the past year and 5.4 percent initiated marijuana use in the past year.<sup>240</sup>

A dramatic rise in opioid addiction over the last two decades in the U.S. is receiving increasing attention. Overdose deaths from opioids — either prescription medications or illicit drugs, such as heroin or fentanyl — present a crisis the U.S. Since 1999, the number of overdose deaths in the U.S. involving opioids (including prescription opioids and heroin) has quadrupled.<sup>241</sup> Certain regions of California have death rates approaching the highest in the country. Nearly 2,000 Californians died of an opioid overdose in 2016.

### ***In San Luis Obispo County***

About 10 percent of adults in San Luis Obispo County have some form of substance use disorder.<sup>242</sup> Among surveyed residents, 74 percent said they were concerned about drug, tobacco, and alcohol abuse the community.<sup>243</sup>

The opioid epidemic affects San Luis Obispo County as well. Deaths related to opioids have been on the rise in the county in recent years, from 15 in 2006 to 37 in 2016, however, according to preliminary data, opioid-related deaths dropped to 22 in 2017.<sup>244</sup> Emergency room visits related to the use of opioids have also increased in the county.<sup>245</sup> Substance abuse treatment admissions in the county reporting heroin as the primary drug rose sharply in 2012 and climbed to over 400 in 2015, matching methamphetamine as the primary drug, with alcohol following third.<sup>246</sup> While the rate of opioid prescriptions in the county appear to be declining, they have been consistently higher than the state overall in all years studied.<sup>247</sup> For every 1,000 residents in the county in 2016, there were 728 prescriptions for an opioid medication, higher than the statewide average of 585.<sup>248</sup>

The rate of binge drinking is higher in San Luis Obispo County than the state average. Binge drinking is the consumption of five or more drinks in a row by men, or four or more drinks in a row by women, at least once in the previous two weeks. Among San Luis Obispo County residents surveyed in 2014 who were age 21 and older, 53 percent reported an episode of binge drinking

239 Ibid.

240 Substance Abuse and Mental Health Services Administration. Behavioral Health Barometer: California, Volume 4: Indicators as measured through the 2015 National Survey on Drug Use and Health, the National Survey of Substance Abuse Treatment Services, and the Uniform Reporting System. HHS Publication No. SMA-17-Baro-16-States-CA. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2017. <https://store.samhsa.gov/shin/content/SMA17-BAROUS-16/SMA17-BAROUS-16-CA.pdf>.

241 Centers for Disease Control and Prevention. Wide-ranging online data for epidemiologic research (WONDER). Atlanta, GA: CDC, National Center for Health Statistics; 2016. Available at <http://wonder.cdc.gov>.

242 Diring and Associates. 40 Prado Detoxification Center Planning Project Report. December 2017.

243 ACTION for Healthy Communities. Vital Signs, Understanding San Luis Obispo County. 2016 Comprehensive Report. <http://actionslo.org/2016/Health.PDF>.

244 California Office of Statewide Health Planning and Development (OSHPD); County of San Luis Obispo Coroner's Office.

245 Ibid.

246 County of San Luis Obispo Behavioral Health Department. (2016). CalOMS Treatment Admission Data, 2005-2015.

247 Ibid.

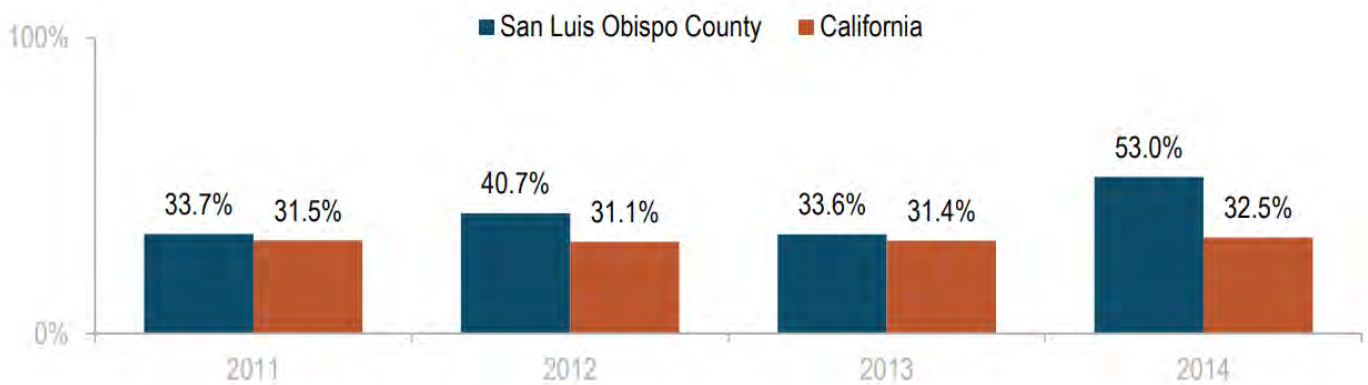
248 Controlled Substance Utilization Review and Evaluation System (CURES 2.0). [https://pdop.shinyapps.io/ODdash\\_v1](https://pdop.shinyapps.io/ODdash_v1).

### Non-Fatal Opioid-Related Emergency Room Visits, San Luis Obispo County

Year	# ER of visits
2006	219
2007	215
2008	256
2009	309
2010	353
2011	356
2012	444
2013	516
2014	640

Source: California Department of Public Health. EpiCenter.

### Binge Drinking in the Past Year (Age 21 and Older)



Note: The definition of binge drinking in the U.S. is the consumption of five or more drinks in a row by men, or four or more drinks in a row by women, at least once in the previous two weeks.

Source: UCLA Center for Health Policy Research, 2015. California Health Interview Survey, 2011-14.



in the past year, compared to 33 percent statewide.<sup>249</sup> Binge drinking is most common among younger adults aged 18–34 years, but more than half of the total binge drinks are consumed by those aged 35 and older. Binge drinking is a common consequence of youth underage drinking and is linked to alcohol poisoning and other unhealthy high-risk behaviors.<sup>250</sup>

According to the 2015–16 California Healthy Kids Survey, 53 percent of San Luis Obispo County eleventh graders had consumed at least one drink of alcohol over the past month, 41 percent had used marijuana in the past 30 days, and 16 percent reported having used prescription opioids, tranquilizers, or sedatives recreationally at least once in their lifetime (6 percent in the last 30 days).<sup>251</sup>

## Suicide

### *Why this Matters*

Suicide is a serious public health problem with broad and lasting consequences. Most people survive suicide attempts, but they may experience serious injuries, such as broken bones, brain damage, or organ failure, which may have long-term effects on their health.<sup>252</sup> Suicide also affects the health of others and the community. When people die by suicide, their family and friends often experience shock, anger, guilt, and depression. The medical costs and lost wages associated with suicide can also take their toll on a community.

### *National and State Context*

Suicide was the tenth leading cause of death in the U.S. in 2016 and the eleventh in California.<sup>253</sup> But suicide deaths only account for part of the problem. In 2016, 9.8 million American adults seriously thought about suicide, 2.8 million made a plan, and 1.3 million attempted suicide.<sup>254</sup>

Suicide is a problem throughout the life span, but rates differ dramatically by gender, age and race. Among females, the national suicide rate was highest for those aged 45–64 (9.8 per 100,000).<sup>255</sup> Among males, the national suicide rate was highest for those aged 75 and over (38.8 per 100,000).<sup>256</sup> The rates of suicide were highest for males (27.4 per 100,000) and females (8.7 per 100,000) in the American Indian/Alaska Native group, followed by males (25.8 per 100,000) and females (7.5 per 100,000) in the White/non-Hispanic group.<sup>257</sup>

249 ACTION for Healthy Communities. Vital Signs, Understanding San Luis Obispo County. 2016 Comprehensive Report. <http://actionslo.org/2016/Health.PDF>.

250 Centers for Disease Control and Prevention. (2014). Underage Drinking Fact Sheet. <http://www.cdc.gov/alcohol/fact-sheets/underage-drinking.htm>.

251 San Luis Obispo County. California Healthy Kids Survey, 2015–16: Main Report. San Francisco: WestEd Health & Human Development Program for the California Department of Education. <http://chks.wested.org/reports>.

252 Centers for Disease Control and Prevention. (2015). Understanding Suicide Factsheet. [https://www.cdc.gov/violenceprevention/pdf/suicide\\_factsheet-a.pdf](https://www.cdc.gov/violenceprevention/pdf/suicide_factsheet-a.pdf).

253 Stone, D.M., Holland, K.M., Bartholow, B., Crosby, A.E., Davis, S., and Wilkins, N. (2017). Preventing Suicide: A Technical Package of Policies, Programs, and Practices. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. <https://www.cdc.gov/violenceprevention/pdf/suicidetechnicalpackage.pdf>.

254 Center for Behavioral Health Statistics and Quality. (2017). 2016 National Survey on Drug Use and Health: Detailed Tables. Substance Abuse and Mental Health Services Administration, Rockville, MD. <https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2016/NSDUH-DetTabs-2016.pdf>.

255 Centers for Disease Control and Prevention. National Center for Injury Prevention and Control. WISQARS.

256 Ibid.

257 Ibid.

## Lifetime Alcohol or Drug Use Among Teens, San Luis Obispo County

	Grade 7 %	Grade 9 %	Grade 11 %	NT %
<b>Alcohol (one full drink)</b>				
0 times	92	71	47	32
1 time	4	8	6	6
2 to 3 times	2	9	10	9
4 or more times	2	12	37	53
<b>Marijuana</b>				
0 times	96	82	59	33
1 time	2	4	6	3
2 to 3 times	1	3	7	7
4 or more times	1	11	29	57
<b>Inhalants (to get "high")</b>				
0 times	98	96	94	85
1 time	1	2	2	3
2 to 3 times	0	1	2	6
4 or more times	1	1	2	6
<b>Cocaine, Methamphetamine, or any amphetamines</b>				
0 times	na	98	94	79
1 time	na	1	3	3
2 to 3 times	na	0	1	5
4 or more times	na	1	2	13
<b>Ecstasy, LSD, or other psychedelics</b>				
0 times	na	97	91	74
1 time	na	1	4	7
2 to 3 times	na	1	2	6
4 or more times	na	1	2	12
<b>Any other drug, or pill, or medicine to get "high" or for other than medical reasons</b>				
0 times	98	95	91	78
1 time	1	1	2	3
2 to 3 times	0	2	3	6
4 or more times	0	2	4	13
Any of the above AOD use	11	34	57	73

*Survey Question: During your life, how many times have you used the following substances? One full drink of alcohol (such as a can of beer, glass of wine, wine cooler, or shot of liquor)... Marijuana (pot, weed, grass, hash, bud)... Inhalants (things you sniff, huff, or breathe to get "high" such as glue, paint, aerosol sprays, gasoline, poppers, gases)... Cocaine, Methamphetamine, or any amphetamines (meth, speed, crystal, crank, ice)... Ecstasy, LSD, or other psychedelics (acid, mescaline, peyote, mushrooms)... Any other drug, or pill, or medicine to get "high" or for other than medical reasons. na—Not asked of middle school students. Note: NT includes continuation, community day, and other alternative school types.*

*Source: California Healthy Kids Survey, 2015-2016*

### *In San Luis Obispo County*

In San Luis Obispo County, suicide is the seventh leading cause of death.<sup>258</sup> While the county's overall suicide rate has varied, it has been consistently higher than the state rate. From 2014–2016, the age-adjusted death rate due to suicide in San Luis Obispo County was 17.2 per 100,000 population, compared to 10.4 in California and 13.2 in the U.S.<sup>259</sup> The Healthy People 2020 national target is to reduce the suicide rate to 10.2 or below.

Local patterns for suicide, gender and age are similar to state and national data. Among residents of San Luis Obispo County, the majority of suicides (44 percent) are by adults age 45 to 64. Males account for 68 percent of all suicides. Firearms are the most prevalent means of suicide (39 percent) followed by hanging/suffocation (27 percent) and poisoning (25 percent).<sup>260</sup>

According to the 2015–2016 California Healthy Kids Survey, when eleventh graders in San Luis Obispo were asked, “During the past 12 months, did you ever seriously consider attempting suicide?” 18 percent responded, “Yes.”<sup>261</sup>

Data from the California Polytechnic State University, San Luis Obispo (Cal Poly) participation in the 2016 Healthy Minds Study found that 11 percent of Cal Poly students surveyed reported having seriously thought about attempting suicide in the past year; three percent made a plan for attempting suicide; and less than half of one percent attempted suicide in the past year.<sup>262</sup>

258 California Department of Public Health. County Health Status Profiles. <https://www.cdph.ca.gov/Programs/CHSI/Pages/County-Health-Status-Profiles.aspx>.

259 Ibid.

260 California Department of Public Health Vital Statistics Death Statistical Master Files. <http://epicenter.cdph.ca.gov/ReportMenus/CustomTables.aspx>

261 San Luis Obispo County. California Healthy Kids Survey, 2015-16: Main Report. San Francisco: WestEd Health & Human Development Program for the California Department of Education. <http://chks.wested.org/reports>.

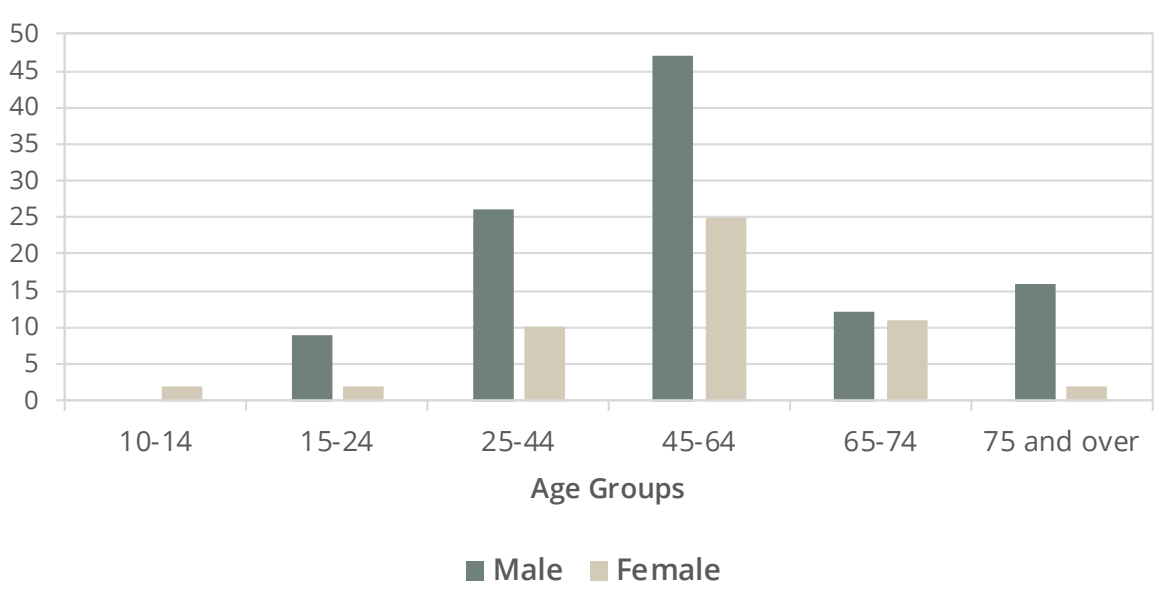
262 California Polytechnic State University, San Luis Obispo, California. Counseling Services: Suicide Prevention. <https://hcs.calpoly.edu/content/counseling/suicide-facts>.

*Average Age-Adjusted Death Rate Due to Suicide Per 100,000 population, 2014-2016*

Healthy People 2020 Target	10.2
San Luis Obispo County	17.2
California	10.4
United States	13.2

Source: California Department of Public Health, County Health Status Profiles 2018

*Number of Suicides by Gender and Age in San Luis Obispo County, 2014-2016*



Source: California Department of Public Health, Vital Statistics

*Percent of 11th Graders Who Have Considered Suicide in San Luis Obispo County*



**18%**

of eleventh graders have seriously considered attempting suicide in the past 12 months

Source: California Healthy Kids Survey, 2015-16.

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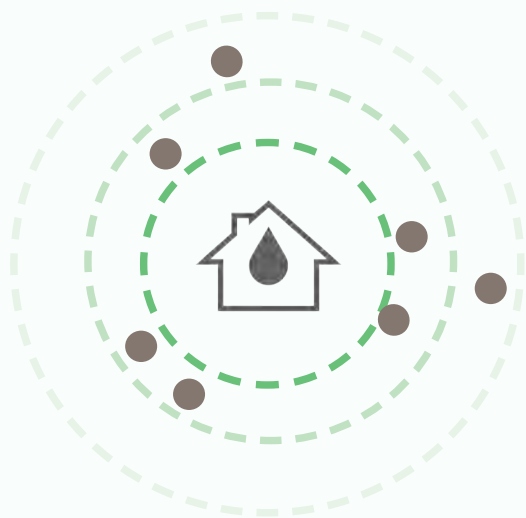
# ENVIRONMENT



*photo credit: Andrea McGurk*

### **Good News Spotlight**

#### **One Data Point Propels Rapid Action for Entire Neighborhood**



*In December 2015, an industrial solvent known as Trichloroethene (TCE) was detected in a residential water well. TCE in drinking water can lead to health problems, such as liver or kidney damage, and increased risk of cancer. The finding spurred Public Health Department staff into action: they worked around the clock and through the holidays with state water officials to contact nearby residents, test more wells to discover how many had been contaminated, and issue a public health alert. Their swift action allowed residents to immediately curb their consumption of the dangerous chemical and install the necessary filtration systems to protect their families.*

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# ENVIRONMENT

Safe air, soil, and water are fundamental to a healthy community environment. An environment free of hazards, such as secondhand smoke, carbon monoxide, allergens, lead, and toxic chemicals, helps prevent disease and other health problems. Implementing and enforcing environmental standards and regulations, monitoring pollution levels and human exposures, building environments that support healthy lifestyles, and considering the risks of pollution in decision-making can improve health and quality of life.

In 2016, surveyed residents in San Luis Obispo County were most concerned about the following environmental issues: water quality (76 percent), building in open space (63 percent), traffic congestion (62 percent), pesticide use near homes (55 percent), and air pollution (53 percent).<sup>263</sup> These have remained the top community concerns among residents since 2010.

## Air Quality

### *Why this Matters*

The quality of the air, both indoors and outside, has a direct impact on health. Air pollution can trigger heart attacks, stroke, and irregular heart rhythms—particularly in those with existing lung and heart disease. Very small airborne particles found in haze, smoke, and dust are especially harmful because they can become trapped in the lungs or enter the bloodstream, causing both short and long-term damage. Ground-level ozone (the main component of smog) and particle pollution are two of the many threats to air quality and public health in the U.S.<sup>264</sup> These can cause damage to the cells that line that lungs, allowing lungs to become more susceptible to infection, reducing lung function, or leading to permanent lung damage. Certain groups of people are especially sensitive to poor air quality, including children, the elderly, and individuals with asthma, heart disease, and chronic obstructive pulmonary disease (COPD).<sup>265</sup>

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<sup>263</sup> ACTION for Healthy Communities. (2016). Vital Signs – Understanding San Luis Obispo County. <http://actionslo.org>.

<sup>264</sup> Centers for Disease Control and Prevention. Air Quality. From <http://www.cdc.gov/air>.

<sup>265</sup> Ibid.

### ***National and State Context***

Nearly one in 10 children and one in 12 adults in the U.S. has asthma, which is caused, triggered, and exacerbated by environmental factors such as air pollution and secondhand smoke.<sup>266</sup> Outdoor air quality has improved since the 1990s, but many air quality problems persist.

The California Air Resources Board (ARB) and the U.S. EPA have adopted ambient air quality standards for six common air pollutants of primary public health concern: ozone, particulate matter (PM10 and PM2.5), nitrogen dioxide, sulfur dioxide, carbon monoxide, and lead.<sup>267</sup> These are called “criteria pollutants” because the standards establish permissible airborne pollutant levels based on criteria developed after careful review of medical and scientific studies of the effects of each pollutant on public health and welfare.

### ***In San Luis Obispo County***

In 2016, San Luis Obispo County had nine days (2.5 percent of all measured days) with air quality in the unhealthy range. This compares to 8.2 percent of all measured days statewide over the same time period.<sup>268</sup> This is defined as an Air Quality Index (AQI) greater than 100 (in the unhealthy range).<sup>269</sup> AQI is based on five of the six “criteria pollutants” mentioned above (ozone, particulate matter (PM10 and PM2.5), nitrogen dioxide, sulfur dioxide, carbon monoxide), measured at nine stations around San Luis Obispo County.<sup>270</sup> If any one of the stations measures unhealthy levels of a pollutant, that day is categorized as unhealthy for the whole county.

While overall indicators are promising, regional differences in air quality exist throughout the county. The Nipomo Mesa, in South County, frequently has periods of high particulate matter (PM) from blowing dust. This occurs most often in the spring, but may occur any time of the year. While the federal PM10 standard was not exceeded at any site in 2016, the more stringent state standard was exceeded more than 20 percent of the time on the Nipomo Mesa, an increase over the previous year.<sup>271</sup>

SLO County can also experience effects of smoke from seasonal wildfires. These tend to occur in the dry summer months and their impact on air quality varies depending on the size, location and duration of the fire. Smoke from the Soberanes and Chimney wildfires had major impacts on air quality throughout the county in 2016. The Soberanes Fire burned over 130,000 acres in and around the Los Padres National Forest from July through October, and the Chimney Fire burned more than 46,000 acres around Lake Nacimiento from August to September 2016.<sup>272</sup> The year’s highest ozone concentrations in North County all occurred during these fires, as did North County’s highest particulate matter readings (3 highest PM10 days at Paso Robles and 2 out of 3 of the highest PM10 and PM2.5 days at Atascadero).<sup>273</sup>

266 HealthyPeople2020. 2020 Leading Health Topics: Environmental Quality. <https://www.healthypeople.gov/2020/leading-health-indicators/2020-lhi-topics/Environmental-Quality>.

267 SLO County Air Pollution Control District. (2016). 2016 Annual Air Quality Report. <http://www.slocleanair.org/library/air-quality-reports.php>.

268 Ibid.

269 U.S. EPA. Outdoor Quality Index Report. <https://www.epa.gov/outdoor-air-quality-data/air-quality-index-report>.

270 SLO County Air Pollution Control District. (2016). 2016 Annual Air Quality Report. <http://www.slocleanair.org/library/air-quality-reports.php>.

271 Ibid.

272 Ibid.

273 Ibid.

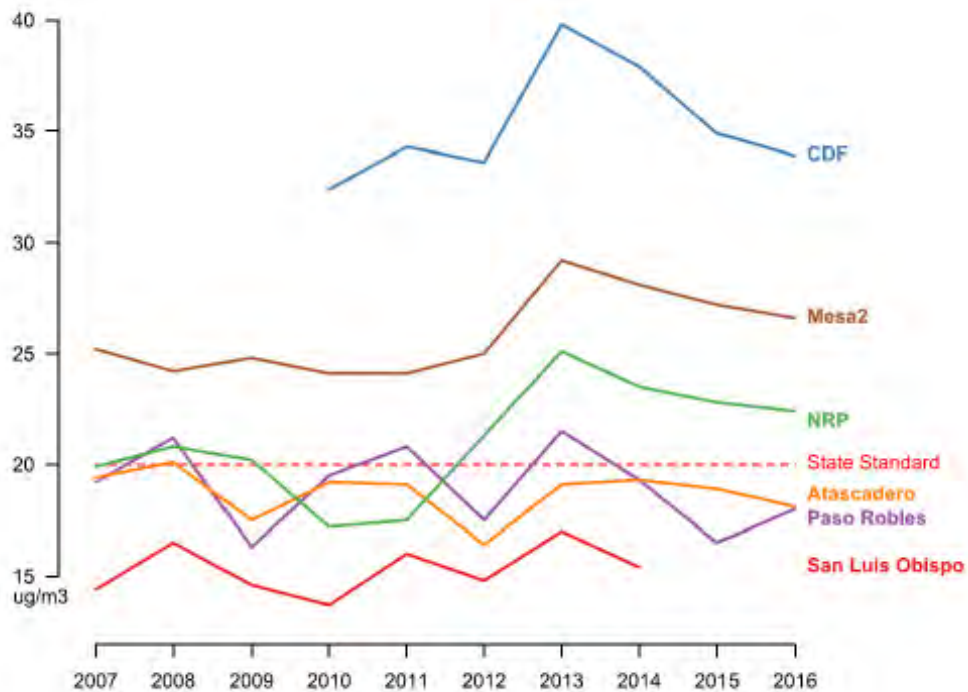


### Map of Air Pollution Monitoring Stations in San Luis Obispo County



Source: SLO County Air Pollution Control District (2017)

### Annual Average for Particulate Matter by Station (PM10), 2007-2016



Source: SLO County Air Pollution Control District (2017)

## Water Quality

### ***Why this Matters***

Poor water quality can lead to a range of health conditions within a community, including waterborne diseases, cancer, and other adverse outcomes. For that reason, monitoring and limiting the levels of microorganisms, chemicals, and other contaminants in our community's water is necessary to reduce residents' risk.

Public drinking water systems are required to monitor approximately 90 contaminants and indicators regulated by the Environmental Protection Agency. A health-based violation occurs when a contaminant exceeds its Maximum Contamination Limit (MCL)—the highest amount allowed in drinking water—or when water is not treated properly.

### ***In San Luis Obispo County***

According to County Health Rankings, during FY 2013-2014, approximately 6.4 percent of county residents received water from public water systems that had received at least one health-based violation in the recording period. This situation was worse than both the state (2.5 percent) and the county's prior year value (4.0 percent).<sup>274</sup>

Over 3,000 residents rely on private wells for their drinking water supply. The water quality from private wells is not regulated by any outside agency. It is the responsibility of the well owner to test and ensure their well water is safe.

In 2015, Trichloroethene (also known as TCE) was detected above a state-mandated Maximum Contaminant Level (MCL) of five micrograms per liter of water ( $\mu\text{g/L}$ ) in five residential water wells near the San Luis Obispo airport.<sup>275</sup> Historically used as an industrial solvent and metal degreaser, this chemical can lead to health problems, such as liver or kidney damage and increased risk of cancer, when it is consumed in drinking water. While toxic chemicals like TCE have been known to be present in groundwater in the past, current drought conditions, decline in groundwater level, and reduced recharge from nearby creeks may have increased concentrations to unsafe levels.

Ocean water quality is also an important indicator for health. Ocean water can have high levels of disease-causing organisms such as bacteria, viruses and protozoa, which can cause skin, respiratory, and intestinal problems. People with compromised immune systems, plus the very young and elderly, are especially vulnerable to these waterborne pathogens. The Public Health Department takes ocean water samples at 19 locations along the coast on a weekly basis and posts the results. In 2016, there were five days of beach closures as a result of poor ocean water quality.<sup>276</sup>

274 Robert Wood Johnson Foundation. (2017). County Health Rankings & Roadmap. <http://www.countyhealthrankings.org>.

275 County of San Luis Obispo Public Health Department. (2015). Media Release: TCE Detected in 5 Local Wells. [https://www.waterboards.ca.gov/rwqcb3/press\\_room/press\\_releases/docs/medica\\_tec\\_12\\_24\\_15.pdf](https://www.waterboards.ca.gov/rwqcb3/press_room/press_releases/docs/medica_tec_12_24_15.pdf).

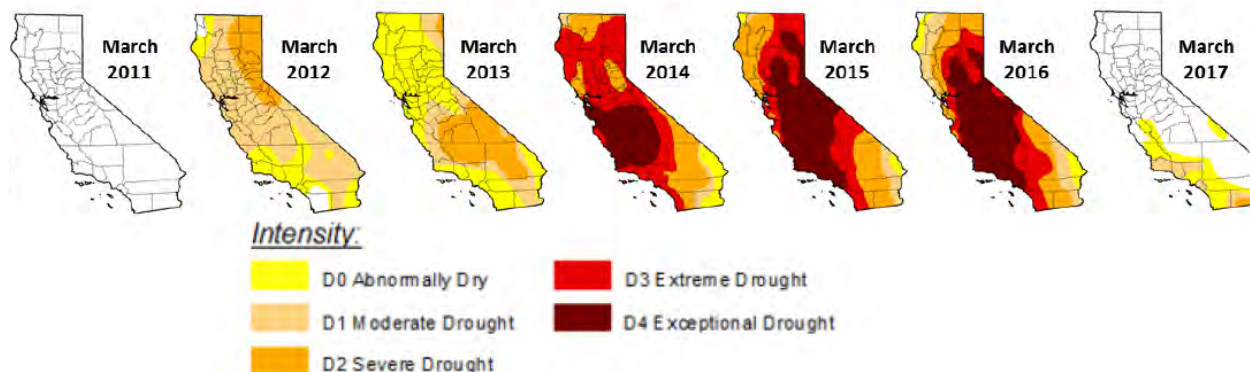
276 County of San Luis Obispo Environmental Health Division. (2017). Beach Water Quality Map Viewer. [www.surfsafeslo.org](http://www.surfsafeslo.org).

### Highest 24-hour Concentrations and Annual Averages, 2016

Station	24-hour PM <sub>10</sub>			Annual Average PM <sub>10</sub> <sup>‡</sup>	24-hour PM <sub>2.5</sub>			Annual Average PM <sub>2.5</sub> <sup>‡</sup>
	1st	2nd	3rd		1st	2nd	3rd	
Paso Robles	44 07/26	44 07/28	43 07/27	18.0				
Atascadero	<u>56</u> 06/19	47 07/28	46 08/16	18.1	28.6 12/21	26.2 09/19	24.6 08/16	6.3
San Luis Obispo *	42 06/26	40 07/23	39 06/27	*	21.0 08/03	20.9 08/04	20.5 08/13	*
CDF, Arroyo Grande	<u>144</u> 07/10	<u>143</u> 06/14	<u>142</u> 10/01	<u>33.9</u>	32.5 10/01	30.2 06/14	29.3 07/10	8.2
Nipomo Regional Park	<u>78</u> 08/30	<u>71</u> 06/25	<u>70</u> 07/23	<u>22.4</u>				
Oso Flaco *	<u>62</u> 11/16	<u>56</u> 04/25	<u>55</u> 03/28	*				
Mesa2, Nipomo	<u>111</u> 07/10	<u>104</u> 06/14	<u>100</u> 03/25	<u>26.6</u>	23.0 07/10	21.4 10/01	21.2 03/25	5.8

Source: SLO County Air Pollution Control District (2017). Table lists the highest 24-hour concentrations recorded and the date they occurred, as well as the annual means for PM10 and PM2.5 for all stations where these pollutants were monitored. Values exceeding federal standards are shown in bold; those exceeding state standards are underlined. Areas marked with an \* note an incomplete data year, where no average is available.

### Changing Drought Conditions in California, 2011-2017



Source: U.S. Drought Monitor. The National Drought Mitigation Center, University of Nebraska, Lincoln.

## Water Availability

### **Why this Matters**

Adequate water supply is necessary to provide for public health and safety, like the provision of safe drinking water, clean rivers and beaches, and flood protection. It is also necessary to protect the environment and support a stable California economy.

### **National and State Context**

The average family in the U.S. uses more than 300 gallons of water per day at home.<sup>277</sup> Beyond use at home, water is also used in the U.S. to grow our food, manufacture goods, and keep businesses running smoothly.

While the nation's water bodies have long supplied Americans with abundant freshwater, recent events, such as the 2012-2016 California drought, have raised concerns about ongoing water management and availability. The California drought included the driest four-year statewide precipitation on record (from 2012-2015) and the smallest Sierra-Cascades snowpack on record (with 2015 achieving only 5 percent of average snowfall). It was also marked by extraordinary heat: 2014, 2015 and 2016 were California's first, second and third warmest year in terms of statewide average temperatures.<sup>278</sup>

Water management in California has always been a challenge, with the state's variable climate marked by long droughts and severe floods, and stark regional differences in water availability and demand between its hot, dry deserts and its snow-covered mountains and foggy coastlines.<sup>279</sup> An expansive network of water storage and transport infrastructure has long delivered water from the wetter parts of the state (north of Sacramento, where 75 percent of California's precipitation occurs) to population and farming centers south of Sacramento (where 75 percent of water consumption takes place).<sup>280</sup> Statewide, average water use is roughly 50 percent environmental,<sup>281</sup> 40 percent agricultural, and 10 percent urban, with wide variances across regions and between wet and dry years.<sup>282</sup>

### **In San Luis Obispo County**

San Luis Obispo County has experienced a persistent lack of water in recent years, leading to an official drought declaration in 2012. Beginning in 2014, diminishing groundwater supplies caused by drought conditions led to many of the over 3,000 private wells in use by San Luis Obispo County residents to no longer reach groundwater levels. These impacts and other severe drought conditions in San Luis Obispo County prompted a local state of emergency in 2014.

Between 2012 and 2014, six out of 19 communities reached a level III severity for their water supply and/or water system, signifying that their water demand exceeded supply or their water

277 US EPA. (2018). WaterSense Website: How We Use Water. <https://www.epa.gov/watersense/how-we-use-water>.

278 State of California. Office of the Governor. (2017). *Governor Brown Lifts Drought Emergency, Retains Prohibition on Wasteful Practices*. <https://www.gov.ca.gov/2017/04/07/news19747>.

279 US EPA. (2017). *Saving Water in California*. <https://www.epa.gov/sites/production/files/2017-02/documents/ws-ourwater-california-state-fact-sheet.pdf>.

280 Public Policy Institute of California Water Policy Center. (2017). *California's Future: Water*. <http://www.ppic.org/wp-content/uploads/r-118ehr.pdf>.

281 Environmental water use includes water in rivers protected as "wild and scenic" under federal and state laws, water required for maintaining habitat within streams, water that supports wetlands within wildlife preserves, and water needed to maintain water quality for agricultural and urban use.

282 Ibid.

delivery system had reached its capacity.<sup>283</sup> The issue appears to be most severe in North County, where studies show that residents reliant on the Paso Robles groundwater basin are in severe danger of not having water for either agricultural or residential use by 2025.<sup>284</sup> Due to these conditions, surveyed residents in San Luis Obispo County in 2016 were “very” (53.5 percent) or “somewhat” (27.4 percent) concerned about the availability and quality of our water supply, making it the top environmental concern reported.<sup>285</sup>

Beyond these far reaching impacts on personal households, water availability also affects the economy overall in the county. San Luis Obispo County is well known for its long agricultural history - with grapes, strawberries, avocados, and more than a hundred other crops grown in the county locally, alongside water-intensive cattle production. In 2016, the county’s total gross crop value totaled \$914,724,000, leaving the County of San Luis Obispo ranked 16th in the state for overall agricultural production value.<sup>286 287</sup> The threat of diminishing water resources have placed a strain on agricultural production—an industry which uses 40 percent of all state water resources.<sup>288</sup>

## Built Environment

### *Why this Matters*

Health begins where people live, learn, work, and play. The design of our homes, schools, workplaces, streets, communities, and open spaces has a tremendous impact on health, affecting chronic diseases such as asthma, heart disease, and obesity. Communities with an optimal built environment have safe places to walk and bike; access to open space and parks; access to affordable healthy foods; and access to affordable and safe housing.

Health-promoting features in a community include greater access to parks, exercise opportunities, farmers’ markets, grocery stores, and more. Other indicators—such as fast food density and liquor store density—can impede community health. This is because consumer choices about food spending and diet are likely to be influenced by the accessibility and affordability of food retailers—travel time to shopping, availability of healthy foods, and food prices.

Some people and places, especially those with low income, may face greater barriers in accessing healthy and affordable food retailers, which may negatively affect diet and food security.

### *In San Luis Obispo County*

Access to health-promoting parks and exercise opportunities was noted as fairly high among surveyed residents, with 89.2 percent of the population claiming reasonable access to exercise opportunities in 2016, eclipsing the national rate of 84.0 percent but coming up short compared

283 County of San Luis Obispo Department of Planning and Building. (2014). 2012–2014 Annual Resource Summary Report, 2012–2014.

284 Goldberg, A. & Feenstra, G. *Assessing the San Luis Obispo County Food System*. (Central Coast Grown, U.C. Davis Agricultural Sustainability Institute and U.C. Sustainable Agriculture Research and Education Program, 2014).

285 ACTION for Healthy Communities. (2016). Vital Signs – Understanding San Luis Obispo County. <http://actionslo.org>.

286 County of San Luis Obispo Department of Agriculture/Weights and Measures. 2016 Crop Report Media Release. (2017).

287 California Department of Food and Agriculture (CDFA). California Agricultural Statistics Review. (2015).

288 Public Policy Institute of California Water Policy Center. (2017). *California’s Future: Water*. <http://www.ppic.org/wp-content/uploads/r-118ehr.pdf>.

to the state average of 93.5 percent.<sup>289</sup> In 2016, 39 percent of those surveyed reported visiting their nearest park, trail, or beach 10 or more times in the last month, though many still expressed a need for more hiking trails (28 percent) and local or community parks or playgrounds (27 percent). Sixty-four percent of teen residents lived within walking distance to a park, playground, or open space in 2014.

Residents participating in 2017 focus groups reported that not all areas had equal access to parks and recreation, with limited street lights and sidewalks in some areas of the county making access difficult.

Access to healthy food also varied in the county. While San Luis Obispo County had seven farmers' markets per 100,000 population (greater than the national average of three farmers' markets per 100,000 population),<sup>290</sup> in 2014, the county also had a large number of fast food restaurants, with 80 establishments per 100,000 people.<sup>291</sup> While a high per capita rate of fast food restaurants in San Luis Obispo County is concerning, that figure has been declining in recent years.<sup>292</sup>

Additionally, liquor store density has increased in recent years, from 20.2 stores per 100,000 population in 2011 to 21.0 stores per 100,000 population in 2015.<sup>293</sup> This rate was higher than both the state (10.1) and national (10.5) rates.<sup>294</sup> High alcohol outlet density has been shown to be related to increased rates of drinking and driving, motor vehicle-related pedestrian injuries, and child abuse and neglect. In addition, liquor stores frequently sell food and other goods that are unhealthy and expensive, promoting unhealthy habits in the areas they serve.

## Transportation

### *Why this Matters*

Transportation includes walking, biking, and use of public transit or a personal vehicle. Affordable and reliable transportation is essential for a healthy community, and provides access to jobs, schools, grocery stores, health care, opportunities to socialize, and other resources beneficial to health. People with access to quality public transportation walk and bike more than those without access and also drive less, which reduces automobile-related emissions.

Alternative transportation refers to commuting in any way other than driving alone. Examples include biking, walking, carpooling, and taking public transportation.<sup>295</sup> There are myriad benefits to using alternative transportation, including reduced commuting costs, reduced stress, improved health, improved air quality, reduced peak period traffic congestion, reduced energy

289 Healthy Communities Institute calculation (County Health Rankings using 2010 and 2014 data from Business Analyst, Delorme map data, ESRI, and U.S. Census Tigerline Files).

290 U.S. Department of Agriculture. Food Environment Atlas. <https://www.ers.usda.gov/data-products/food-environment-atlas/go-to-the-atlas.aspx>.

291 Ibid.

292 Ibid.

293 U.S. Census Bureau. County Business Patterns. <http://www.slohealthcounts.org/index.php?module=indicators&controller=index&action=view&indicatorId=298&localeId=277>

294 Ibid.

295 Green Plus. Alternative Transportation. Accessed September 2016. From <http://gogreenplus.org/nuts-and-bolts-guide/planet-nuts-and-boltsguide/transportation/alternative-transportation>.

### *Elementary School Children Who Walk, Bike, or Take Bus to School, San Luis Obispo County, 2016*

<b>Region</b>	<b>Percent</b>
North Coast	43.1 percent
North County	23.9 percent
San Luis Obispo	27.8 percent
South County	32.8 percent

*Source: ACTION for Healthy Communities. (2016). Regional Telephone Survey.*

consumption, and less land use for parking facilities.<sup>296</sup> Encouraging employees to cycle or walk to work can provide a variety of benefits to both the individual and the community.

### ***In San Luis Obispo County***

From 2011-2015, 1.5 percent of county residents aged 16 years and older took public transportation to work, lower than both the California average of 5.2 percent and the Healthy People 2020 target of 5.5 percent. While public transportation figures are lower than state and national benchmarks, rates of walking to work were higher than average when compared to state and national trends. In San Luis Obispo County, 4.5 percent of residents aged 16 years and older walked to work (higher than the California average of 2.7 percent and meeting the Healthy People 2020 target of 3.1 percent).<sup>297</sup>

## Pesticides and Toxic Substances

### ***Why this Matters***

Pesticides and toxic substances in the environment can lead to a variety of health problems, ranging from short-term impacts such as headaches and nausea to chronic impacts like cancer, reproductive harm, and endocrine disruption. Some chemicals in and around homes and workplaces can contribute to acute poisonings and other toxic effects.

Pesticides include any substance used to control a pest. The general term “pesticide” also includes more specific terms describing what type of pest is being controlled, such as insecticide, fungicide, herbicide, etc. Pesticides are one of only a few known toxic materials that are intentionally released into the environment for a specific purpose. Because of this, pesticides are heavily regulated, and use of the most hazardous pesticides is strictly controlled.

### ***In San Luis Obispo County***

The agriculture sector is the largest user of pesticides in San Luis Obispo County. Over 60 percent of all pesticides used in San Luis Obispo County are applied to strawberries and wine grapes. The top five pesticides used in San Luis Obispo County in 2016 were sulfur; chloropicrin; 1,3-dichloropropene; metam-potassium; and sodium bromide.<sup>298</sup>

296 Mid-Ohio Regional Planning Commission (MORPC). Benefits of Sustainable Transportation Choices. Accessed September 2016. From <http://www.morpc.org/transportation/CommuterChallenge/benefits-of-alternative-transportation/index>.

297 U.S. Census Bureau. (2016). 2011-2015 American Community Survey 5-Year Estimates. <https://factfinder.census.gov>.

298 California Department of Pesticide Regulation. California Pesticide Information Portal (CALPIP). [http://www.cdpr.ca.gov/docs/pur/pur16rep/top\\_5\\_ais\\_sites\\_lbs\\_2016.pdf](http://www.cdpr.ca.gov/docs/pur/pur16rep/top_5_ais_sites_lbs_2016.pdf).



# APPENDICES

SLO

HEALTH  
COUNTS

EXPLORE DATA

SEE HOW WE COMPARE

RESOURCES

OTHER TOOLS

ABOUT

Welcome to SLO Health Counts!

Facts in Focus for Cal Poly Campaign

Valley Fever - What Does Data Show?

Explore the Data

## APPENDIX 1

# WWW.SLOHEALTHCOUNTS.ORG

SLO Health Counts is a local health data hub that complements this community health assessment. It is a source of population data and community health information for San Luis Obispo County that includes research-based promising practices for each health indicator.

With SLO Health Counts, you can:

- View 120+ health and quality of life data indicators
- Map and visualize data
- Generate custom data reports
- Examine zip-code level maps of socio-economic need
- Browse 2,000+ evidence-based practices and programs related to specific health indicators
- Access information on local health improvement activities and resources
- Track progress toward county and regional goals
- ... and more.

We invite you to use this site as a tool for analysis, strategic planning, collaboration, and advocacy.

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## APPENDIX 2

# METHODS OF DATA COLLECTION

This section describes the different sources and methods of data collection. The type of data collected includes a wide range of both quantitative and qualitative data, and the sources include primary data from the Public Health Department and secondary data from national, state, and other local sources.

### Community Health Survey

The Public Health Department used the ACTION for Healthy Communities (ACTION) survey as its main source to identify and collect data and information for the assessment, given its rich history in the region and in an effort to reduce duplication of efforts. The ACTION for Healthy Communities collaborative, a consortium of local public and private health, education, business, environmental, human service and civic organizations, of which the Public Health Department is a part, meets monthly to discuss health issues in San Luis Obispo County. Representatives from First 5 San Luis Obispo County, Transitions Mental Health Association, County of San Luis Obispo Administration, San Luis Obispo Council of Governments, County of San Luis Obispo Office of Education, Dignity Health, San Luis Obispo Planning Department, Community Action Partnership of San Luis Obispo County, the Public Health Department and the Community Foundation of San Luis Obispo County regularly attend.

ACTION works with a professional research firm to conduct a random telephone survey of residents every three years to gather data on human needs, changing trends, and emerging issues in the region. This 2016 survey represents the seventh survey and report from ACTION and was facilitated by Applied Survey Research (ASR), a nonprofit social research firm. Their research team vetted the survey questions and conducted the survey outreach.

As part of this research, 1,100 telephone surveys were completed in May and June of 2016. Telephone contacts were attempted with a random sample of residents 18 years or older in San Luis Obispo County. Potential respondents were selected based on phone

number prefixes, and quota sampling was employed to obtain the desired gender distribution, as well as the desired geographic distribution of respondents across the four geographic sub-areas: North County, North Coast, San Luis Obispo, and South County. In addition to the telephone surveys, face-to-face self-administered surveys were conducted by nonprofit partners for three target groups that were considered to have higher health risk or poorer health outcomes. These target groups included caregivers; individuals experiencing homelessness; and Spanish-speaking parents.

### Partner Surveys

The Public Health Department conducted surveys to gain insight on partners' perception of health issues and indicators, health assets and resources, and a vision statement for health in the community. Survey questions about health assets and resources addressed both physical assets (such as local parks, recreation centers, farmers' markets, free clinics, and schools) and non-physical assets (such as residents' skills, local service or professional associations, institutions, social capital, community resilience, and a strong business community).

Representatives from a wide variety of partner organizations also participated in the planning and development of the community health assessment.

### Participating Partner Organizations

- 5 Cities Homeless Coalition
- Access Support Network
- ACTION for Healthy Communities
- Aegis Treatment Centers, LLC
- Air Pollution Control Board
- Alliance for Pharmaceutical Access
- ALPHA
- Alzheimer's Association
- American Cancer Society
- Big Brothers Big Sisters
- Bike SLO County
- Cal Poly University
- CalFresh Alliance
- CalFresh Nutrition Education
- California State Parks
- Cambria Community Healthcare District
- Casa Solana Inc.
- Cayucos Elementary School
- CenCal Health
- Center for Family Strengthening
- Central Coast Dental Society

- City of Grover Beach Police Dept.
- City of Morro Bay Planning Dept.
- City of Paso Robles
- Coast Smiles on Wheels
- Commission on Aging
- Community Action Partnership of SLO (CAPSLO)
- Community Foundation of SLO County
- Community Health Centers of Central Coast (CHC)
- Conifer Health
- County Health Commission
- County of San Luis Obispo Departments:
  - Agriculture/Weights and Measures
  - Behavioral Health
  - Libraries
  - Parks and Recreation
  - Planning and Building
  - Probation
  - Public Health
  - Public Works
  - Social Services
- County Planning Commission
- Cuesta College
- Dentists
- Dignity Health
- Diringer & Associates
- District Attorney's Office
- Family Care Network
- First 5 of SLO County
- HEAL SLO
- Health Navigator Project
- HomeShareSLO
- Hospice
- Integrated Waste Management Authority (IWMA)
- Latino Outreach Council
- Leadership SLO
- Long-term Care Ombudsman
- Meals that Connect
- Movement for Life
- Noor Foundation
- People's Self Help Housing
- Planned Parenthood CA Central Coast
- Pregnancy and Parenting Support of SLO
- Promotoras
- RISE

- San Luis Sports Therapy
- Senior Nutrition
- SLO Chamber of Commerce
- SLO Coastal Unified School District
- SLO Council of Governments (SLOCOG)
- SLO County Office of Education
- SLO Food Bank
- St. Timothy's Church
- Surfrider Foundation
- The Link
- Tenet Health
- Tolosa Children's Dental Center
- Transitions Mental Health Association (THMA)
- UCCE
- United Way
- YMCA

... plus unaffiliated community members, dentists, physicians, and other health care professionals.

### Focus Groups

The Public Health Department also collected data through focused conversations of pre-selected populations at already scheduled meetings. Efforts were made to reach participants from across the four geographic sub-areas of the county.

#### Meetings:

- Prenatal to 5 Children's Advocacy Network (September 2017)
- WIC Parent Support Classes - Paso Robles, Grover Beach (September 2017)
- Promotoras (September 2017)
- Oceano Elementary Parent Group (September 2017)
- Georgia Brown Elementary Parent Group (October 2017)

#### Questions:

- What are the strengths, resources, and assets that exist in your community to help you stay healthy?
- What are the barriers that keep you, your family and friends, and your community from being healthy?

#### Response Highlights:

"We have to talk about head of household jobs and the job market. We have a lot of hospitality industry employers that don't necessary pay a living wage. We need these higher paying jobs to be able to pay for quality daycare, to be able to pay for quality medical care."

"When I tried to sign my grandchild up for Medi-Cal, I thought it would be an easy process, as I just had to add a new baby to my daughter's plan. I waited on the phone for twenty minutes and then

got frustrated and hung up. When I told my friend, she laughed and said that she had waited two hours.”

“While it’s a good thing to have a quality early childhood education program; It’s a really bad thing to have a not quality early childhood education program. There’s no middle ground. If your child is in a bad program, there are lifelong implications.”

“The process for accessing government services can be incredibly frustrating to get through. There is lots of paperwork and then waiting, hoping that you did everything right. It’s like you need a dedicated case manager just to help you get through the red tape.”

“My son’s a picky eater, so I spend my time trying to make every person in the family a meal that they’ll eat. It’s exhausting.”

“With two kids and my work schedule, there’s just never enough hours in the day, so we go for what’s easy and convenient.”

“We have great insurance, but when I went to find a periodontist for my son, the closest in-network provider was in Bakersfield.”

“I am getting custody of my four grandchildren and trying to get both legal custody and getting them enrolled in Medi-Cal has been stressful and confusing. I just want to get them into a safe space, but the paperwork is killing me.”

“I had thought I might be retired by now. Or use my savings to go on a vacation. But now I have custody of my grandchildren and they need me, so those things aren’t going to happen.”

“Someone asked me recently what I thought about the millions that the government spends on social services. I admitted that it sounded like a huge number, but when I think about how much my family gets each month, it only gets us through the first two weeks.”

“So last week I decided that our county’s new tagline should be: San Luis Obispo County, a great place to live if you have no health issues.”

“There’s always something that needs to be repaired at our apartment, but I’m too afraid to ask the landlord to repair it for fear that they’d increase our rent and we’d be forced out.”

“I’m a great cook and know how to cook Mexican food for my family. But I’d like to learn how to make the recipes healthier, and I don’t know the first thing about doing that.”

“I hear the term ‘welfare queens’ and wonder if people realize how much time and effort it takes to get all of the support we’re eligible for. Frankly, it’d be easier to work. But I’m disabled, so finding employment is not so easy either.”

“My son loves carrots, but he also loves soda. Getting him to drink healthy drinks instead has been a real challenge.”

“I would love to be able to prepare healthy meals, but we live in Shandon and it seems like when we finally get home after work, we barely have enough time to get the kids fed, bathed and put to bed. There just never seems to be enough time.”

“If we talk about specialty care, we have to look at how it really plays out in our community. Let’s take a specialist like an orthopedic surgeon, for example. With a small population like ours, doctors have such a small sample size of cases that they can train up in that they don’t ever get the experience needed. This pediatrician that I spoke with said that if they had to send their kid to a specialist, they wouldn’t want them to go to one in SLO even if there was one available because they just don’t have enough practice doing the procedure. It’s a little bit of a geographic hazard of living in the place that we do.”

## Secondary Data Sources

The community health assessment also includes data obtained from national, state, and local surveys, reports, and fact sheets.

Key sources include:

- ACTION for Healthy Communities’ Vital Signs – Understanding San Luis Obispo County (2016)
- Behavioral Risk Factor Surveillance System, 2016 Annual Survey Data
- California Health Interview Survey, AskCHIS©
- California Healthy Kids Survey (CHKS). Results of the fifteenth Biennial Statewide Student Survey, Grades 7, 9, and 11 (2013-2015)
- CAPSLO Community Action Plan Needs Assessment (2017)
- Dignity Health Community Health Needs Assessment, June 2016
- SLOCOG 2050 Regional Growth Forecast for San Luis Obispo County (2017)
- Substance Abuse and Mental Health Services Administration (SAMHSA). Behavioral Health Barometer: California, Volume 4 (2017)
- U.S. Census American Community Survey
- UCLA Center for Health Policy Research. California Health Interview Survey (CHIS) (2014-2016)

## SLO Health Counts Data Hub

In November 2017, the Public Health Department launched SLO Health Counts ([www.slohealthcounts.org](http://www.slohealthcounts.org)), an online data hub available free to the public. The data hub is a companion piece to the community health assessment. The SLO Health Counts data hub includes over 120 health and quality of life indicators and provides context of state and national averages, national public health goals, and overall trends. It also includes factors that influence health, such as median household income and educational attainment. Users of the site can map and visualize data, generate custom reports, examine ZIP-code level maps of socio-economic needs, and research evidence-based practices, programs, and funding sources specific to health indicators.



Unlike the static nature of the community health assessment document, the data on the SLO Health Counts site is regularly updated whenever the source data is updated.

## Data Limitations and Information Gaps

Some indicators which merited examination were not addressed in the report due to data limitations and information gaps. To the extent possible, data was sought that represented the County of San Luis Obispo or the sub-regions (North Coast, North County, San Luis Obispo, and South County) and ZIP codes included therein. In addition to geographic data, data was also sought to distinguish age groups, gender and race or ethnicity represented in the county. However, due to the relatively small population size of San Luis Obispo County, most demographic-specific data results in too small a sample size to be statistically significant. Indicator data is sometimes grouped in multiple years when working with small sample sizes.

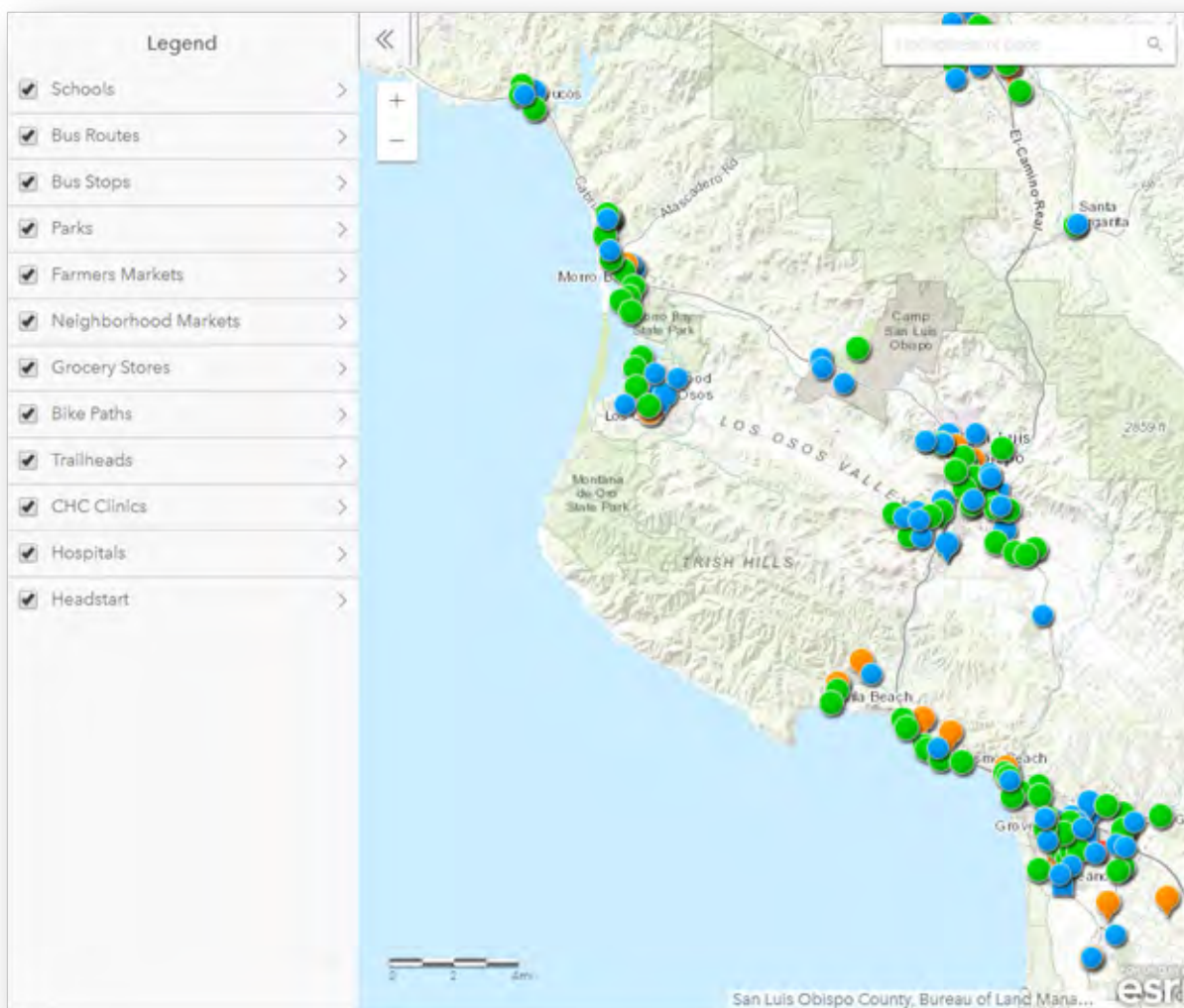
## Summary of Public Comments

Below is a summary of comments submitted by partners on a draft of this report, and changes made in response to the comments. Note this summary includes only substantive content changes or additions, and does not include line-level points of clarification.

Comment	Response
Consider including more data with focus on health equity and diversity. If county-level data not available, then discuss state data and how that may apply to sub populations in SLO County not captured in county-level data.	This has been noted as an area for improvement and will be considered in the planning and development of the next edition of the CHA.
Use census tract data when possible to display race, income, and language within SLO County regions.	This is somewhat addressed through the addition of the SocioNeeds Index data and map, which ranks by ZIP codes within the county. However, potential exists for this to be addressed more comprehensively in future editions. Census tract data is not often appropriate or statistically relevant due to population size and privacy needs.
Suicide section focuses on teens when it should note that majority of suicides are committed by older white men—including death by firearms.	This was addressed by the addition of local suicide data by gender, age, and means.
Should discuss SLO County ranking in context of Robert Wood Johnson Foundation Health Status Rankings.	We recognize the value of the RWJF County Health Rankings; however, we instead prioritized including national and state comparative data and Healthy People 2020 target objectives, which are in line with the SLO Health Counts data hub.

## APPENDIX 3

## HEALTH ASSETS &amp; RESOURCES IDENTIFIED BY PARTNERS



[www.SLOHealthCounts.org/health-assets](http://www.SLOHealthCounts.org/health-assets)

Health assets are strengths and resources that may contribute to the overall health or quality of life in a community. Community health improvement planning includes consideration of assets and resources that individuals and organizations can mobilize to address health issues. Assets and resources may be physical or non-physical.

## Physical Assets

Physical assets and resources, such as access to parks, open space, markets, clinics and other aspects of a community can also impact a person's ability to get and stay healthy.

Community members mentioned the following when asked what physical assets were present in SLO County:

- Quality, accessible doctors, clinics and hospitals
- Neighborhood schools with walkable routes
- Neighborhood grocery stores on walkable/bus-able routes
- Farmers Markets and produce stands that are accessible to lower income neighborhoods and families
- Recreational trails
- Mobile and accessible social services
- Partner agencies of the Food Bank with the capacity to store and distribute food
- Mobile food sources for aging population
- Community parks
- Rec centers for youth
- Neighborhood markets and corner stores
- Lots of open space
- Farmer's markets and community gardens
- Clean air and water
- Regional parks and hiking trails
- Safe and enjoyable walking trails, good for families
- Safe sidewalks, bike lanes, trails
- Easy access to beaches and ocean
- Clean water and air
- Safe walking streets that invite me to ditch my car
- Walkable & wheelchair friendly outdoor paths & city sidewalks
- Senior housing close to activity & shopping centers with access by walking
- Respite Care Centers
- Dog-accessible parks and beaches
- Grocery stores in rural areas
- Walkable towns
- Bike friendly in some areas (less so in others)
- Class 1 bike lanes
- High frequency bus routes
- Parks with playgrounds
- Walking routes and bikeways separate from roads
- Affordable, accessible quality grocery stores
- Free Healthcare Clinics
- K-12 schools, pre-schools and higher education
- Charity care facilities (health care, food access, etc.)
- Farmer's Markets and grocery stores that sell affordable fresh foods

- Parks with exercise equipment
- Schools in close proximity to neighborhoods
- Many public and private facilities: gymnasiums, pools, schools, bike lanes, etc.
- Transportation hubs
- Free Clinics, like Community Health Centers
- Senior Community Centers
- Safe places to walk, bike and be outside - many with separate paths along major roadways
- Parklets and car free plazas
- Accessible natural spaces
- Creek access more than just downtown SLO
- Trails near urban space in North & South county
- WIC centers
- Public transportation
- Potable water supply infrastructure
- Localized, accessible social services, like Prado Road
- Uncrowded stress-free living
- Free mental health clinics
- Skate parks
- Nipomo Park (natural area) for dog walking and horse riding
- Transportation
- Colleges, Cuesta, Cal Poly
- Sports fields
- Walk-in medical clinics
- Lakes
- Early Care and Education Programs
- Local Libraries
- Affordable, accessible urgent care clinics
- Safe, well maintained child play areas
- Golf Courses
- Recreation Centers for children
- After school centers
- Adult day care centers
- Safe bike lanes

Please visit [www.slohealthcounts.org/health-assets](http://www.slohealthcounts.org/health-assets) to view a map of some of the physical assets that shape health in San Luis Obispo County.

## Non-Physical Assets

Non-physical assets and resources include the skills of residents; the power of local associations, like service or professional associations; local institutions, like faith-based groups, local foundations, governmental agencies, institutions of higher learning; social capital; community resilience; and a strong business community. Community members mentioned the following when asked what non-physical assets were present in SLO County:

- School staff that values kids' mental and physical wellness.
- A community of individuals passionate about promoting health in the built environment.
- A community focused on giving
- Resources that increase accessibility and resources for an aging population.
- A positive, open attitude of the medical community in delivering care
- Engaged and empowered service clubs, like Rotary
- Volunteers committed to addressing issues like food insecurity and hunger
- Robust and well-funded evidenced-based health communication and prevention media campaigns
- Food service directors at several districts that are enthusiastic about scratch cooking
- Environmentally-focused NGOs
- A community of 1st adopters
- Strong business associations and Chamber of Commerce
- Committed public health staff
- Connected and resilient citizens
- Engaged health care providers
- Accessible mental health practitioners
- An incredible community foundation
- Collaborations with Cal Poly and Cuesta that benefit the community
- Excellent city and county government services
- Strong senior citizen organizations
- High quality K-12 schools
- Skills of residents & institutions of higher learning
- Healthy levels of non-profit and government collaboration
- Caring and passionate community-members
- Charming, small town environment
- Local associations and coalitions that focus on emerging needs
- Strong social networks that keep residents connected
- Socially conscious businesses—e.g. family friendly employers
- Health care providers set up to serve regardless of patient ability to pay
- Government that prioritizes community health—including attention to the environment, equitable access to care, focus on early prevention and health promotion
- A strong culture of volunteerism
- A strong nonprofit network
- A community with strong values and culture
- Strong faith-based organizations

## APPENDIX 4

# INDICATORS AT A GLANCE

This appendix includes the data components that the reader will find contained within the body of this report. Data tables may include indicators from the most recent (2010) decennial national census, annual census estimates, multiple years grouped together to strengthen the statistical power of an indicator, or the most current validated data available at the time a particular section was written. Persons interested in viewing the most up-to-date annual or multi-year data are encouraged to look to [SLOHealthCounts.org](http://SLOHealthCounts.org) now and on an ongoing basis.

Indicator	SLO County	CA	US	HP2020	HP 2020 Achieved?	Sources
<b>Demographics</b>						
Population	282,887 (2016)	39,250,017 (2016)	323,127,513 (2016)	NA	NA	<a href="#">ACS</a>
Population under the age of 18	18.1% (2015)	23.3% (2015)	22.8% (2016)	NA	NA	<a href="#">ACS</a>
Population over the age of 65	18.2% (2015)	13.3% (2015)	15.2% (2016)	NA	NA	<a href="#">ACS</a>
Projections for population over the age of 60 (by 2050)	28.0%	25.0%	NA	NA	NA	<a href="#">CA Department of Finance</a>
Population density	81.7 people/ sq. mi	239.1 people/ sq. mi	87.4 people/ sq. mi	NA	NA	<a href="#">ACS</a>
Owner-occupied housing rate	57.7% (2011-2015)	54.3% (2011-2015)	63.9% (2011-2015)	NA	NA	<a href="#">ACS</a>
Median value of owner-occupied housing units	\$445,700 (2011-2015)	\$385,500 (2011-2015)	\$178,600 (2011-2015)	NA	NA	<a href="#">ACS</a>
% Non-Hispanic African American	2.0%	6.5%	13.3%	NA	NA	<a href="#">ACS</a>
% American Indian and Alaskan Native	1.4%	1.7%	1.3%	NA	NA	<a href="#">ACS</a>
% Asian	3.9%	14.8%	5.7%	NA	NA	<a href="#">ACS</a>
% Native Hawaiian/Other Pacific Islander	0.2%	0.5%	0.2%	NA	NA	<a href="#">ACS</a>
% Hispanic	22.3%	38.9%	17.8%	NA	NA	<a href="#">ACS</a>
% Non-Hispanic white	69.2%	37.7%	61.3%	NA	NA	<a href="#">ACS</a>

Indicator	SLO County	CA	US	HP2020	HP 2020 Achieved?	Sources
% not proficient in English	3.5% (2011-2015)	9.5% (2011-2015)	4.5% (2011-2015)	NA	NA	<a href="#">ACS</a>
% Foreign born persons	10.5%	27.0%	13.2%	NA	NA	<a href="#">ACS</a>
% Females	49.3% (2016)	50.3% (2016)	50.8% (2016)	NA	NA	<a href="#">ACS</a>
Veterans	19,134	1,777,410	20,108,332	NA	NA	<a href="#">ACS</a>
% Rural	16.6% (2010)	5.0% (2010)	19.3% (2010)	NA	NA	<a href="#">Census</a>
<b>Social Determinants of Health</b>						
Percent of people living below 100% of Federal Poverty Level	14.8% (2011-2015)	16.3% (2011-2015)	15.5% (2011-2015)	NA	NA	<a href="#">ACS</a>
Percent of children under age 18 living below 100% of Federal Poverty Level	15.1% (2011-2015)	22.5% (2011-2015)	21.7% (2011-2015)	NA	NA	<a href="#">ACS</a>
Percent of people living below 200% of Federal Poverty Level	68.2% (2011-2015)	63.9% (2011-2015)	65.7% (2011-2015)	NA	NA	<a href="#">ACS</a>
% Households below real cost measure	29% (2015)	31% (2015)	NA	NA	NA	<a href="#">United Way</a>
Single parent households	26.1% (2011-2015)	32.1% (2011-2015)	33.7% (2011-2015)	NA	NA	ACS
Unemployment Rate	3.1% (2017)	4.2% (2017)	3.9% (2017)	NA	NA	ACS
Median household income	\$60,691 (2011-2015)	\$61,818 (2011-2015)		NA	NA	ACS
Per capita income	\$31,060 (2011-2015)	\$30,318 (2011-2015)		NA	NA	ACS
Real Cost Budget - Annual income required for two adults	\$32,568 (2015)	\$38,992 (2015)	NA	NA	NA	<a href="#">United Way</a>
Real Cost Budget – Annual income required for one adult and one child	\$32,893 (2015)		NA	NA	NA	<a href="#">United Way</a>
Gini coefficient of income inequality	45.5 (2010-2014)	48.1 (2010-2014)	47.6 (2010-2014)	NA	NA	<a href="#">ACS</a>

Indicator	SLO County	CA	US	HP2020	HP 2020 Achieved?	Sources
Proportion of people spending 30% or more of household income on housing	57.8% (2011-2015)	56.9% (2011-2015)	51.8% (2011-2015)	NA	NA	ACS
Percent of children eligible for the Free Lunch Program	44.2% (2015-2016)	59.0% (2015-2016)		NA	NA	<a href="#">National Center for Education Statistics</a>
Percent enrolled in CalFresh, also known as Supplemental Nutrition Assistance Program (SNAP)	6.4% (2016)	10.8% (2016)	14.2% (2015)	NA	NA	<a href="#">CA Budget &amp; Policy Center</a>
Percentage of children reporting food insecurity	18.7% (2015)	20.7% (2015)	19.3% (2015)	NA	NA	<a href="#">Feeding America</a>
Percentage of population reporting food insecurity	13.4% (2015)	12.5% (2015)	13.7% (2015)	NA	NA	<a href="#">Feeding America</a>
Percent of students who graduate high school within four years of their first enrollment in 9th grade	91.5% (2014-2015)	82.3% (2014-2015)	83.2% (2014-2015)	>=87%	Met	<a href="#">CA Dept of Ed</a>
Percent of adults age 25+ with high school degree or higher	89.7% (2011-2015)	81.8% (2011-2015)	86.7% (2011-2015)	NA	NA	ACS
Percent of adults age 25+ with Bachelor's degree or higher	33% (2011-2015)	31.4% (2011-2015)	29.8% (2011-2015)	NA	NA	ACS
Percent of third grade children reading at proficient or advanced level	49% (2016)	42% (2016)		>=36.3%	Met	<a href="#">CDE/US Dept of Ed</a>
Percent of 4th grade students proficient in English Language Arts (ELA) and Math	69% ELA 75% Math (2013)	65% ELA 72% Math (2013)	NA	NA	NA	<a href="#">CA Dept of Ed</a>
<b>Access to Care</b>						
Percent of adults (18-64) with health insurance	90.5% (2015)	87.9% (2015)	89.5% (2015)	100%	Not met	<a href="#">SAHIE</a>
Children with Health Insurance	97.3% (2016)	97.1% (2016)	95.5% (2016)	100%	Not met	ACS
People with a usual source of health care	85.3% (2014-2016)	85.7% (2014-2016)		>=95%	Not met	<a href="#">CHIS/BRFSS</a>
Percent of adults who were always able to get a doc appt within 2 days in past year	49.7% (2013-2015)	52.6% (2013-2015)	NA	NA	NA	<a href="#">CHIS</a>



Indicator	SLO County	CA	US	HP2020	HP 2020 Achieved?	Sources
Primary care physicians per 100,000 population	86/100,000 (2014)	78/100,000 (2014)		NA	NA	<a href="#">County Health Rankings</a>
Non-physician primary care providers per 100,000 population	57/100,000 (2016)	46/100,000 (2015)		NA	NA	<a href="#">County Health Rankings</a>
Dentists per 100,000 population	77/100,000 (2015)	79/100,000 (2014)		NA	NA	<a href="#">County Health Rankings</a>
Mental health providers per 100,000	511/100,000 (2016)	286/100,000 (2016)		NA	NA	CMS National Provider Identification Registry
Delayed or had difficulty obtaining care	14.0% (2014-2016)	10.9% (2014-2016)		<=4.2%	Not Met	<a href="#">CHIS</a>
Had difficulty finding specialty care	7.5% (2013-2015)	11.9% (2013-2015)		NA	NA	<a href="#">CHIS</a>
Percent of adults age 50+ who have ever had a sigmoidoscopy/colonoscopy	80.1% (2007/2009)	76.3% (2007/2009)		>=70.5%	Met	<a href="#">CHIS/NHIS</a>
Percent of women age 21-65 years with Pap test in past 3 years	83.1% (2007)	84.1% (2007)		>=93.0%	Not met	<a href="#">CHIS/NHIS</a>
Percent of women age 40+ with mammogram in past 2 years	78.0% (2015-2016)	76.4% (2015-2016)		>=81.1%	Not Met	<a href="#">CHIS/NHIS</a>
Adults receiving colorectal cancer screening based on the most recent guidelines (C-16)	65.3% (2009)	68.1% (2009)	62.4% (2015)	>=70.5%	Not met	<a href="#">CHIS/NHIS</a>
Percent of children who visited a dentist in the past year	98.2% (2013-2016)	80.4% (2013-2016)	54.4% (2014)	>=49.0%	Met	<a href="#">CHIS/MEPS</a>
Adults who visited the dentist in the past year (OH-7)	73.9% (2013-2016)	69.2% (2013-2016)	43.2% (2014)	>=49.0%	Met	<a href="#">CHIS/MEPS</a>
<b>Maternal, Child &amp; Adolescent Health</b>						
Percent of mothers initiating breastfeeding in the hospital (MICH-21.1)	97.6% (2015)	94.0% (2015)	81.1% (2013)	>=81.9%	Met	<a href="#">CDPH/NIS</a>
Percent of mothers exclusively breastfeeding at 3 months (MICH-21.4)	46.4% (2013-2014)	27.4% (2013-2014)	44.4% (2013)	>=46.2%	Met	<a href="#">CDPH/NIS</a>
Percent of WIC mothers exclusively breastfeeding at 3 months (MICH-21.4)	32.0% (2013-2014)	20.1% (2013-2014)	NA	>=46.2%	Met	<a href="#">CDPH</a>
Percent of mothers exclusively breastfeeding at 6 months (MICH-21.5)	NA	24.8% (2013)	22.3% (2013)	>=25.5%	NA	<a href="#">NIS</a>

Indicator	SLO County	CA	US	HP2020	HP 2020 Achieved?	Sources
Percent of mothers breastfeeding at 6 months (MICH-21.2)	NA	58.5% (2013)	51.8% (2013)	>=60.6%	NA	<a href="#">NIS</a>
Percent of newborns with low birth weight	6.1% (2014-2016)	6.8% (2014-2016)	8.0% (2012-2014)	<=7.8%	Met	<a href="#">CDPH</a>
Percent of newborns with very low birth rates	0.9% (2013)	1.2% (2013)	1.4% (2013)	<=1.4%	Met	<a href="#">Kidsdata.org</a>
Mothers who received early prenatal care (1st trimester)	80.5% (2014-2016)	83.3% (2014-2016)		>=77.9%	Met	<a href="#">CDPH</a>
Percent of pre-term births (< 37 weeks gestation)	8.0% (2013)	8.8% (2013)	11.4% (2013)	<=11.4%	Met	<a href="#">Kidsdata.org</a>
Births to teens age 15-19 years per 1,000 females aged 15-19	14.1/1,000 (2013-2015)	21.0/1,000 (2013-2015)	24.3/1,000 (2013-2015)	<=36.2	Met	<a href="#">CDPH</a> ; <a href="#">kidsdata.org</a>
Percentage of mothers reporting postpartum depression	11.5% (2013-2014)	13.0% (2013-2014)		NA	NA	CDPH
Infant mortality (deaths per 1,000 live births)	4.9/1,000 (2013-2015)	4.6/1,000 (2013-2015)	6.0/1,000 (2012)	<=6.0	Not Met	<a href="#">CDPH</a>
<b>Infectious Disease</b>						
Percent with flu vaccine in past year	41.0% (2014-2016)	44.6% (2014-2016)		NA	NA	<a href="#">CHIS</a>
Percent of Kindergarteners with all required vaccinations	95.6% (2016-2017)	95.6% (2016-2017)		>=80%	Met	<a href="#">CDPH</a>
Chlamydia Incidence	392.2/100,000 (2015)	486.1/100,000 (2015)		NA	NA	CDPH/CDC
Gonorrhea Incidence	61.2/100,000 (2015)	138.9/100,000 (2015)		NA	NA	CDPH/CDC
HIV Incidence (newly diagnosed cases)	6.4/100,000 (2010-2015)	13.2/100,000 (2010-2015)		<=13	Met	<a href="#">CDPH</a>

Indicator	SLO County	CA	US	HP2020	HP 2020 Achieved?	Sources
HIV Prevalence Rate	54.6/100,000 (2013)	119.7/100,000 (2013)		NA	NA	CDPH
HIV/AIDS Prevalence Rate	166.4/100,000 (2013)	308.1/100,000 (2013)		NA	NA	CDPH
Tuberculosis incidence	2.2/100,000 (2011)	5.9/100,000 (2011)	3.4/100,000 (2011)	<=1.0	Not Met	<a href="#">CDPH</a>
<b>Health Behaviors</b>						
Percent of adults who are overweight or obese	56.4% (2014-2016)	64.2% (2014-2016)	65.2% (2016)	NA	NA	<a href="#">CHIS/BRFSS</a>
Percent of adults who are obese (NWS-9)	20.1% (2014-2016)	27.6% (2014-2016)	29.9% (2016)	<=30.5%	Met	<a href="#">CHIS/BRFSS</a>
Obesity among children and adolescents (NWS-10.4)	17.0% (2015-2016)	19.0% (2015-2016)	17.0% (2011-2014)	<=14.5%	Not Met	<a href="#">CDE/state data/NHANES</a>
Percent of 7th graders who are a healthy weight	65.4% (2015-2016)	62% (2016)	NA	NA	NA	<a href="#">CDE/state data</a>
Adults consuming fast food within the past week	53.1% (2014-2016)	64.2% (2014-2016)	NA	NA	NA	<a href="#">CHIS</a>
Teens Consuming 5+ Servings of Fruits/Vegetables per Day	37.9% (2013-2015)	32.9% (2013-2015)	NA	NA	NA	<a href="#">CHIS</a>
Percent of adults drinking one or more sugar sweetened beverages per day	17.5% (2013-2014)	17.4% (2013-2014)	NA	NA	NA	<a href="#">CHIS</a>
Children consuming one or more sugar sweetened beverages (other than soda) per day	37.9% (2013-2015)	24.6% (2013-2015)	NA	NA	NA	<a href="#">CHIS</a>
Percentage of adults age 20 and over reporting no leisure-time physical activity	15% (2009)	18% (2009)	NA	NA	NA	BRFSS
Workers who walk to work	4.5% (2011-2015)	2.7% (2011-2015)	2.8% (2011-2015)	>=3.1%	Met	ACS
Adults who walk regularly	28.8% (2013-2014)	33.0% (2013-2014)	NA	NA	NA	<a href="#">CHIS</a>
Percent of 7th graders who are physically fit.	78.0% (2015-2016)	65.1% (2015-2016)	NA	NA	NA	CDE

Indicator	SLO County	CA	US	HP2020	HP 2020 Achieved?	Sources
Percent of adults binge drinking within past year	42.4% (2013-2015)	32.9% (2013-2015)	NA	NA	NA	<a href="#">CHIS</a>
Percent of adults binge drinking within past month	20% (2004-2010)	25.2% (2011-2014)	26.9% (2011-2014)	<=24.4%	Met	BRFSS/NSDUH
Percent of 11th grade students binge drinking within last 30 days	18% (2015-2016)	17.6% (2013-2015)	17.7% (2015)	NA	NA	<a href="#">CHKS/YRBSS</a>
Percent of 11th grade students reporting driving after drinking, or been in a car driven by a friend who had been drinking	17% (2015-2016)	19% (2013-2015)	27.8% (2015)	<=25.5%	Not met	<a href="#">CHKS/YRBSS</a>
Adult cigarette smoking	13.0% (2014-2016)	12.2% (2014-2016)	17.1% (2016)	<=12%	Not met	<a href="#">CHIS/BRFSS</a>
Percent of 11th grade students who have ever used electronic cigarettes or other vaping device	39% (2015-2016)	32.4% (2013-2015)	44.9% (2015)	NA	NA	<a href="#">CHKS/YRBSS</a>
Adolescent cigarette smoking in past 30 days	7% (2015-2016)	7.7% (2015-2016)	10.8% (2015)	<=16%	Met	<a href="#">CHKS/YRBSS</a>
Percent of 11th grade students reporting marijuana use within the last 30 days	23% (2015-2016)	20.1% (2013-2015)	21.7% (2015)	NA	NA	<a href="#">CHKS/YRBSS</a>
Adolescents using alcohol or illicit drugs in past 30 days	38% (2015-2016)	35.2% (2013-2015)	16.0% (2014)	<=16.6%	Not met	<a href="#">CHKS/YRBSS</a>
Eleventh graders reported having used Rx pain killers, Diet Pills, or other Rx stimulant recreationally at least once in their lifetime	21% (2015-2016)	21.8% (2013-2015)	16.8% (2015)	NA	NA	<a href="#">CHKS/YRBSS</a>
<b>Chronic Disease</b>						
Percent of adults who reported being in poor or fair health	10.9% (2013-2015)	17.1% (2013-2015)	12.0% (2010)	NA	NA	<a href="#">CHIS/NHIS</a>
Percent of adults ever diagnosed with asthma	12.4% (2014-2016)	14.6% (2014-2016)	14.0% (2016)	NA	NA	<a href="#">CHIS/BRFSS</a>
Percent of children (0-17) ever diagnosed with asthma	13.8% (2011-2016)	15.2% (2011-2016)		NA	NA	<a href="#">CHIS/BRFSS</a>
Percent of adults who have diabetes	5.6% (2014-2016)	9.3% (2014-2016)	10.5% (2016)	NA	NA	<a href="#">CHIS/BRFSS</a>

Indicator	SLO County	CA	US	HP2020	HP 2020 Achieved?	Sources
Percent of adults with heart disease	5.6% (2014-2016)	6.3% (2014-2016)	3.5% (2013-2014)	NA	NA	<a href="#">CHIS/NHANES</a>
Percent of adults with high blood pressure	22.6% (2014-2016)	28.5% (2014-2016)	30.9% (2015)	<=26.9%	Met	<a href="#">CHIS/NHIS</a>
Breast cancer age adjusted incidence	138.2/100,000 (2009-2013)	121.4/100,000 (2009-2013)		NA	NA	<a href="#">NCI</a>
Cervical cancer age adjusted incidence	5.4/100,000 (2009-2013)	7.5/100,000 (2009-2013)	7.6/100,000 (2009-2013)	<=7.2	Met	<a href="#">NCI</a>
Colorectal cancer age adjusted incidence	35.0/100,000 (2009-2013)	38.3/100,000 (2009-2013)	40.6/100,000 (2009-2013)	<=38.6	Met	<a href="#">NCI</a>
Lung cancer age adjusted incidence	46.9/100,000 (2009-2013)	46.5/100,000 (2009-2013)	62.4/100,000 (2009-2013)	NA	NA	<a href="#">NCI</a>
Prostate cancer age adjusted incidence	114.2/100,000 (2009-2013)	118.7/100,000 (2009-2013)	123.1/100,000 (2009-2013)	NA	NA	<a href="#">NCI</a>
<b>Injuries</b>						
Non-fatal emergency department visits for fall related injuries for adults 65 and older	4,607/100,000 (2014)	4,178/100,000 (2014)	6,042/100,000 (2014)	<=4,712	Met	<a href="#">CDPH EpiCenter/ CDC WISQARS</a>
Non-fatal emergency department visits for motor vehicle crash injuries (occupants)	405/100,000 (2014)	509/100,000 (2014)	758/100,000 (2014)	NA	NA	<a href="#">CDPH EpiCenter/ CDC WISQARS</a>
Bicycle-involved collision rate	44.2/100,000 (2013)	35.1/100,000 (2013)	NA	NA	NA	<a href="#">CHP</a>
Injury deaths (IVP-1.1)	59/100,000 (2015)	46.8/100,000 (2015)	63.9/100,000 (2015)	<=53.7	Not met	NVSS
<b>Causes of Death</b>						
Life Expectancy for Females	82.4 (2010)	82.5 (2010)	80.8 (2010)	NA	NA	<a href="#">IHME</a>

Indicator	SLO County	CA	US	HP2020	HP 2020 Achieved?	Sources
Life Expectancy for Males	78.9 (2010)	78.2 (2010)	76.1 (2010)	NA	NA	<a href="#">IHME</a>
Age adjusted death rate, all causes	637.4/100,000 (2015)	641.1/100,000 (2015)		NA	NA	CDPH
All cancers age adjusted mortality rate	151.2/100,000 (2005-2013)	149.5/100,000 (2005-2013)	161.4/100,000 (2015)	<=160.6	Met	CDPH/NVSS
Alzheimer's disease age adjusted mortality rate	21.3/100,000 (2005-2013)	25.9/100,000 (2005-2013)		NA	NA	CDPH
Breast cancer age adjusted mortality rate	22.9/100,000 (2013-2015)	19.8/100,000 (2013-2015)	20.7/100,000 (2013-2015)	<=20.7	Not Met	CDPH/NVSS
Colorectal cancer age adjusted mortality rate	13.3/100,000 (2013-2015)	13.2/100,000 (2013-2015)	14.5/100,000 (2013-2015)	<=14.5	Met	CDPH/NVSS
Diabetes age adjusted mortality rate	12.9/100,000 (2005-2013)	20.1/100,000 (2005-2013)	21.1/100,000 (2013-2015)	NA	NA	CDPH
Heart disease age adjusted mortality rate	140.6/100,000 (2005-2013)	163.2/100,000 (2005-2013)		NA	NA	CDPH/NVSS
Influenza and Pneumonia age adjusted mortality rate	11.0/100,000 (2005-2013)	17.5/100,000 (2005-2013)	15.4/100,000 (2013-2015)	NA	NA	CDPH
COPD age adjusted mortality rate	35.6/100,000 (2005-2013)	35.0/100,000 (2005-2013)		NA	NA	<a href="#">CDPH</a>
Chronic liver disease and cirrhosis age adjusted mortality rate	11.2/100,000 (2005-2013)	11.4/100,000 (2005-2013)	8.2/100,000 (2015)	NA	NA	<a href="#">CDPH</a>
Homicide death rate	2/100,000 (2015)	5/100,000 (2015)	5.7/100,000 (2015)	<= 5.5	Met	CDPH/NVSS
Firearm-related mortality rate	8.8/100,000 (2015)	7.8/100,000 (2015)	9.3/100,000 (2015)	NA	NA	<a href="#">CDPH</a>
Drug poisoning mortality rate	14.7/100,000 (2013-2015)	11.3/100,000 (2012-2014)	15/100,000 (2013-2015)	NA	NA	<a href="#">County Health Rankings</a>
Lung cancer age adjusted mortality rate	31.8/100,000 (2013-2015)	30.6/100,000 (2013-2015)	43.4/100,000 (2013-2015)	<=45.5	Met	CDPH

Indicator	SLO County	CA	US	HP2020	HP 2020 Achieved?	Sources
Motor vehicle crash death rate	9.7/100,000 (2013-2015)	8.3/100,000 (2013-2015)	10.6/100,000 (2013-2015)	<=12.4	Met	CDPH/NVSS
Pedestrian motor vehicle death rate (IVP-18)	1.0/100,000 (2005-2013)	1.8/100,000 (2005-2013)	1.4/100,000 (2008)	<=1.4	Met	CDPH/NVSS
Prostate cancer age adjusted mortality rate	17.9/100,000 (2013-2015)	19.3/100,000 (2013-2015)	19.2/100,000 (2013-2015)	<=21.8	Met	CDPH/NVSS
Stroke age adjusted mortality rate	51.6/100,000 (2005-2013)	37.4/100,000 (2005-2013)	36.8/100,000 (2013-2015)	<=34.8	Not met	CDPH
Suicide death rate	14.5/100,000 (2005-2013)	9.9/100,000 (2005-2013)	12.9/100,000 (2013-2015)	<=10.2	Not met	CDPH/NVSS
Accidents age adjusted mortality rate	35.5/100,000 (2005-2013)	30.0/100,000 (2005-2013)	41.1/100,000 (2013-2015)	<=36.4	Met	CDPH
<b>Social &amp; Emotional Wellness</b>						
Serious psychological stress in the past year	6.4% (2014-2016)	8.1% (2014-2016)	NA	NA	NA	<a href="#">CHIS</a>
Percent of adults who needed help for emotional/mental health problems or use of alcohol/drug	16.2% (2014-2016)	16.7% (2014-2016)	NA	NA	NA	<a href="#">CHIS</a>
Percent of adults needing and receiving help for emotional-mental and/or alcohol-drug issues in past year	48.3% (2014-2016)	59.2% (2014-2016)	NA	NA	NA	<a href="#">CHIS</a>
Percent of 11th grade students who felt sad or hopeless almost everyday for 2 weeks or more so that they stopped doing some usual activities	33% (2015-2016)	34% (2013-2015)	29.9% (2015)	NA	NA	<a href="#">CHKS/YRBSS</a>
Percent of 11th grade students who seriously considered attempting Suicide in the past year	18% (2015-2016)	18.7% (2013-2015)	NA	NA	NA	<a href="#">CHKS</a>

Indicator	SLO County	CA	US	HP2020	HP 2020 Achieved?	Sources
Percent of 11th grade students reporting harassment or bullying on school property within the past 12 months for any reason	32% (2015-2016)	31% (2013-2015)	20.2% (2015)	NA	NA	<a href="#">CHKS/YRBSS</a>
Percent of 11th grade students who report they've been victims of cyber bullying in the past 12 months	19% (2015-2016)	19.3% (2013-2015)	15.5% (2015)	NA	NA	<a href="#">CHKS/YRBSS</a>
Percent of 11th grade students reporting harassment on school property related to their sexual orientation	6.0% (2015-2016)	7.3% (2013-2015)	NA	NA	NA	CDE
Saw any healthcare provider for emotional-mental and/or alcohol-drug issues in past year	16.8% (2013-2015)	12.9% (2013-2015)		NA	NA	<a href="#">CHIS</a>
Death rate due to drug overdose (per 100,000)	14.7 (2013-2015)	11.7 (2013-2015)	15.0 (2013-2015)	<=11.3	Not met	CDC Wonder
Percent of adults with a physical, mental or emotional disability	25.6% (2014-2016)	29.7% (2014-2016)	20.6% (2015)	NA	NA	<a href="#">CHIS</a>
Substantiated child abuse rate	11.4/1,000 (2016)	8.0/1,000 (2016)	9.2/1,000 (2015)	<=8.5	Not met	<a href="#">UC Berkeley Child Welfare Indicators Project</a>
Number of domestic violence calls for assistance and rate per 1,000 population	642 calls 2.3/1,000 (2015)	166,351 calls 4.3/1,000 (2010)	NA	NA	NA	<a href="#">CA DOJ OpenJustice Crime Stats</a>
Violent crime rate	409.6/100,000 (2015)	426.5/100,000 (2015)		NA	NA	<a href="#">CA DOJ OpenJustice Crime Stats</a>
<b>Environment</b>						
Percent of days with Air Quality Index >100 (Unhealthy range)	2.5% (9/366 days) (2016)	8.2% (1,541/ 18,879 days) (2016)	1.4% (4,577/ 328,141 days) (2016)	NA	NA	<a href="#">EPA AQS</a>
Fast Food Restaurants per 100,000 population	80/100,000 (2014)	69.4/100,000 (2009)	68.4/100,000 (2009)	NA	NA	<a href="#">USDA Food Environment Atlas</a>



Indicator	SLO County	CA	US	HP2020	HP 2020 Achieved?	Sources
Percent of all restaurants that are fast-food establishments	41% (2009)	49% (2009)		NA	NA	ACS County Business Patterns
Grocery Stores per 100,000 population	26/100,000 (2012)	22.2/100,000 (2009)	21.8/100,000 (2009)	NA	NA	USDA, ACS County Business Patterns
Liquor Stores per 100,000 population	21.0/100,000 (2015)	10.1/100,000 (2015)	10.5/100,000 (2015)	NA	NA	USDA, ACS County Business Patterns

## GLOSSARY FOR INDICATORS AT A GLANCE

### FEDERAL

ACS	American Community Survey
USDA	U.S. Department of Agriculture
MIT	Massachusetts Institute of Technology
SAHIE	Small Area Health Insurance Estimates
NIH	National Immunization Survey
BRFSS	Behavioral Risk Factor Surveillance System
YRBSS	Youth Risk Behavior Surveillance System
NHANES	National Health and Nutrition Examination Survey
MEPS	Medical Expenditure Panel Survey
IHME	Institute for Health Metrics and Evaluation

### STATE

CARB	California Air and Resources Board
CHKS	California Healthy Kids Survey
CDE	California Department of Education
CA DOJ	California Department of Justice

### LOCAL

ACTION	ACTION for Healthy Communities
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# THANK YOU

Across San Luis Obispo County, individuals and organizations are making a difference every day in the health and well-being of county residents.

Special thanks to the people and the groups doing this valuable work, and to those who have contributed to this report and the overall collaborative health improvement effort.

We look forward to working together to ensure everyone in San Luis Obispo County has the opportunity to be healthy.

## Learn more and stay connected.

This community health assessment is part of a long-term health improvement planning effort for San Luis Obispo County. If you would like to be part of this effort or would like to share comments on this report, please contact the Public Health Department at [slopublichealth@co.slo.ca.us](mailto:slopublichealth@co.slo.ca.us) or 805-781-5500.

For regular data updates, please visit [www.SLOHealthCounts.org](http://www.SLOHealthCounts.org).

To learn more about the Public Health Department, please visit [www.slopublichealth.org](http://www.slopublichealth.org).



COUNTY OF SAN LUIS OBISPO  
HEALTH AGENCY

PUBLIC HEALTH DEPARTMENT