

THE HEALTH OF RURAL AND URBAN CALIFORNIA COUNTIES

In 2001, the Department of Health and Human Services published a document titled 'Health, United States, 2001: Urban and Rural Health Chartbook'¹. The document described some of the differences between the urban and rural communities across the United States and presented the information by combining the data by urban or rural status.

This report seeks to present the health and health risk factors of the counties of California by urban and rural status using similar indicators to the 'Chartbook', but presenting the information by county level specific data rather than looking solely at the rural and urban communities as a collective.

Defining Rural

Most definitions of rural start by defining urban areas. The remaining areas are then, by default, classified as rural. For the purposes of this report, rural counties were defined using the following criteria:

At least 15% of a county population lives in a rural census designated area

AND

1) has a population density of less than 93.2 persons per square mile (150 / km²),

or

2) has a total county population of less than 200,000

The criteria used to define rural counties started with a definition created by the Organisation for Economic Co-operation and Development in Canada and was used to create two categories of rural status for this report: urban and rural. All counties not designated as rural by the definition above were categorized as urban. See Appendix A for a list of counties and its associated status.

Differing Communities

The Urban and Rural Health Chartbook states the following in regards to rural and urban communities:

"The level of urbanization in an area has long been recognized as an important characteristic affecting access to health services. Rural health policy, in particular, has traditionally focused on reduced access to health services caused by the relative scarcity of health care providers in nonmetropolitan areas². Increasingly, policy makers have recognized that communities at different urbanization levels also differ in their demographic, environmental, economic, and social characteristics, and that these characteristics greatly influence the magnitude and types of health problems communities face. The number of children and elderly persons, environmental and occupational exposures, economic resources, health-related behaviors, and availability and use of health services all vary with urbanization level."

¹ Eberhardt MS, Ingram DD, Makuc DM, et al. Urban and Rural Health Chartbook. Health, United States, 2001. Hyattsville, Maryland: National Center for Health Statistics. 2001.

² U.S. Congress, Office of Technology Assessment. Health care in rural America, OTA-H-434. Washington, DC: U.S. Government Printing Office.1990.

The indicators selected for this report encompass a variety of topics that either influence health outcomes or are themselves health outcomes. Each indicator is described to illustrate its importance and relevance to the health of a community.

Latino Paradox

In addition to the Rural or Urban status, counties with a Hispanic population of at least 26.7% were also identified. This was included to potentially demonstrate the influence of the Latino Paradox on these indicators. The Latino Paradox refers to the epidemiological finding that Hispanic and Latino Americans tend to have health outcomes that paradoxically are comparable to, or in some cases better than, those of their U.S. white counterparts, even though Hispanics have lower average income and education.³ California as a whole has a Hispanic population of approximately 40%. Of all 58 counties, 29 (50%) had a Hispanic population of at least 26.7% as of the Department of Finance Estimates for 2018, though Shasta County is not one of those counties.

Indicators

The list of indicators for this report include some identified by the Urban and Rural Health Chartbook and others were chosen based on their connection to health and the availability of data for all 58 California counties.

- Education (Bachelor's or higher)
- Poverty
- Unemployment
- No Health Care Insurance
- Public Health Care Insurance
- Physician Density
- Dentist Density
- Inpatient Hospital Use
- Emergency Department Visits
- Poor Mental Health Days
- Substance Use Treatment Admissions
- Smoking (Adult)
- Alcohol Consumption (Adult Binge)
- Overweight and Obese
- Physical Inactivity
- Elder Maltreatment
- Child Maltreatment
- Intimate Partner Violence (Calls for Assistance)
- Chlamydia Infections
- Gonorrhea Infections (Female and Male Incidence)
- Death (All Causes)
- Cancer Deaths (All Combined)
- Heart Disease Deaths
- Chronic Lower Respiratory Disease Deaths
- Unintentional Injury Deaths
- Suicide
- Homicide
- Firearm-Related Deaths
- Drug-Induced Deaths
- Low Birth Weight Infants
- Teen Births
- Early Prenatal Care
- Adequacy of Prenatal Care

When reviewing each indicator, please note the following information. Each graph is displayed with the counties with the worst rates at the top of the graph. Rankings are from best being a 1, located at the bottom of each graph, to worst being 58 (when all counties included), located at the top of each graph. Some indicators do not have data for all counties, but these counties are still included in the graph to show the status of all counties in California. The counties without data are excluded from ranking and calculation of percent of counties in the worse half for each indicator. Counties with masked data due to California Health and Human Services Data De-Identification Guidelines (DDG) are still included in ranking and calculation of percent of counties in the worse half for each indicator.

³ Franzini L, Ribble JC, Keddie AM (2001). "Understanding the Hispanic paradox". *Ethn Dis* 11 (3): 496–518. PMID 11572416

Limitations

Some indicators have counties with suppressed data. Each of these counties were identified as Rural. In some of these instances the proportion of Urban counties in the worse half of the rankings was greater than the Rural proportion which is to be expected since there would be more Urban counties when suppressing some Rural counties.

Similar instances happen when looking at the Hispanic population proportions (Latino Paradox). Given the nature of the Latino Paradox, we would expect to see a **lower** proportion of counties with Hispanic populations greater than or equal to 26.7% in the worse half of the counties. When Rural counties were removed due to suppressed data, two indicators were significantly different from expected based solely on the Latino Paradox: Inpatient Hospitalization Use (68% of counties with >26.7% Hispanics in the worse half of counties) and Dentist Density (64% of counties).

Summary of Results

This report examined 34 indicators by Rural and Urban status of counties, of which 29 counties fell into each category. Shasta County, identified as Rural, was in the worse half of the county rankings on 29 of the 34 indicators. Three of the 29 indicators had statistically greater proportions of Urban counties in the worse half. Those include:

- Inpatient Hospital Use (75% Urban in worse half of counties)
- Gonorrhea Infections, Male Incidence (72%)
- Chlamydia Infections (66%)

Of the 34 indicators, 28 had more Rural counties than Urban counties in the worse half of each indicators' county ranking. Additionally, 15 of those indicators had statistically greater proportions of Rural counties than Urban counties in the worse half. Those include:

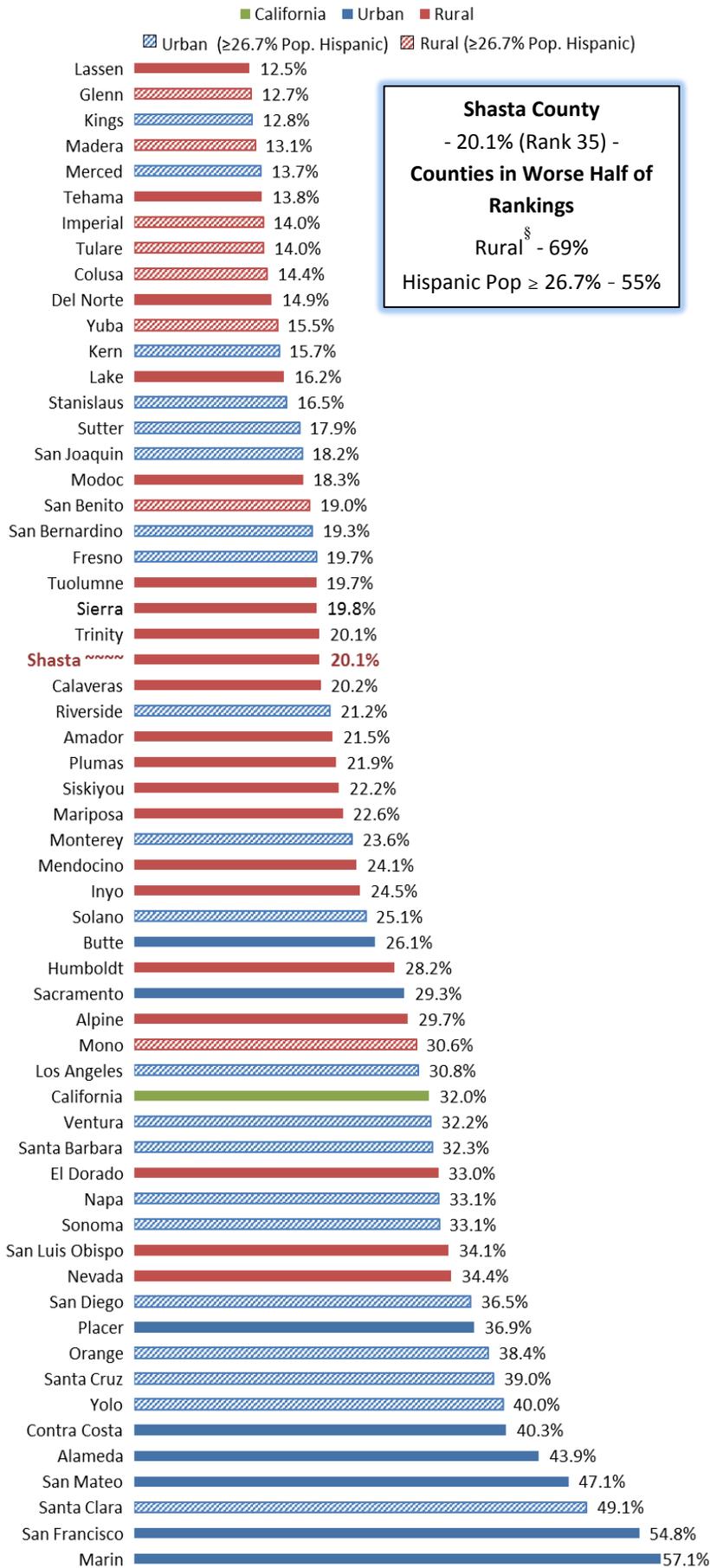
- Deaths Due to Unintentional Injuries (83% Rural in the worse half of counties)
- Deaths Due to Suicide (79%)
- Early Prenatal Care (79%)
- Firearm-Related Deaths (79%)
- Public Insurance (79%)
- Current Smoker (76%)
- Child Maltreatment (72%)
- Drug-Induced Deaths (72%)
- Education (69%)
- Teen Births (69%)
- Intimate Partner Violence (66%)
- Poor Mental Health Days (66%)
- Physician Density (64%)
- Unemployment (64%)
- Emergency Department Visits (63%)

When looking for the influence of the Latino Paradox, 20 of the 34 total indicators had a larger proportion of counties with a Hispanic population of at least 26.7% in the **best** half of the county rankings. Of those 20 indicators, six had statistically greater proportions. Those include:

- Deaths Due to Suicide (76% Hispanic proportion >26.7% in the **best** half of counties)
- Current Smoker (66%)
- Drug-Induced Deaths (69%)
- Firearm-Related Deaths (66%)
- Child Maltreatment (66%)
- Deaths Due to Unintentional Injuries (66%)

All of these six indicators also had statistically greater proportions of Rural counties than Urban counties in the **worse** half of the county rankings.

Percent with a Bachelor's Degree or Higher (Adults 25+)



Education is an important predictor of health because it can provide the knowledge, skills, confidence, connections and opportunities needed to negotiate the world and exert greater control over one's life. Education can reduce inequalities, create tolerance, build social cohesion, and boost the health of entire communities. Education also improves quality of life by helping people attain higher paying jobs and reducing financial worries.

Based on data from the American Community Survey, the counties with the lowest proportion of individuals 25 and older who attained at least a Bachelor's degree are primarily Rural, making up 69% of the bottom half of the rankings (29 counties). Shasta County was ranked 35th with 20.1% of its residents 25 and older attaining a Bachelor's Degree, worse than the overall California rate (32.0%).

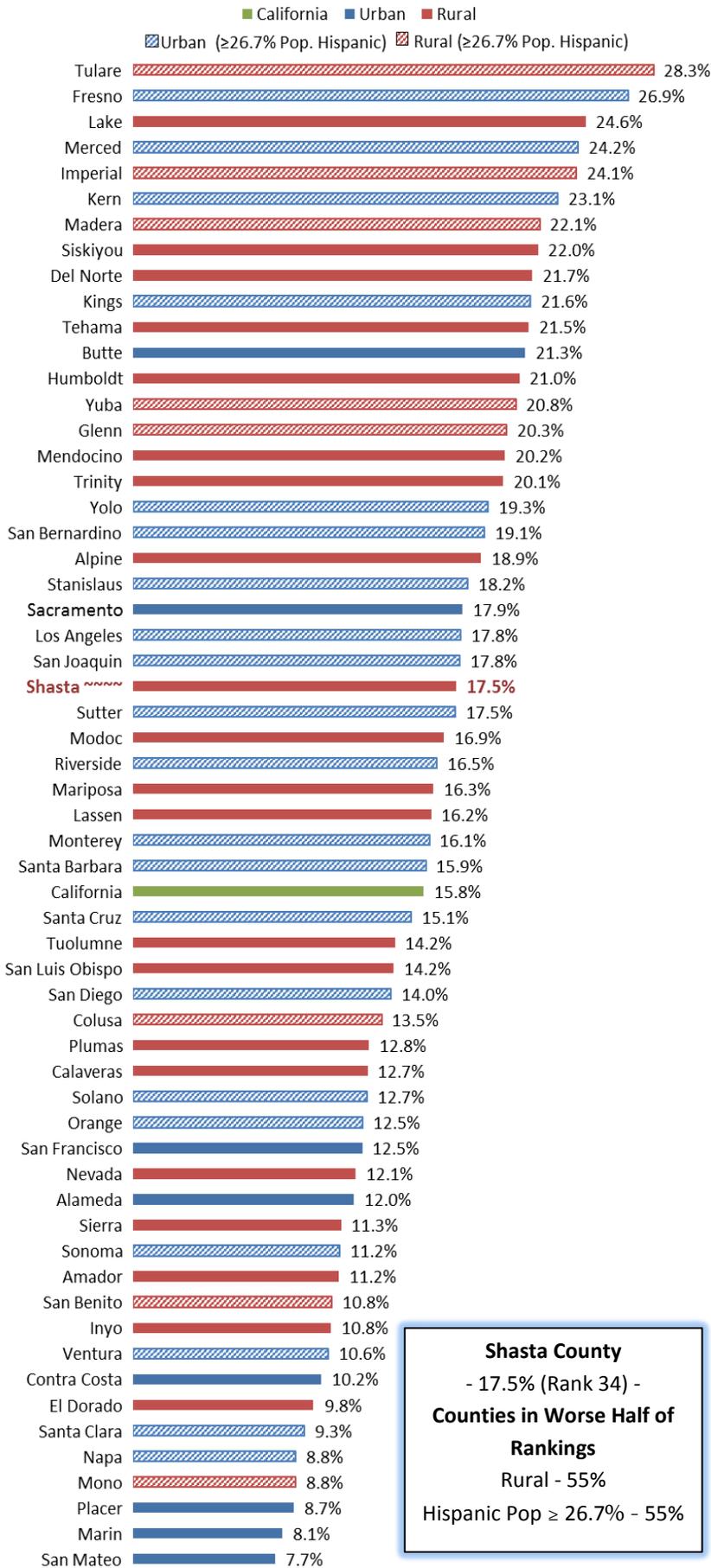
Where We Were		
2009-13	2010-14	2011-15
18.8%	19.1%	19.6%

Data Definition: Percent of individuals who attained a Bachelor's Degree or greater, among the population 25 and older.

[§] Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

Data Source: 2012-2016 American Community 5-year Estimates, Table S1501

Percent of Individuals Living in Poverty



Shasta County
 - 17.5% (Rank 34) -
Counties in Worse Half of
Rankings
 Rural - 55%
 Hispanic Pop ≥ 26.7% - 55%

Personal or family income is strongly related to most indicators of health status, health care access and use, and health-related behaviors. Thus, a county's economic well-being generally, and the share of its population living below the official poverty threshold in particular, greatly influence the health and health care needs of its residents. [1]

Based on data from the American Community Survey, the counties with the highest proportion of individuals below poverty are primarily Rural, making up 55% of the bottom half of the rankings (29 counties). Shasta County was ranked 34th worst, with 17.5% of its residents living below poverty, worse than the overall California rate (15.8%).

Where We Were		
2009-13	2010-14	2011-15
17.5%	18.0%	18.0%

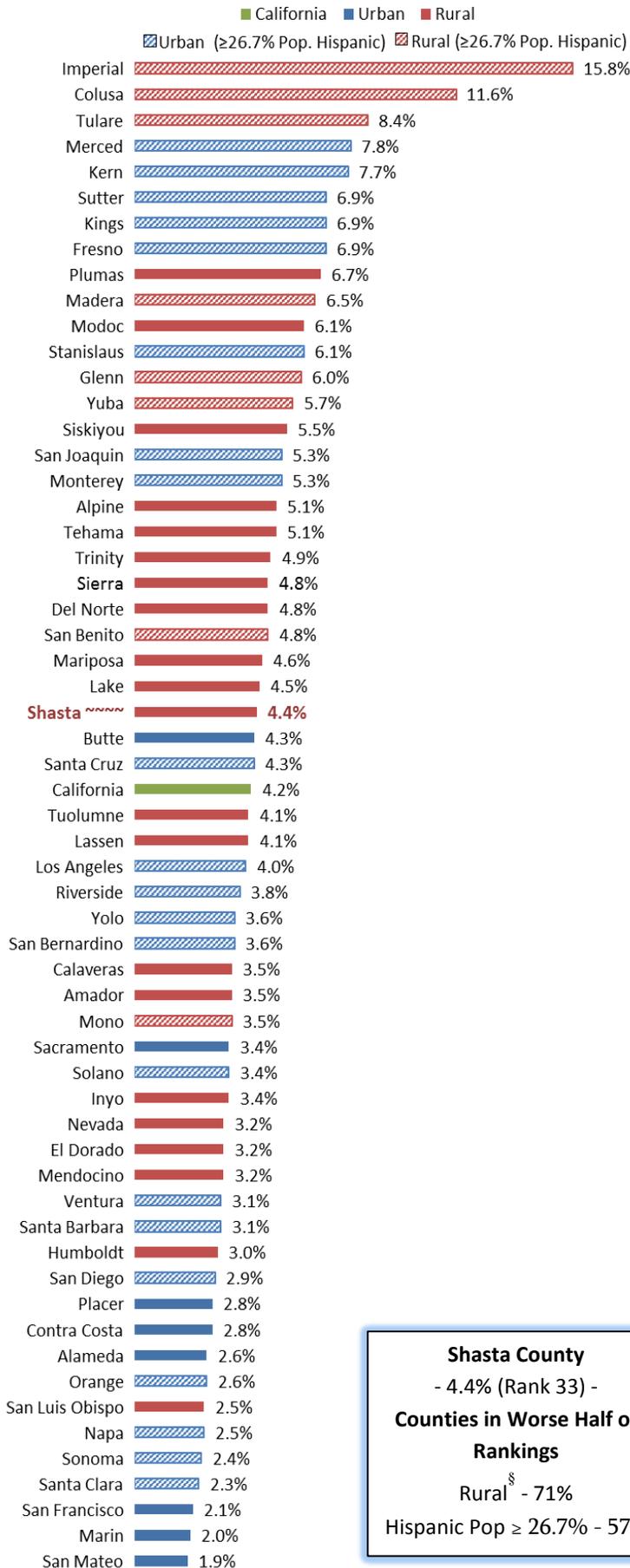
Data Definition: Percent of individuals living at 99% of the Federal Poverty Level or below in the past 12 months, among the population for whom poverty status is determined.

Data Source: 2012-2016 American Community 5-year Estimates, Table S1701

References:

[1] Eberhardt MS, Ingram DD, Makuc DM, et al. Urban and Rural Health Chartbook. Health, United States, 2001. Hyattsville, Maryland: National Center for Health Statistics. 2001.

Unemployment Rate



Shasta County
 - 4.4% (Rank 33) -
Counties in Worse Half of
Rankings
 Rural[§] - 71%
 Hispanic Pop ≥ 26.7% - 57%

The unemployment rate is well established as a risk factor for elevated illness and mortality rates in epidemiological studies performed since the early 1980's. In addition to influences on mental disorder, suicide and alcohol abuse and alcoholism, unemployment is also an important risk factor in cardiovascular disease and overall decreases in life expectancy. [1]

Based on the 2018 unemployment rates from the California Employment Development Department, unemployment rates are greater among Rural Counties, making up 64% of the bottom half of the rankings (29 counties). Shasta County was ranked 33rd with an unemployment rate of 4.4% which is worse than the overall California rate (4.2%).

Where We Were		
2015	2016	2017
7.5%	6.2%	5.3%

Data Definition: Percent of individuals not working but were able, available, and actively looking for work.

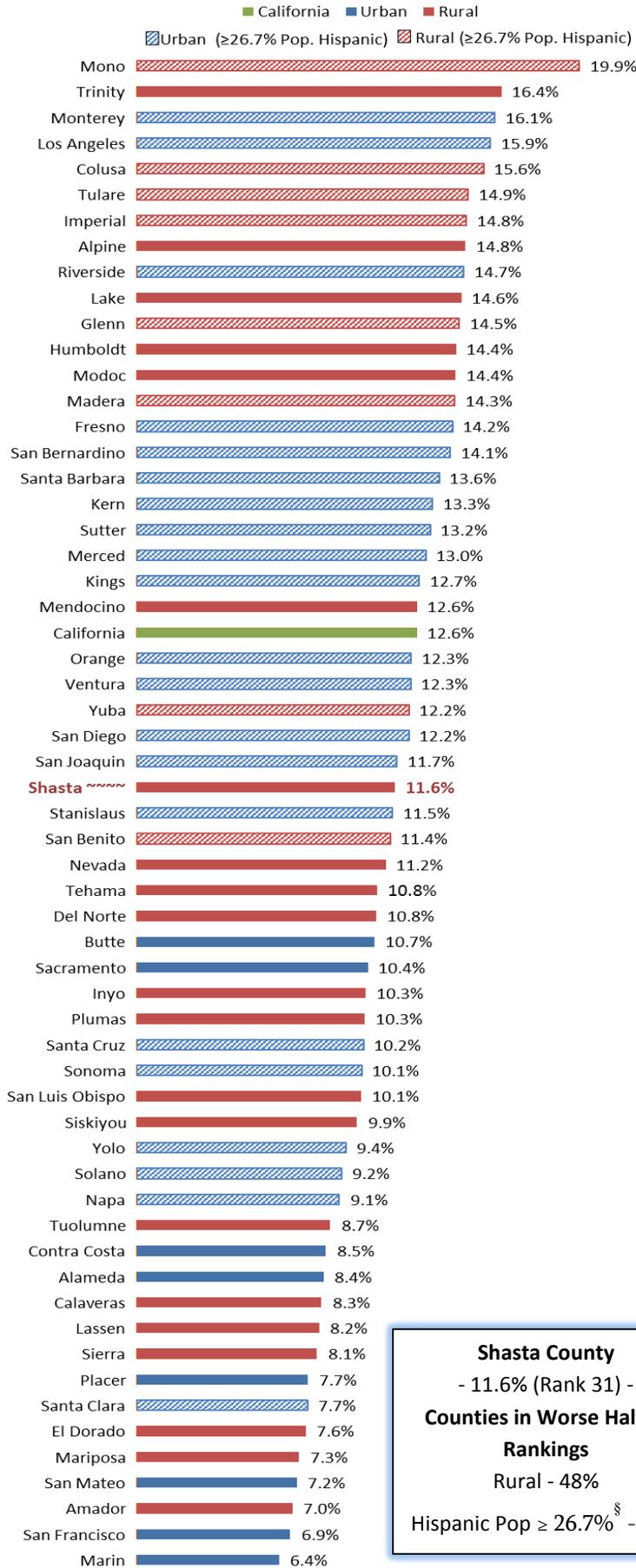
[§] Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

Data Source: 2015-2018 California Employment Development Department, Local Area Profiles, <http://www.labormarketinfo.edd.ca.gov/>, Accessed 7/17/18.

References:

[1] Brenner, M. Harvey, Ph.D., Major Factors in the Prediction of National Life Expectancy: GDP and Unemployment, Testimony before the U.S. Senate Committee on Environment and Public Works, Washington, D.C., June 15, 2011, http://www.epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=37188bea-2c5f-4100-a767-f264f1a1ced2

Percent of Individuals With No Health Insurance



Shasta County
 - 11.6% (Rank 31) -
Counties in Worse Half of
Rankings
 Rural - 48%
 Hispanic Pop ≥ 26.7%[§] - 76%

Going without coverage can have serious health consequences for the uninsured because they receive less preventative care, and delayed care often results in serious illness or other health problems. Being uninsured can also have serious financial consequences, with many unable to pay their medical bills, resulting in medical debt. [1]

Based on data from the American Community Survey, the counties with the highest proportion of individuals with no insurance are primarily Urban, making up 52% of the bottom half of the rankings (29 counties). Shasta County was ranked 31st best, with 11.6% of its residents having no health insurance, better than the overall California rate (12.6%).

Where We Were		
2009-13	2010-14	2011-15
15.8%	15.1%	13.7%

Data Definition: Percent of individuals with no health insurance, among the civilian non-institutionalized population.

[§] Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

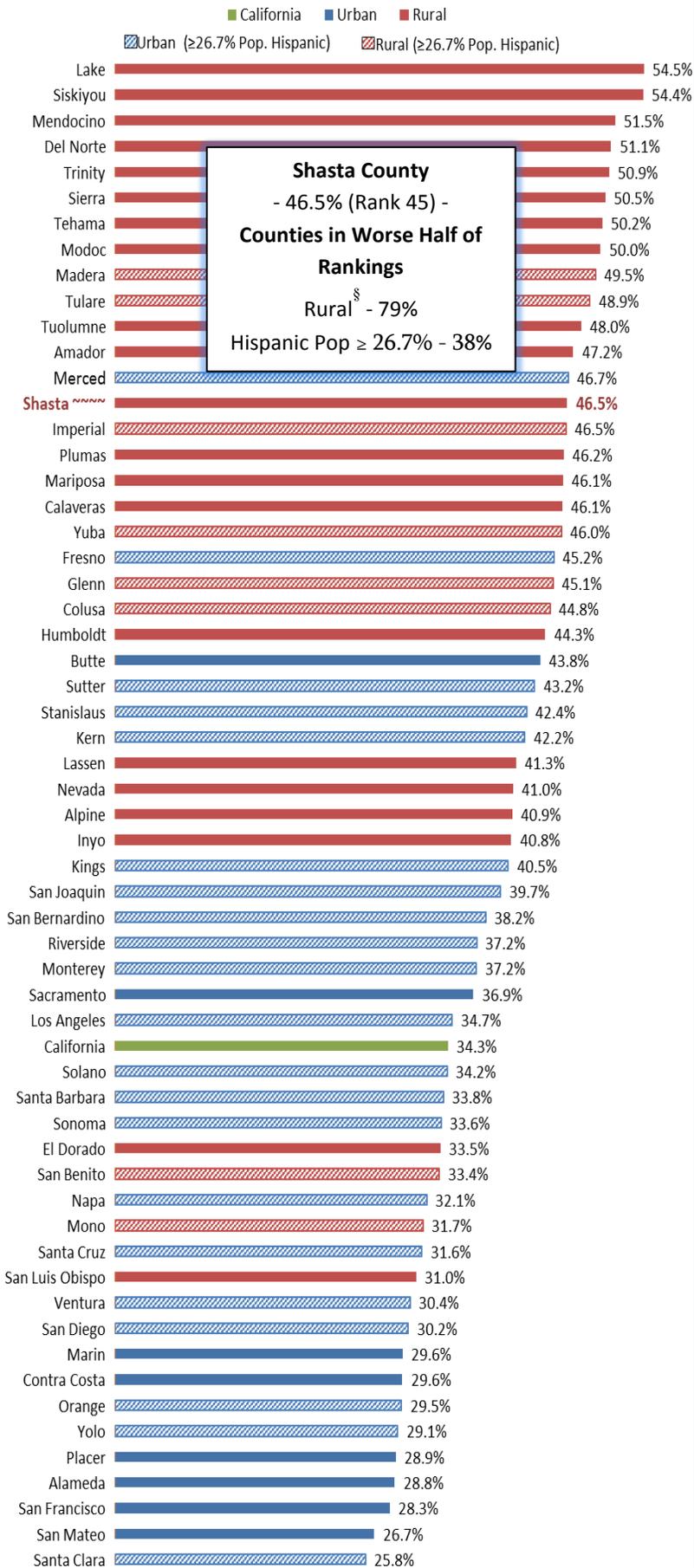
Data Source: 2012-2016 American Community Surveys 5-year Estimates, Table DP03

References:

[1] Henry J Kaiser Family Foundation, *The Uninsured: A Primer – Key Facts about Health Insurance and the Uninsured Under the Affordable Care Act, 2017*

<https://www.kff.org/uninsured/report/the-uninsured-a-primer-key-facts-about-health-insurance-and-the-uninsured-under-the-affordable-care-act/>, Accessed 10/23/2018.

Percent of Individuals With Public Insurance



Health insurance coverage is an important determinant of access to care. Uninsured people receive less medical care and less timely care, they have worse health outcomes, and lack of insurance is a fiscal burden for them and their families. Moreover, the benefits of expanding coverage outweigh the costs for added services. Safety-net care from hospitals and clinics improves access to care but does not fully substitute for health insurance. [1]

Based on data from the American Community Survey, the counties with the highest proportion of individuals with public insurance are primarily Rural, making up 79% of the bottom half of the rankings (29 counties). Shasta County was ranked 45th with 46.5% of its residents having public health insurance, worse than the overall California rate (34.3%).

Where We Were		
2009-13	2010-14	2011-15
42.0%	43.7%	44.8%

Data Definition: Percent of individuals with no health insurance, among the civilian non-institutionalized population.

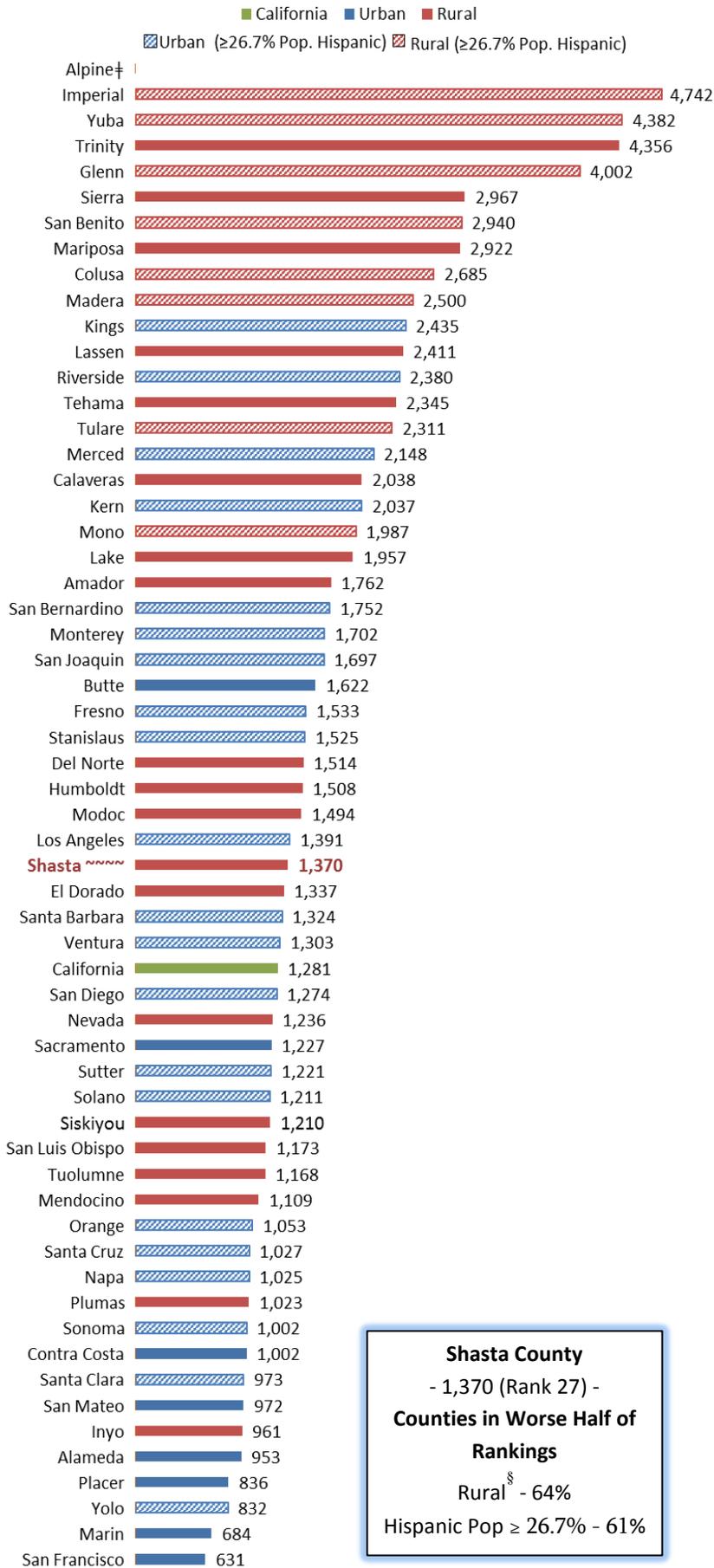
[§] Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

Data Source: 2012-2016 American Community Surveys 5-year Estimates, Table DP03

References:

[1] Bovbjerg RR, and Hadley J. Why Health Insurance Is Important. Healthy Policy Briefs DC-SPG no. 1: The Urban Institute. November 2007.

Population Per Physician (Ratio)



Shasta County
- 1,370 (Rank 27) -
Counties in Worse Half of
Rankings
Rural[§] - 64%
Hispanic Pop ≥ 26.7% - 61%

Access to care requires not only financial coverage, but also access to providers. While high rates of specialist physicians have been shown to be associated with higher (and perhaps unnecessary) utilization, sufficient availability of primary care physicians is essential for preventive and primary care, and, when needed, referrals to appropriate specialty care. [1]

Based on data from the 2018 County Health Rankings, the counties with the highest ratio of residents to physicians are primarily Rural, making up 64% of the bottom half of the rankings (28 counties). Shasta County was ranked 27th best of 57 ranked counties, with a ratio of 1,370 residents per physician, better than the overall California rate of 1,281 residents per physician).

Where We Were		
2015	2016	2017
1,294	1,220	1,260

Data Definition: Number of county residents per primary care physician. Primary care physicians include practicing physicians (M.D.'s and D.O.'s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics.

† Rates, percentages, and confidence limits are not calculated for zero events.

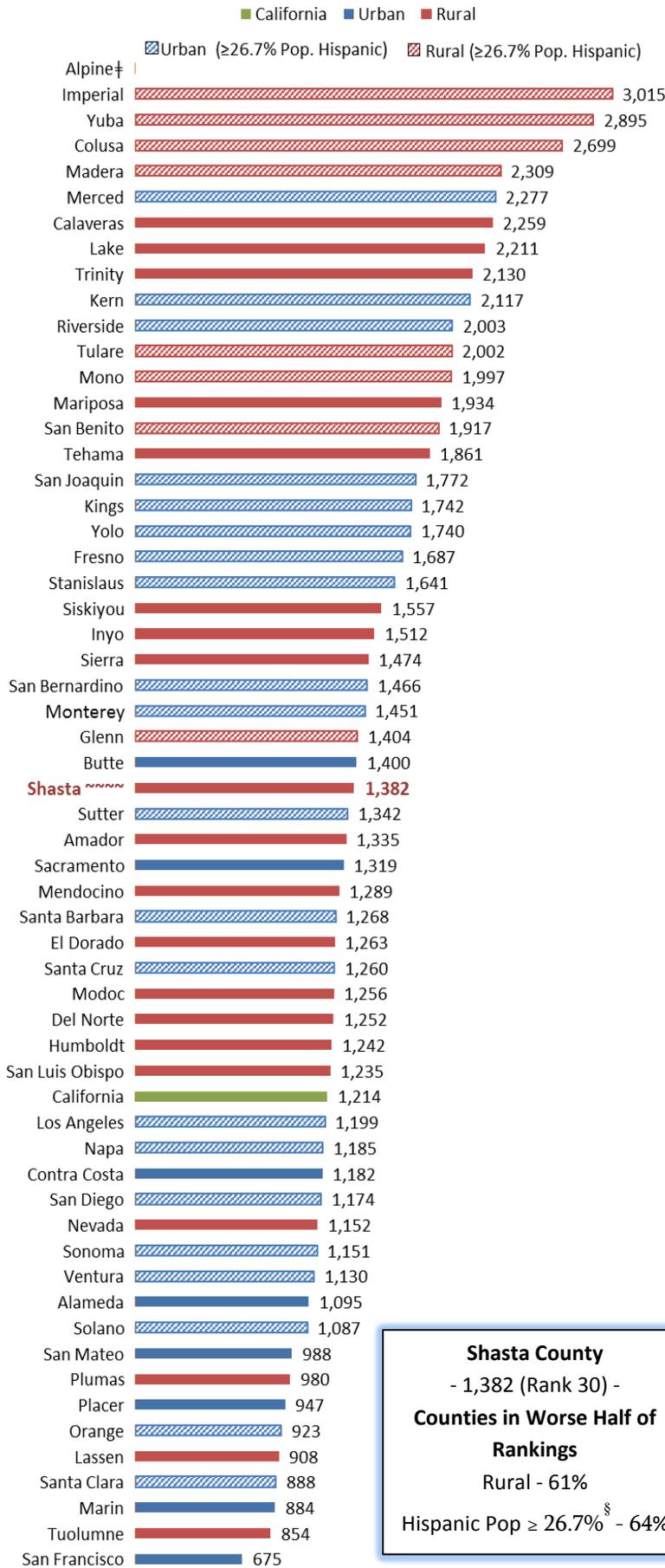
§ Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

Data Source: 2015-2018 County Health Rankings, University of Wisconsin Population Health Institute, and Health Resources and Services Administration Area Resource File

References:

[1] County Health Rankings, Primary Care Physicians, University of Wisconsin Population Health Institute. <http://www.countyhealthrankings.org/app/california/2018/measure/factors/4/description>, Accessed 10/23/2018.

Population Per Dentist (Ratio)



Shasta County
- 1,382 (Rank 30) -
Counties in Worse Half of
Rankings
Rural - 61%
Hispanic Pop ≥ 26.7%[§] - 64%

Dentists provide preventive and curative dental care and play an important role in maintaining oral health. As with physicians, the supply of dentists affects access to needed care. [1] Untreated dental disease can lead to serious health effects including pain, infection, and tooth loss. Although lack of sufficient providers is only one barrier to access for oral health care, much of the country suffers from shortages. [2]

Based on data from the 2018 County Health Rankings, the counties with the highest ratio of residents to dentists are primarily Rural, making up 61% of the bottom half of the rankings (28 counties). Shasta County was ranked 30th with a ratio of 1,382 residents per dentist, better than the overall California rate (1,214 residents per dentist).

Where We Were		
2015	2016	2017
1,432	1,400	1,360

Data Definition: Number of county residents per dentist.

† Rates, percentages, and confidence limits are not calculated for zero events.

§ Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

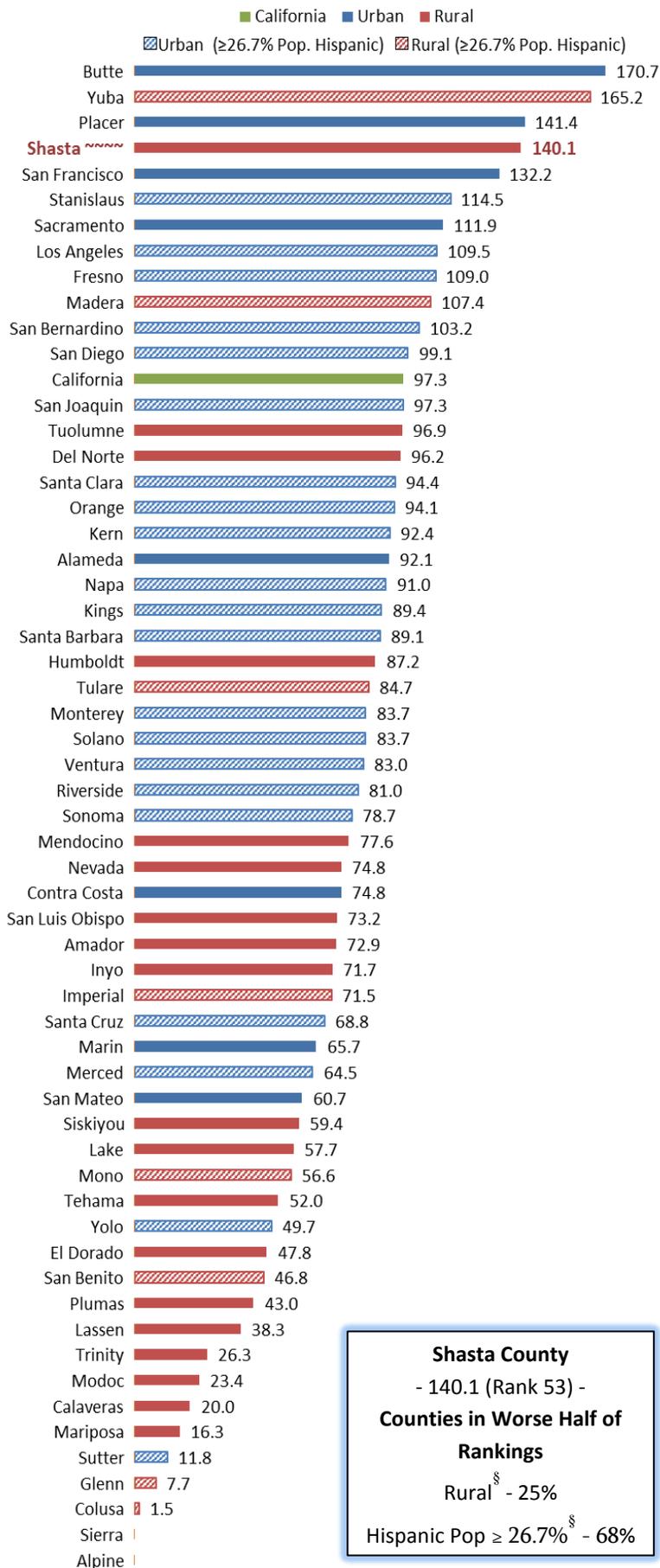
Data Source: 2015-2018 County Health Rankings, University of Wisconsin Population Health Institute, and Health Resources and Services Administration Area Resource File

References:

[1] Eberhardt MS, Ingram DD, Makuc DM, et al. Urban and Rural Health Chartbook. Health, United States, 2001. Hyattsville, Maryland: National Center for Health Statistics. 2001.

[2] 2018 County Health Rankings, Dentists, University of Wisconsin Population Health Institute, <http://www.countyhealthrankings.org/app/california/2018/measure/factors/88/description>, Accessed 10/23/2018.

Inpatient Hospital Use (Rate per 1,000 Population)



Shasta County
- 140.1 (Rank 53) -
Counties in Worse Half of
Rankings
Rural[§] - 25%
Hispanic Pop ≥ 26.7%[§] - 68%

Inpatient hospital use depends on both underlying medical conditions and factors that affect access to care, including health insurance coverage and physician supply. [1] Individuals without adequate access to non-emergent health care services are less likely to get preventive services or seek treatment for an illness until it becomes more severe.

Based on the 2017 inpatient discharges reported by the State of California Office of Statewide Health Planning & Development, inpatient hospital use rates are greater among Urban Counties, making up 75% of the bottom half of the rankings (28 counties). Shasta County's inpatient hospital use rate of 140.1 discharges per 1,000 population ranks 53rd and is worse than the overall California rate of 97.3 discharges per 1,000 population.

Where We Were		
2014	2015	2016
134.2	134.7	139.4

Data Definition: Discharge counts are by county of residence. Rates are per 1,000 population.

[§] Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

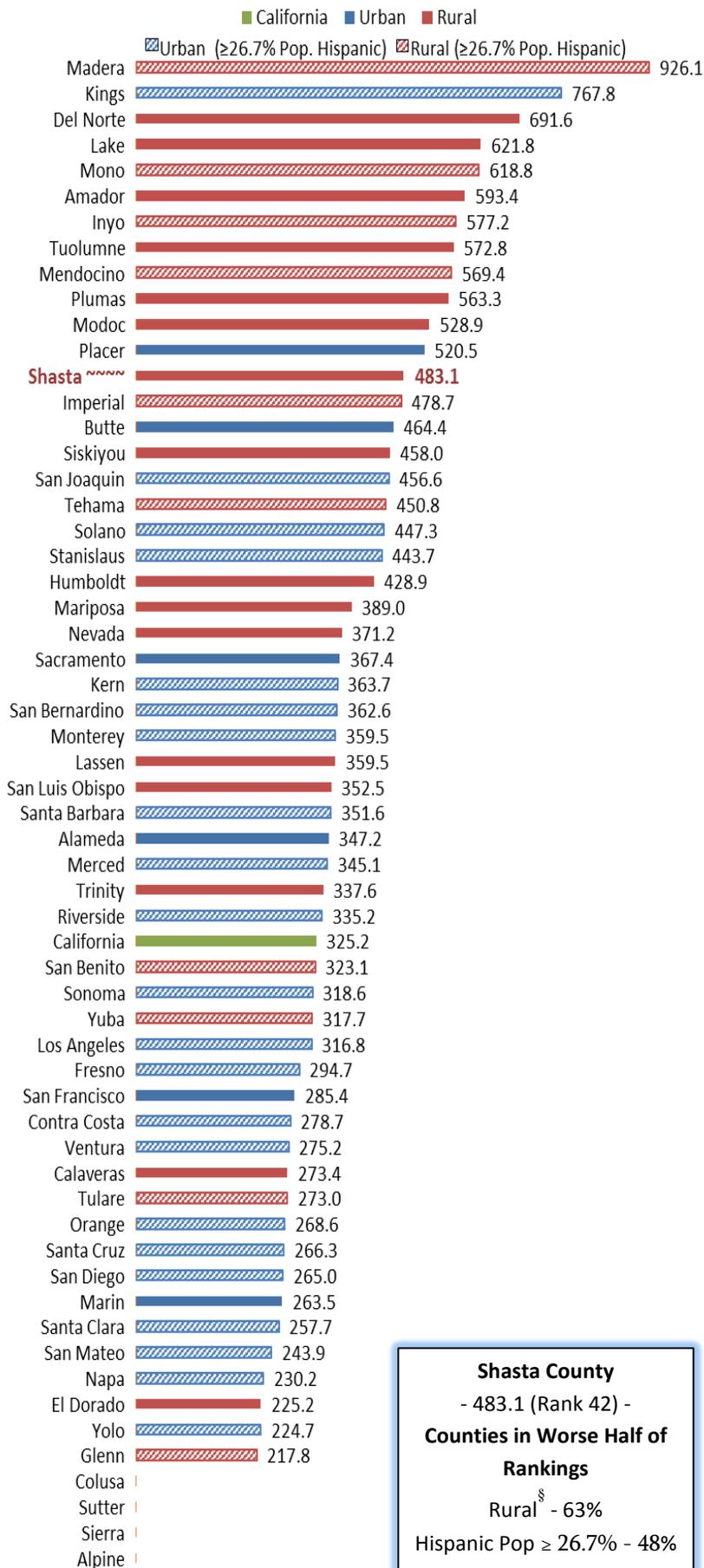
Data for Alpine and Sierra Counties not available.

Data Source: State of California Office of Statewide Health Planning & Development, Healthcare Information Division, Hospital Inpatient – Characteristics by Facility (2014-2017), <http://www.oshpd.ca.gov>, accessed 8/28/18.

References:

[1] Eberhardt MS, Ingram DD, Makuc DM, et al. *Urban and Rural Health Chartbook. Health, United States, 2001. Hyattsville, Maryland: National Center for Health Statistics. 2001.*

Emergency Department Visits (Rate per 1,000 Population)



Shasta County
- 483.1 (Rank 42) -
Counties in Worse Half of Rankings
Rural[§] - 63%
Hispanic Pop ≥ 26.7% - 48%

Emergency Department visits, like Inpatient hospital use, depends on both underlying medical conditions and factors that affect access to care, including health insurance coverage and physician supply. Individuals without adequate access to non-emergent health care services are less likely to get preventive services or seek treatment for an illness until it becomes severe. In many instances, the emergency department also acts as a medical home for individuals without insurance or without an identified primary care physician.

Based on the 2017 emergency department visits reported by the State of California Office of Statewide Health Planning & Development, emergency department visit rates are greater among Rural Counties, making up 63% of the bottom half of the rankings (27 counties). Shasta County's emergency department visit rate of 483.1 visits per 1,000 population ranks 42nd and is worse than the overall California rate of 325.2 visits per 1,000 population.

Where We Were		
2014	2015	2016
495.5	529.2	516.1

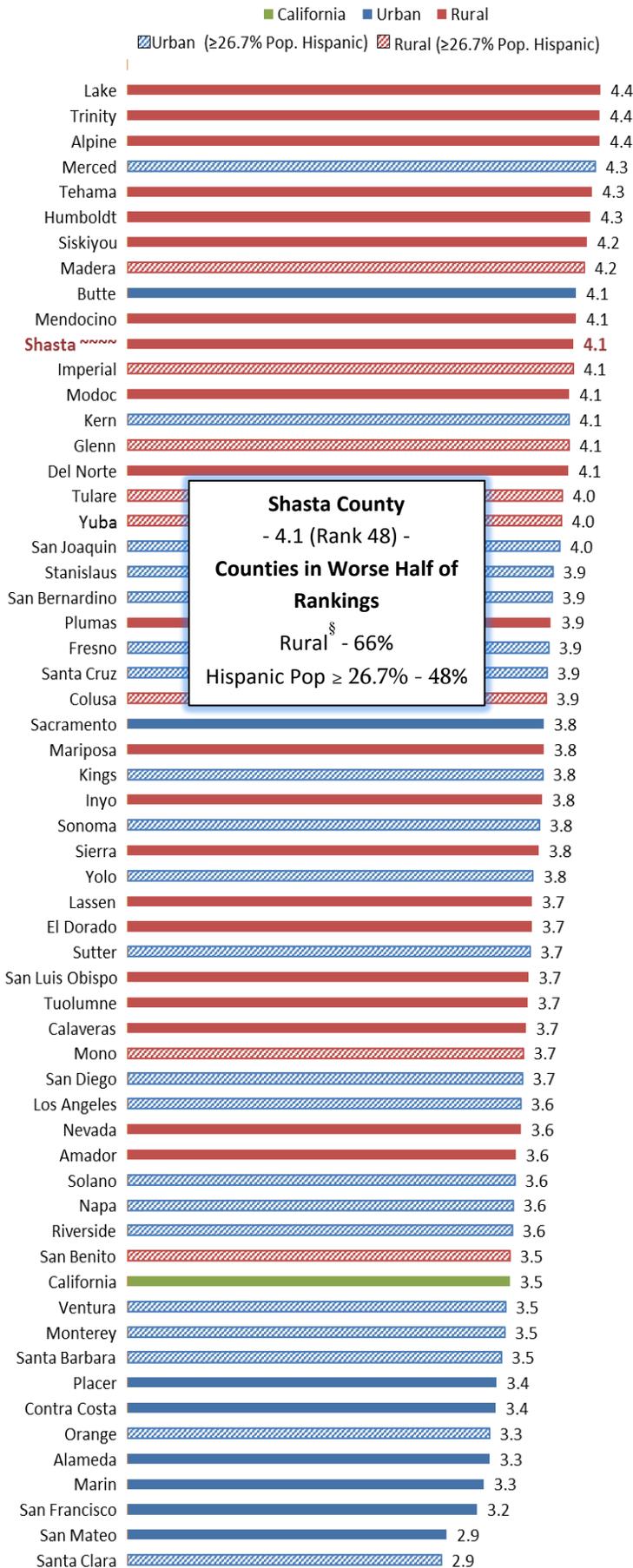
Data Definition: Emergency Department Visit counts are by county of residence. Rates are per 1,000 population.

Data for Alpine, Colusa, Sierra, and Sutter Counties not available.

[§] Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

Data Source: State of California Office of Statewide Health Planning & Development, Healthcare Information Division. Hospital Emergency Department – Characteristics By Facility (2014-2017). <http://www.oshpd.ca.gov>. accessed 8/28/18.

Average Number of Mentally Unhealthy Days Reported in the Past 30 Days



Overall health depends on both physical and mental well-being. Measuring the number of days when people report that their mental health was not good, i.e., poor mental health days, represents an important facet of health-related quality of life. [1]

Based on data from the 2018 County Health Rankings, the counties with the highest average of poor mental health days are primarily rural, making up 66% of the bottom half of the rankings. Shasta County was ranked 48th of 58 ranked counties, with an average of 4.1 poor mental health days, worse than the overall California average of 3.5 poor mental health days.

Where We Were		
2015	2016	2017
4.1	4.0	4.0

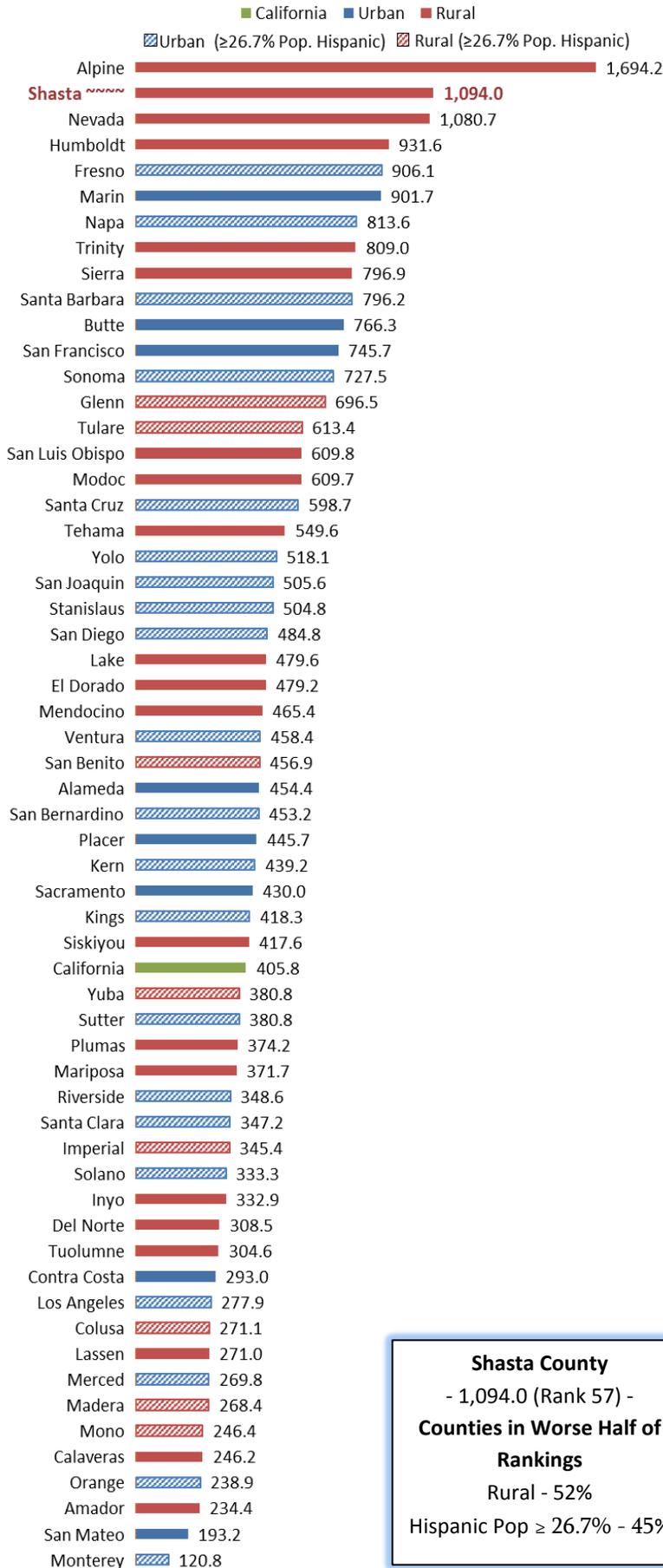
Data Definition: Average number of mentally unhealthy days which includes stress, depression, and other problems with emotions reported in past 30 days (age-adjusted).

[§] Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

Data Source: 2015-2018 County Health Rankings, University of Wisconsin Population Health Institute, and Health Resources and Services Administration Area Resource File, <http://www.countyhealthrankings.org/app/california/2018/measure/outcomes/42/data>, Accessed 11/16/2018.

References:[1] 2018 County Health Rankings, Dentists, University of Wisconsin Population Health Institute, <http://www.countyhealthrankings.org/app/california/2018/measure/outcomes/42/description>, Accessed 11/16/2018.

Substance Abuse Treatment Admissions (Rate per 100,000 Population)



Shasta County
 - 1,094.0 (Rank 57) -
Counties in Worse Half of
Rankings
 Rural - 52%
 Hispanic Pop ≥ 26.7% - 45%

Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. [1]

Based on data from the California Department of Health Care Services, the counties with the highest rates of admission to substance abuse treatment are primarily Rural, making up 52% of the bottom half of the rankings (29 counties). Shasta County was ranked 57th with 1,094.0 admissions per 100,000 population, more than twice the overall California rate (405.8 per 100,000).

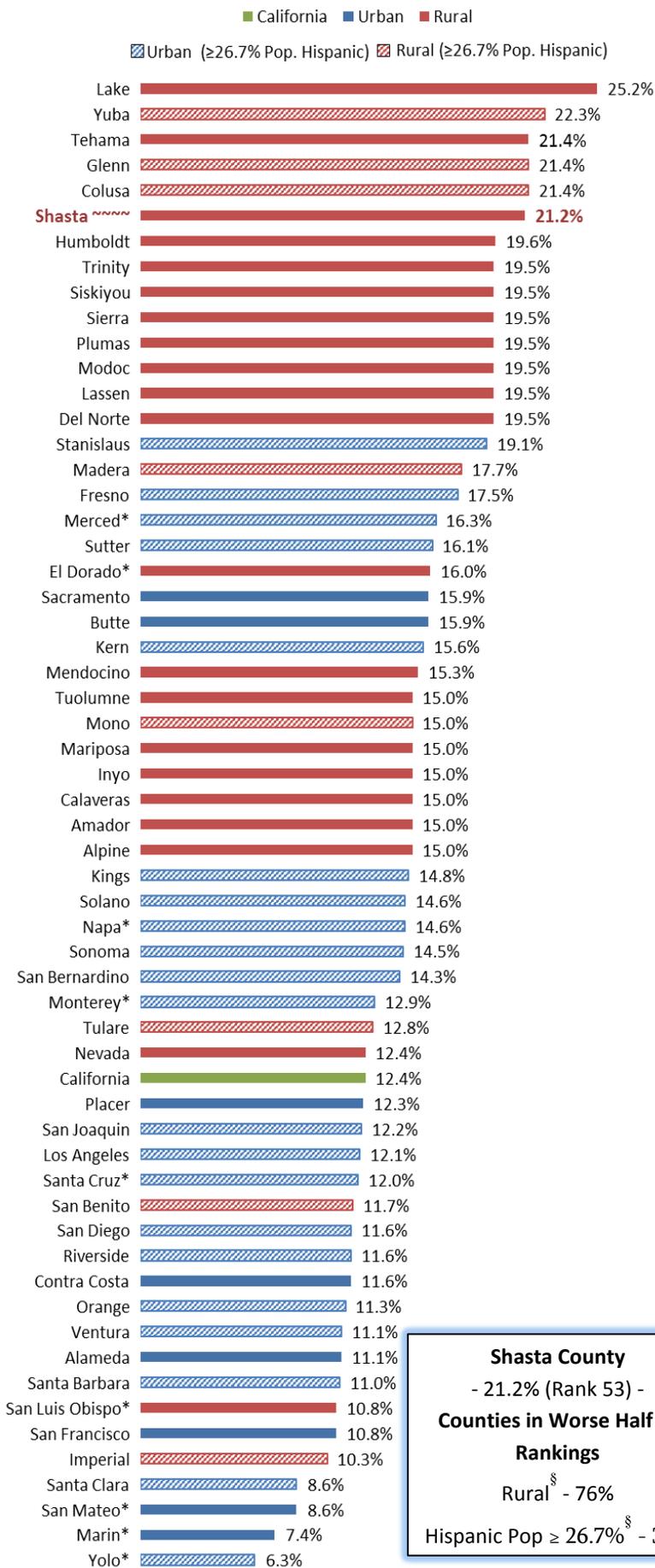
Data Definition: Total admissions to publicly funded alcohol and other drug treatment facilities in California for both detoxification and other treatment services, per 100,000 total population.

Data Source: California Department of Health Care Services, California and Individual Counties, 2016-17 data.

References:

[1] Office of Disease Prevention and Health Promotion, Substance Abuse, <https://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse>, accessed 11/7/2018.

Current Smoker (Adults 18+)



Shasta County
 - 21.2% (Rank 53) -
Counties in Worse Half of
Rankings
 Rural[§] - 76%
 Hispanic Pop ≥ 26.7%[§] - 34%

Each year, smoking kills 480,000 Americans, including about 41,000 from exposure to secondhand smoke. Smoking causes cancer, heart disease, stroke, diabetes, and lung diseases such as emphysema, bronchitis, and chronic airway obstruction, and can lead to lung cancer and heart disease in those exposed to secondhand smoke. On average, smokers die 10 years earlier than nonsmokers. [1]

Based on the 2015-2016 California Health Interview Survey (CHIS), adult smoking rates are greater among Rural Counties, making up 76% of the bottom half of the rankings (29 counties). Shasta County's adult smoking rate of 21.2% ranks as 53rd and is worse than the overall California rate of 12.4%.

Where We Were		
2012-13	2013-14	2014-15
20.6%	18.1%	22.8%

Data Definition: Percent of surveyed adults who smoked 100 or more cigarettes in their life.

* Statistically unstable estimate

§ Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

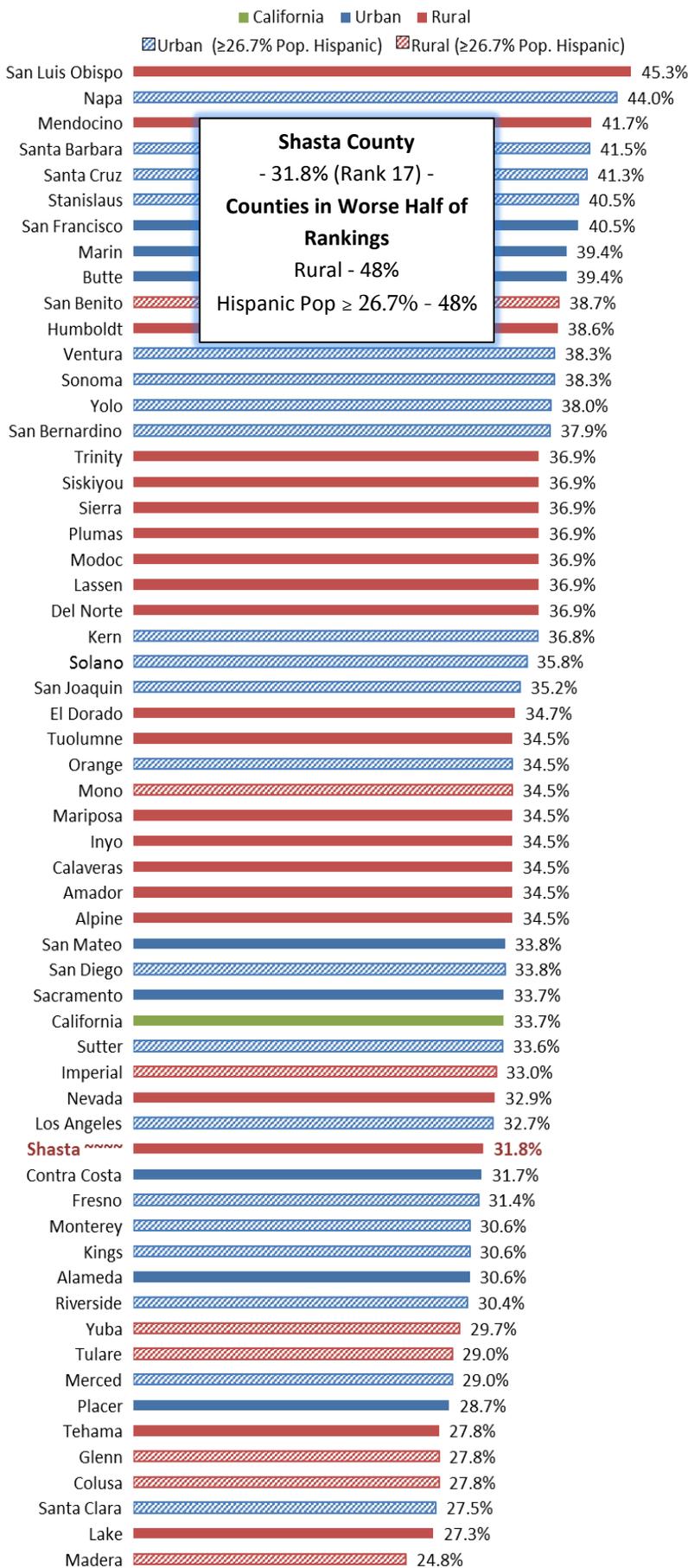
Data Source: California Health Interview Survey (2012-2016). <http://ask.chis.ucla.edu> Accessed 7/16/18.

References:

[1] County Health Rankings, Tobacco Use, University of Wisconsin Population Health Institute.

<http://www.countyhealthrankings.org/explore-health-rankings/what-and-why-we-rank/health-factors/health-behaviors/tobacco-use> Accessed 10/15/18.

Binge Drinking (Adults 18+)



Shasta County
 - 31.8% (Rank 17) -
Counties in Worse Half of Rankings
 Rural - 48%
 Hispanic Pop ≥ 26.7% - 48%

Over time, excessive alcohol consumption is a risk factor for hypertension, heart disease, fetal alcohol syndrome, liver disease, and certain cancers. In the short-term, excessive drinking is also linked to alcohol poisoning, intimate partner violence, risky sexual behaviors, and motor vehicle crashes. Alcohol-impaired crashes accounted for nearly one-third of all traffic-related deaths in 2016-more than 10,000 fatalities.[1]

Based on the 2014-2015 California Health Interview Survey (CHIS), binge drinking rates are greater among Urban Counties, making up 52% of the bottom half of the rankings (29 counties). Shasta County's binge drinking rate of 31.8% ranks as 17th and is better than the overall California rate of 33.7%.

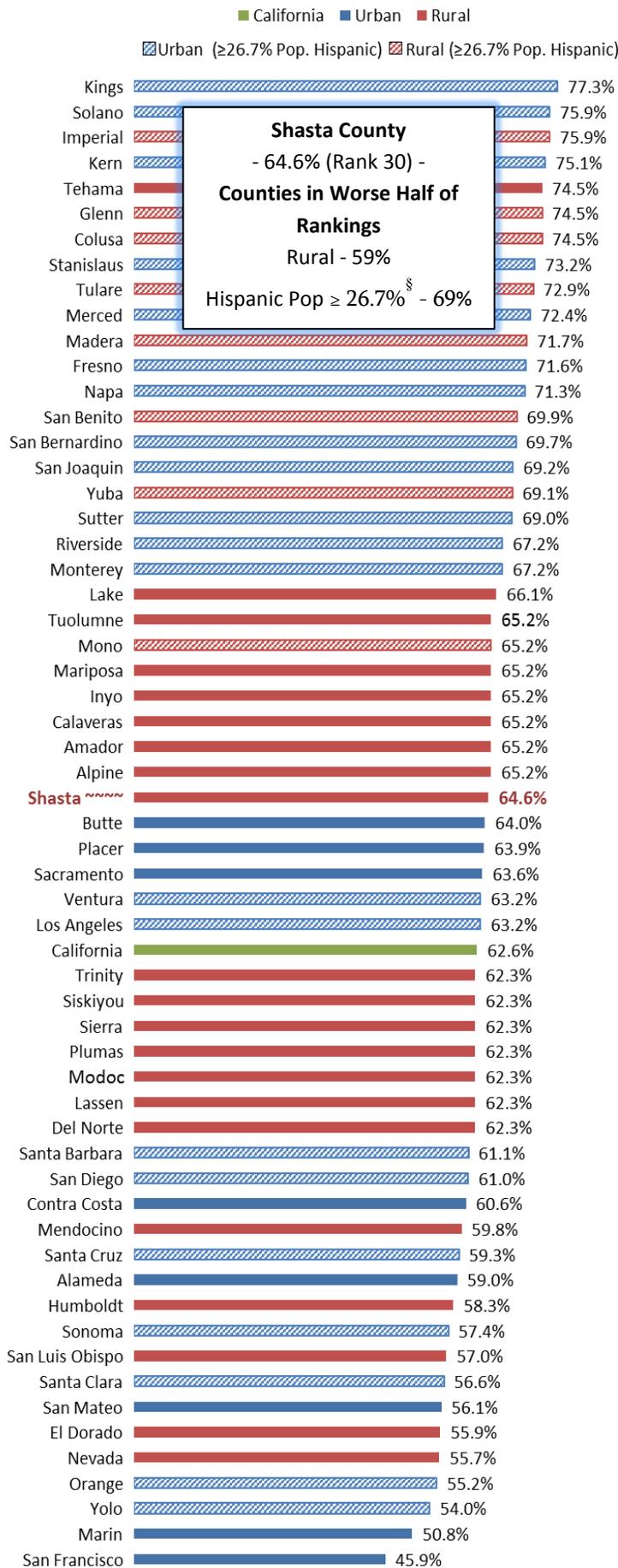
Where We Were		
2011-12	2012-13	2013-14
29.2%	26.6%	27.0%

Data Definition: Males are considered binge drinkers if they consumed 5 or more alcoholic drinks on at least one occasion in the past year. Females are considered binge drinkers if they consumed 4 or more alcoholic drinks on at least one occasion in the past year.

Data Source: California Health Interview Survey (2011-2015). <http://ask.chis.ucla.edu> Accessed 7/16/18.

References:
 [1] County Health Rankings, Alcohol and Drug Use, University of Wisconsin Population Health Institute. <http://www.countyhealthrankings.org/explore-health-rankings/what-and-why-we-rank/health-factors/health-behaviors/alcohol-and-drug-use> Accessed 10/15/18.

Overweight & Obese (Adults)



Obesity is one of the biggest drivers of preventable chronic diseases in the US. Being overweight or obese increases the risk for many health conditions, including type 2 diabetes, heart disease, stroke, hypertension, cancer, Alzheimer's disease, dementia, liver disease, kidney disease, osteoarthritis, and respiratory problems. [1]

Based on the 2015-2016 California Health Interview Survey (CHIS), rates of overweight and obese individuals is greater among Rural Counties, making up 59% of the bottom half of the rankings (29 counties). Shasta County's rate of overweight and obese individuals at 64.6% ranks as 30th and is worse than the overall California rate of 62.6%.

Where We Were		
2012-13	2013-14	2014-15
64.4%	60.4%	60.4%

Data Definition: Adults age 18 and older with Body Mass Index (BMI) scores of at least 25.0 are considered overweight or obese. BMI was calculated using self-reported height and weight of survey respondents.

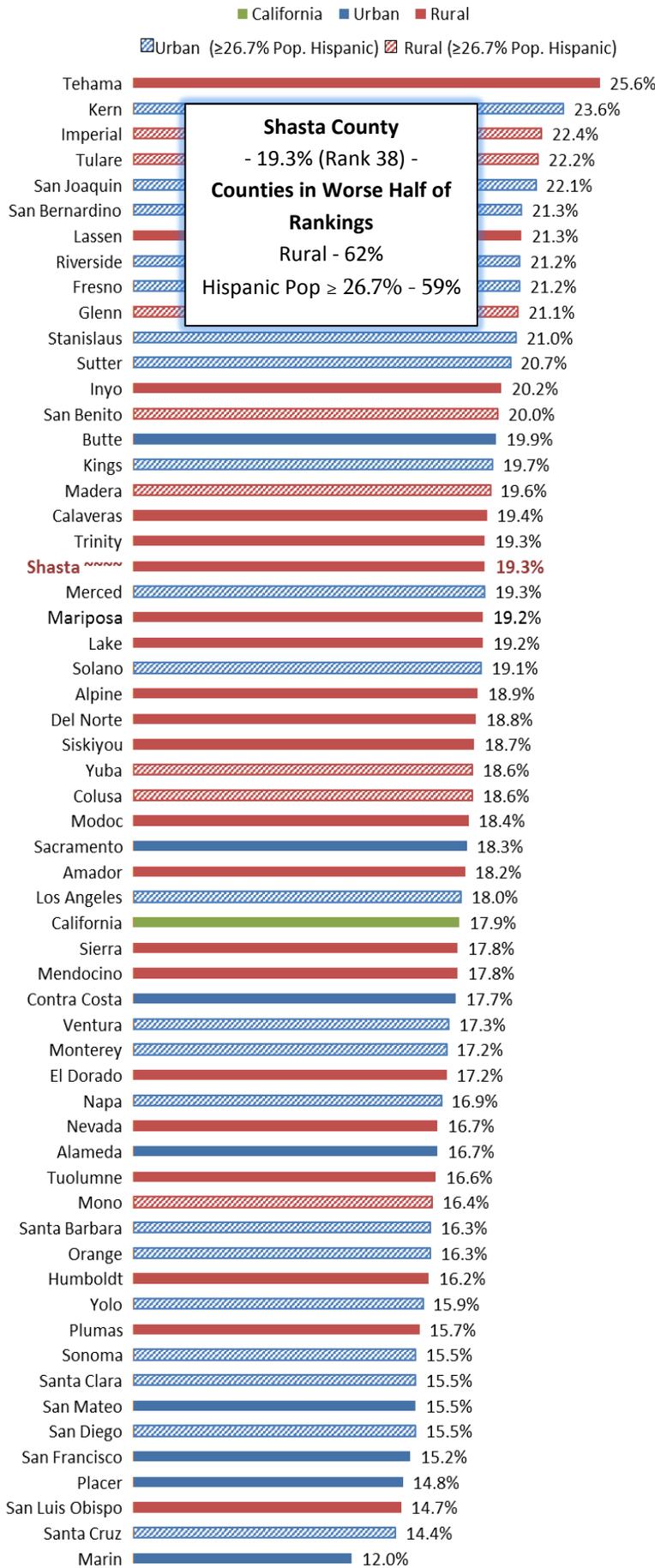
§ Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

Data Source: California Health Interview Survey (2012-2016). <http://ask.chis.ucla.edu> Accessed 7/16/18.

References:

[1] County Health Rankings, Diet and Exercise, University of Wisconsin Population Health Institute. <http://www.countyhealthrankings.org/explore-health-rankings/what-and-why-we-rank/health-factors/health-behaviors/diet-and-exercise> Accessed 10/15/18.

Physical Inactivity



Decreased physical activity has been related to several disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity.[1,2] In addition, physical inactivity at the county level is related to health care expenditures for circulatory system diseases.[1]

Based on the 2018 County Health Rankings, physical inactivity rates are greater among Rural Counties, making up 62% of the bottom half of the rankings (29 counties). Shasta County's physical inactivity rate of 19.3% ranks as the 38th worst county and is worse than the overall California rate of 17.9%.

Where We Were		
2015	2016	2017
19.3%	20.3%	19.4%

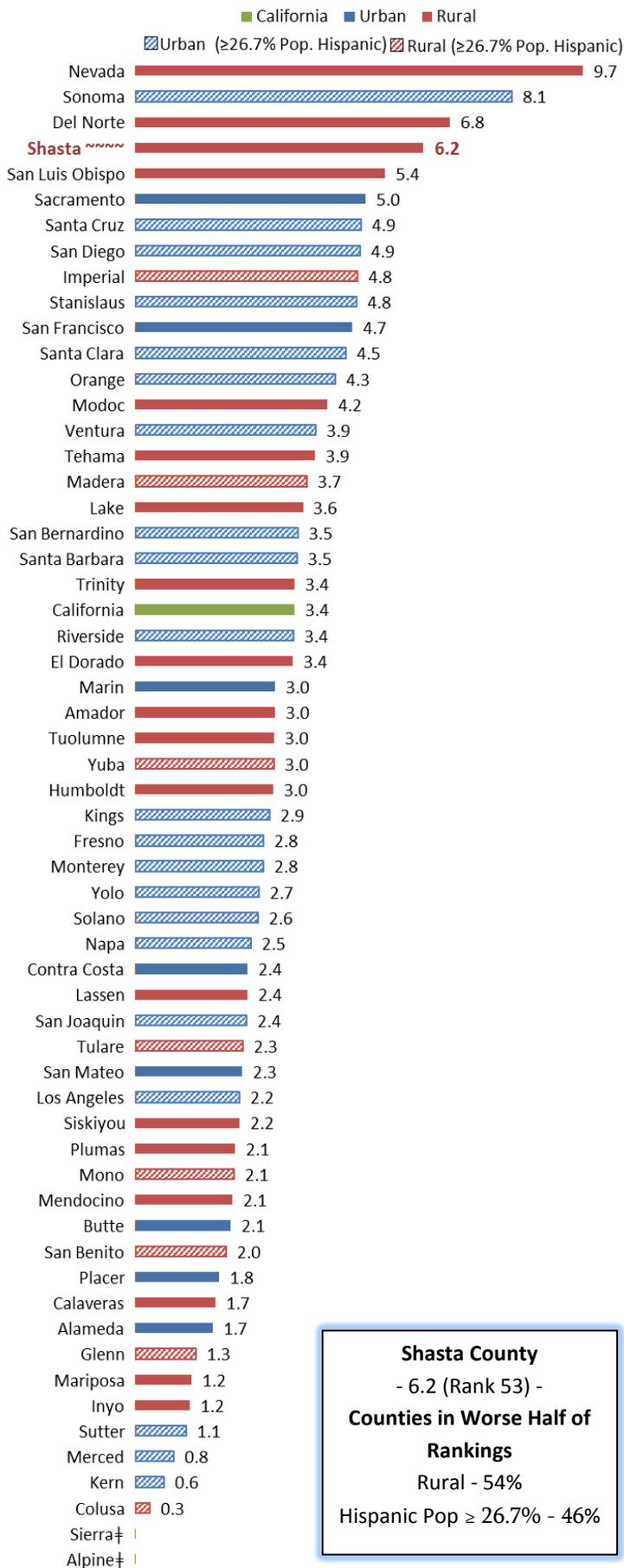
Data Definition: Percent of adults age 20 and over reporting no leisure time physical activity.

Data Source: 2015-2018 County Health Rankings, University of Wisconsin Population Health Institute, and Health Resources and Services Administration Area Resource File

References:

- [1] Rosenberger RS, Sneh Y, Phipps TT, Gurvitch R. A spatial analysis of linkages between health care expenditures, physical inactivity, obesity and recreation supply. *Journal of Leisure Research*. 2005; 37.2:216-235.
- [2] Rana JS, Li TY, Manson JE, Hu FB. Adiposity compared with physical inactivity and risk of type 2 diabetes in women. *Diabetes Care*; Jan 2007;30,1:53-58.

Substantiated Elder Abuse Cases (Rate per 1,000 Population Aged 65+)



Shasta County
- 6.2 (Rank 53) -
Counties in Worse Half of
Rankings
Rural - 54%
Hispanic Pop ≥ 26.7% - 46%

In the United States, 1 out of every 10 people over the age of 60 who live at home experience elder abuse. This statistic is likely an underestimate because many victims are unable or afraid to tell the police, family, or friends about the violence. There are six types of maltreatment that occur among the elderly. These include: physical abuse, sexual abuse, emotional abuse, neglect, abandonment, and financial abuse.

Based on 2017 data from the California Department of Social Services, substantiated rates of elder abuse are greater among Rural Counties, making up 54% of the bottom half of the rankings (28 counties). Shasta County's rate of elder abuse at 6.2 per 1,000 adults age 65+ ranks as 53rd and is worse than the overall California rate of 3.4 per 1,000.

Where We Were		
2014	2015	2016
7.0	6.0	6.5

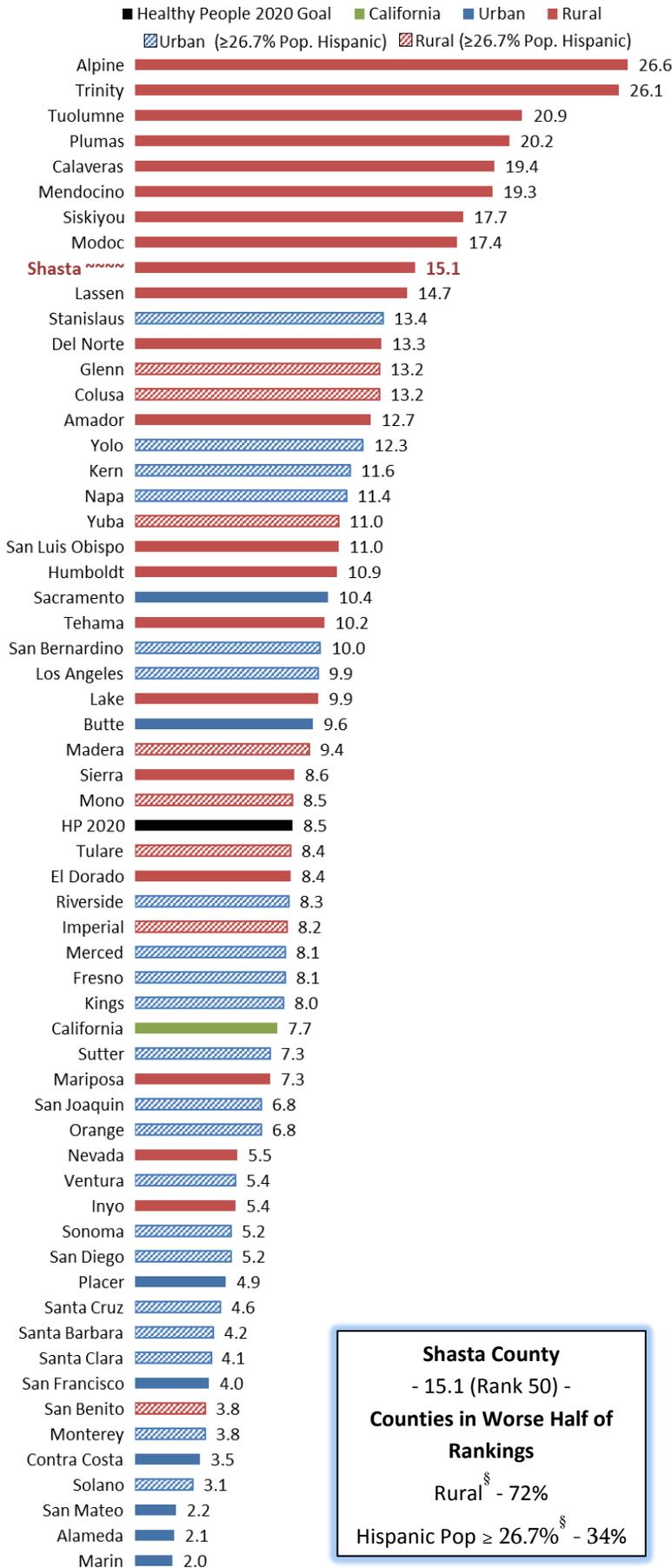
Data Definition: Estimated rate of substantiated cases (per 1,000 population aged 65 and older) for maltreatment of an older person (over 65 years of age) including physical, sexual, emotional, or financial abuse, neglect, or abandonment by someone who has a special relationship with the elder (spouse, sibling, child, friend, caregiver).

† Rates, percentages, and confidence limits are not calculated for zero events.

Data Source: California Department of Social Services, Adult Protective Services and County Block Grant Monthly Statistical Reports 2014-2017, and California Department of Finance Population Projections 2014-2017.

References:
[1] Centers for Disease Control and Prevention. Elder Abuse Prevention. <http://www.cdc.gov/features/elderabuse/> Accessed 10/15/18.

Child Maltreatment Substantiations (Rate per 1,000 Children)



Shasta County
- 15.1 (Rank 50) -
Counties in Worse Half of Rankings
Rural[§] - 72%
Hispanic Pop ≥ 26.7%[§] - 34%

Childhood Abuse, neglect, and exposure to other traumatic stressors (Adverse Childhood Experiences, or ACE) have been demonstrated to increase the risk of a multitude of health and social problems, including alcoholism, COPD, depression, illicit drug use, heart disease, liver disease, smoking, intimate partner violence, suicide, and unplanned pregnancies.

Based on 2017 data from the California Department of Social Services, substantiated rates of child abuse are greater among Rural Counties, making up 72% of the bottom half of the rankings (29 counties). Shasta County's rate of child abuse at 15.1 per 1,000 children age 0 to 17 ranks as 50th and is worse than the overall California rate of 7.7 per 1,000.

Where We Were		
2014	2015	2016
13.2	13.4	13.0

Data Definition: Estimated rate of substantiated cases (per 1,000 population aged 0 to 17) for maltreatment of a child (age 0 to 17).

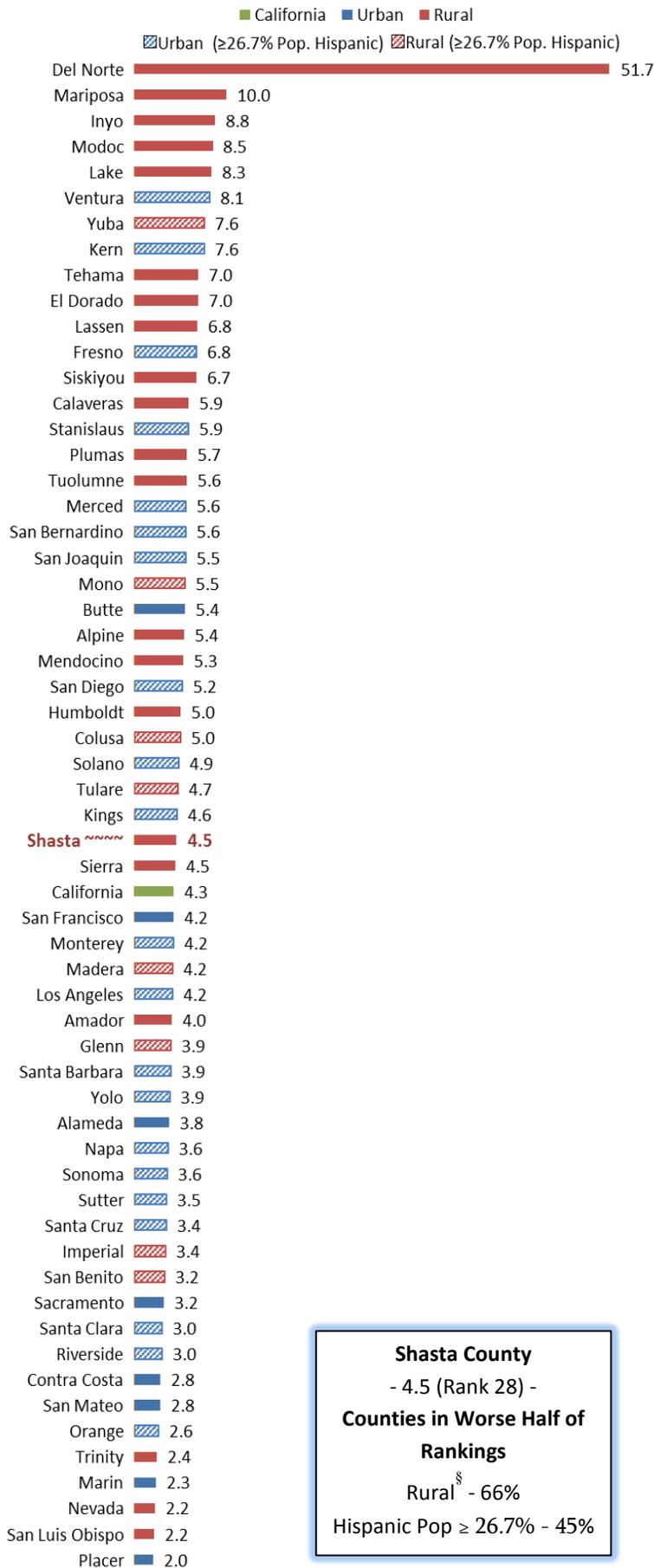
[§] Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

Data Source: California Department of Social Services and University of California Berkeley California Child Welfare Indicators Project Dynamic Report Index, January - December 2014-2017.

References:

[1] Centers for Disease Control and Prevention. Adverse Childhood Experiences (ACE). <http://www.cdc.gov/ace/findings.htm> Accessed 10/15/18.

Intimate Partner Violence Calls for Assistance (Rate per 1,000 Population)



Shasta County
- 4.5 (Rank 28) -
Counties in Worse Half of
Rankings
Rural[§] - 66%
Hispanic Pop ≥ 26.7% - 45%

An estimated 7% of women and 4% of men in the U.S. have reported experiencing physical violence, rape, or stalking from an intimate partner in their lifetime and indicated that they first experienced intimate partner violence prior to the age of 18. Victims of intimate partner violence may experience physical injuries, mental health conditions, chronic health conditions, and are at a higher risk for smoking and binge drinking. [1]

Based on 2017 data from the California Department of Justice, the rate of intimate partner violence calls for assistance are greater among Rural Counties, making up 66% of the bottom half of the rankings (29 counties). Shasta County's rate of intimate partner calls for assistance at 4.5 per 1,000 ranks as 28th and is worse than the overall California rate of 4.3 per 1,000.

Where We Were		
2014	2015	2016
5.2	5.4	4.7

Data Definition: Number of reported incidents of intimate partner violence, measured as intimate partner violence-related calls to law enforcement agencies for assistance, per 1,000 population.

† Rates, percentages, and confidence limits are not calculated for zero events.

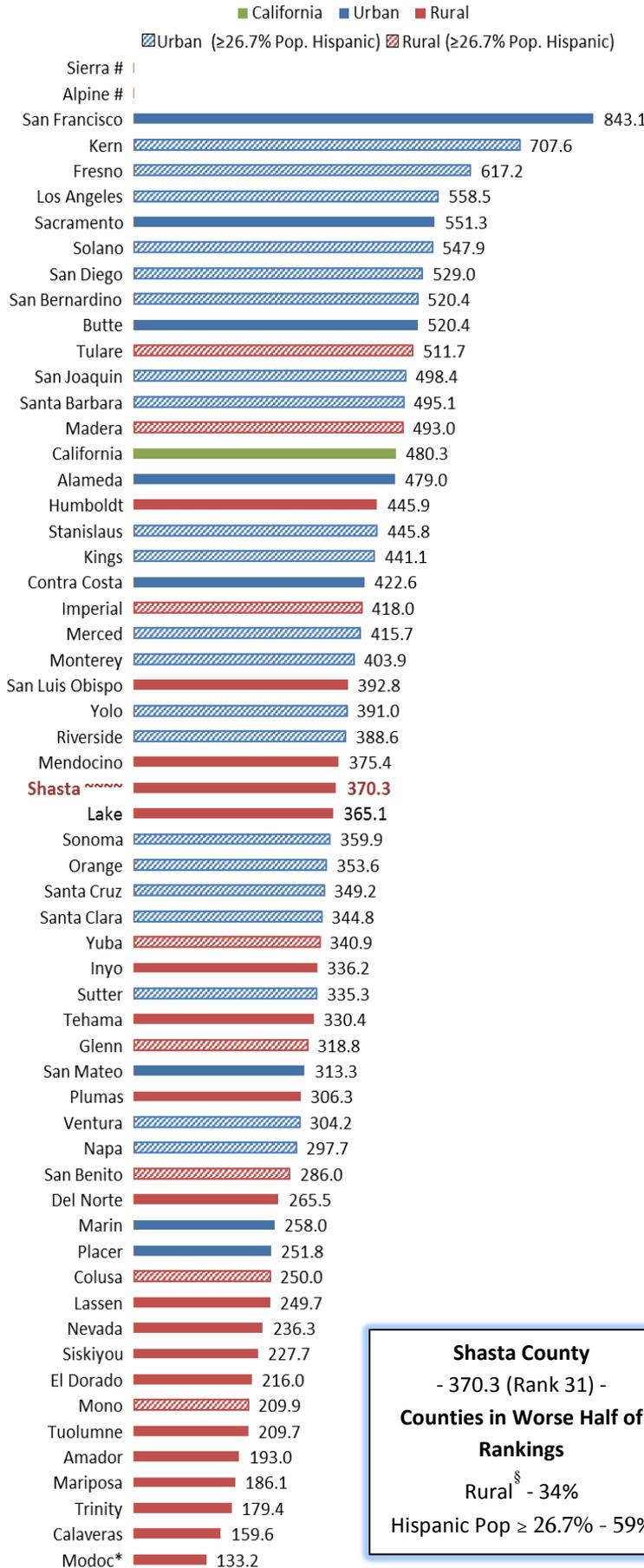
§ Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

Data Source: California Department of Justice, Open Justice Crime Statistics for Domestic Violence-Related Calls 2014-2017; California Department of Finance Population Projections for 2017

References:

[1] Centers for Disease Control and Prevention. Preventing Intimate Partner Violence. <https://www.cdc.gov/violenceprevention/pdf/ipv-factsheet.pdf> Accessed 10/15/18.

Reported Incidence of Chlamydia (Rate per 100,000 Population)



Shasta County
- 370.3 (Rank 31) -
Counties in Worse Half of Rankings
Rural[§] - 34%
Hispanic Pop ≥ 26.7% - 59%

Commonly an asymptomatic disease, Chlamydia is often undetected. Left as such, the disease is easily and unknowingly spread to others; it increases the individual's risk of acquiring or transmitting HIV, is transmittable to a fetus during birth, and can lead to infertility. Chlamydia is considered the most frequently reported bacterial sexually transmitted infection in the United States. [1]

Based on the 2014-2016 three-year average number of reported cases provided in the California Department of Public Health's 2018 County Health Status Profiles, Chlamydia Infection crude case rates are greater among Urban Counties, making up 66% of the bottom half of the rankings (29 counties). Shasta County's crude case rate of 370.3 cases of Chlamydia per 100,000 population ranks as 31st and is better than the overall California rate of 480.3 per 100,000.

Where We Were		
2011-13	2012-14	2013-15
327.2	345.7	354.3

Data Definition: Number of reported cases of Chlamydia per 100,000 population.

* Rates are deemed unreliable based on fewer than 20 data elements

Results masked per California Health and Human Services Data De-Identification Guidelines (DDG).

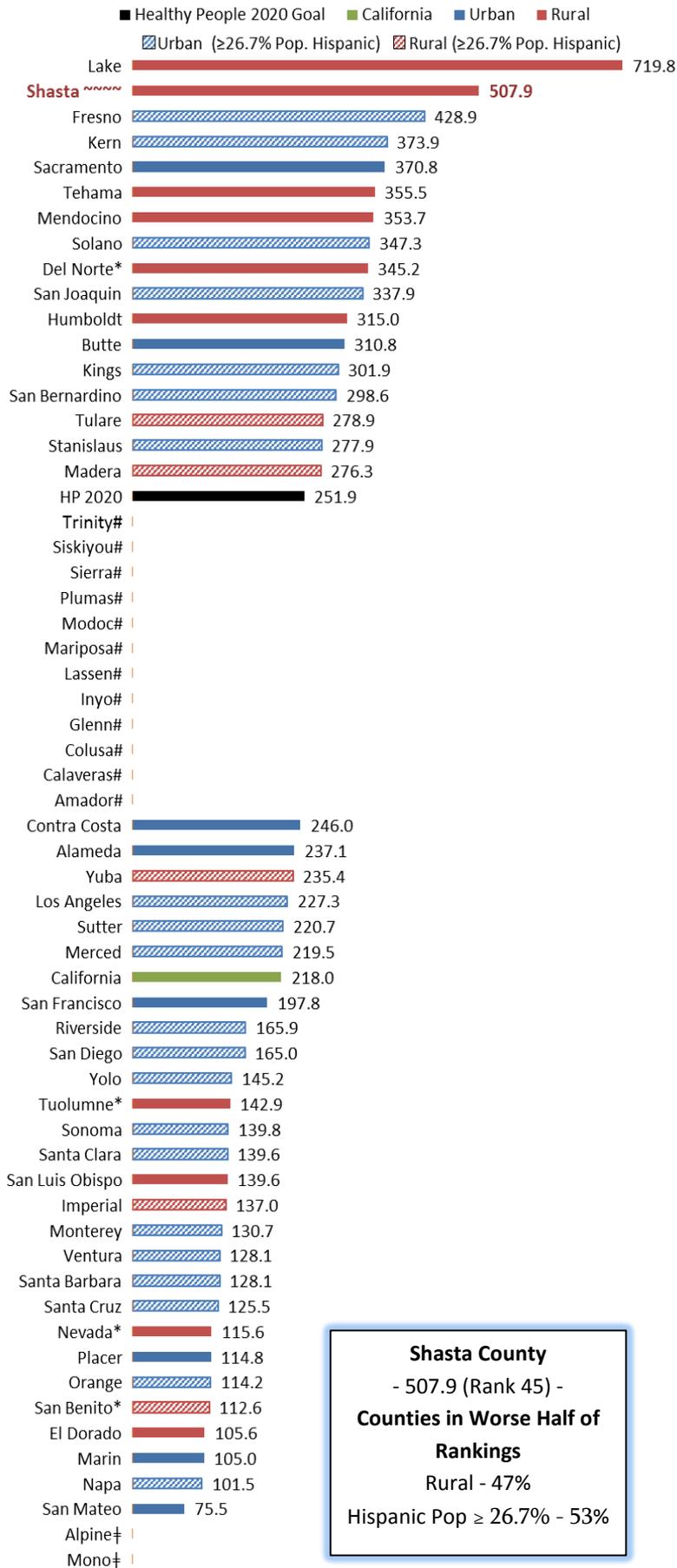
§ Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥ 26.7% vs. Hispanic Population < 26.7%)

Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

References:

[1] Centers for Disease Control and Prevention. Sexually Transmitted Diseases: Chlamydia - CDC Fact Sheet. <https://www.cdc.gov/std/chlamydia/stdfact-chlamydia-detailed.htm>, Accessed 10/15/2018.

Reported Incidence of Gonorrhea (Rate per 100,000 Females Age 15 to 44)



Shasta County
- 507.9 (Rank 45) -
Counties in Worse Half of
Rankings
Rural - 47%
Hispanic Pop ≥ 26.7% - 53%

Commonly an asymptomatic disease, Gonorrhea is often undetected. Left as such, the disease is easily and unknowingly spread to others; it increases the individual's risk of acquiring or transmitting HIV, is transmittable to a fetus during birth and can lead to infertility. Gonorrhea often accompanies other STDs like Chlamydia and is considered the second most frequently reported bacterial sexually transmitted infection in the United States. [1]

Based on the 2014-2016 three-year average number of reported cases provided in the California Department of Public Health's 2018 County Health Status Profiles, Gonorrhea Infection crude case rates are greater among Urban Counties, making up 53% of the bottom half of the rankings (17 counties). Shasta County's crude case rate of 507.9 cases of Gonorrhea per 100,000 population ranks as 45th and is worse than the overall California rate of 218.0 per 100,000.

Where We Were		
2011-13	2012-14	2013-15
253.7	407.8	495.0

Data Definition: Number of reported cases of Gonorrhea per 100,000 population females age 15 to 44.

* Rates are deemed unreliable based on fewer than 20 data elements

† Rates, percentages, and confidence limits are not calculated for zero events.

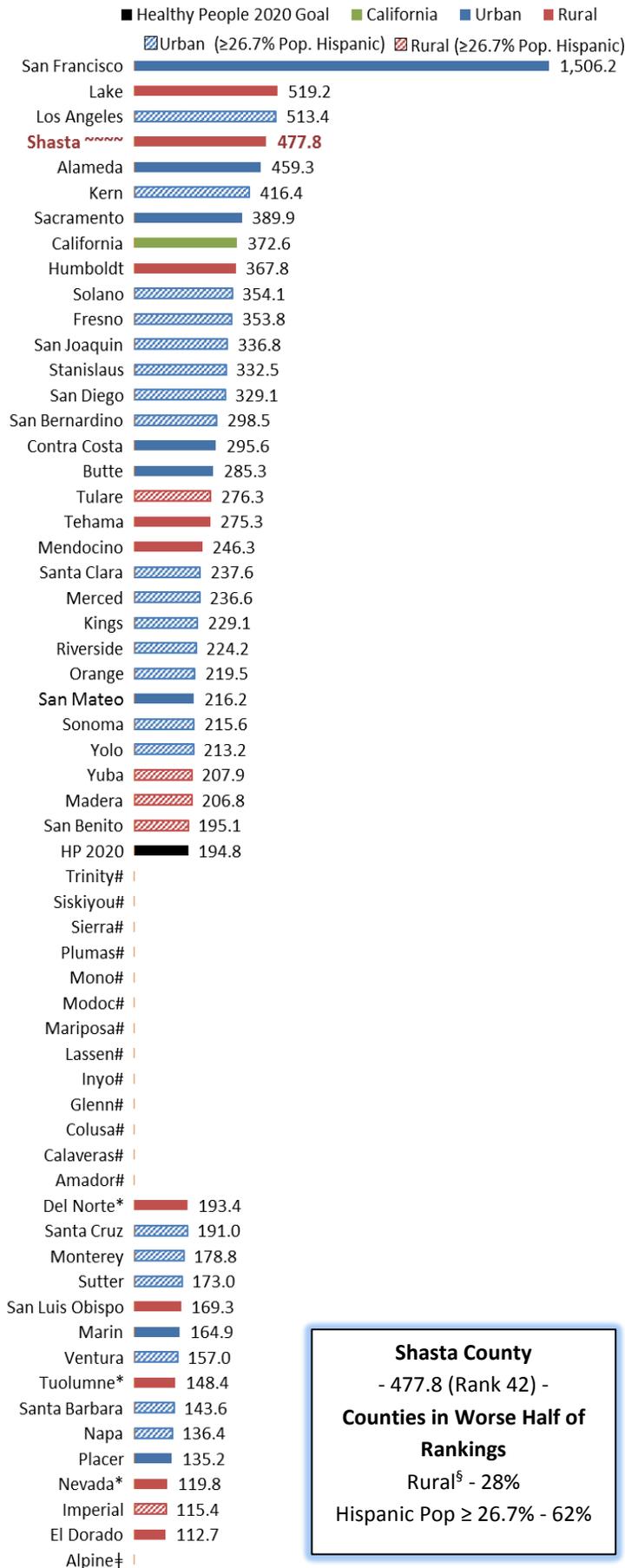
Results masked per California Health and Human Services Data De-Identification Guidelines (DDG).

Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

References:

[1] Centers for Disease Control and Prevention. Sexually Transmitted Diseases: Gonorrhea - CDC Fact Sheet. <http://www.cdc.gov/std/Gonorrhea/STDFact-gonorrhea.htm>, Accessed 10/15/2018.

Reported Incidence of Gonorrhea (Rate per 100,000 Males Age 15 to 44)



Shasta County
- 477.8 (Rank 42) -
Counties in Worse Half of Rankings
Rural[§] - 28%
Hispanic Pop ≥ 26.7% - 62%

Commonly an asymptomatic disease, Gonorrhea is often undetected. Left as such, the disease is easily and unknowingly spread to others; it increases the individual's risk of acquiring or transmitting HIV, is transmittable to a fetus during birth and can lead to infertility. Gonorrhea often accompanies other STDs like Chlamydia and is considered the second most frequently reported bacterial sexually transmitted infection in the United States. [1]

Based on the 2014-2016 three-year average number of reported cases provided in the California Department of Public Health's 2018 County Health Status Profiles, Gonorrhea Infection crude case rates are greater among Urban Counties, making up 72% of the bottom half of the rankings (29 counties). Shasta County's crude case rate of 477.8 cases of Gonorrhea per 100,000 population ranks as 42nd and is worse than the overall California rate of 372.6 per 100,000.

Where We Were		
2011-13	2012-14	2013-15
206.1	367.7	454.1

Data Definition: Number of reported cases of Gonorrhea per 100,000 population males age 15 to 44.

* Rates are deemed unreliable based on fewer than 20 data elements

‡ Rates, percentages, and confidence limits are not calculated for zero events.

Results masked per California Health and Human Services Data De-Identification Guidelines (DDG).

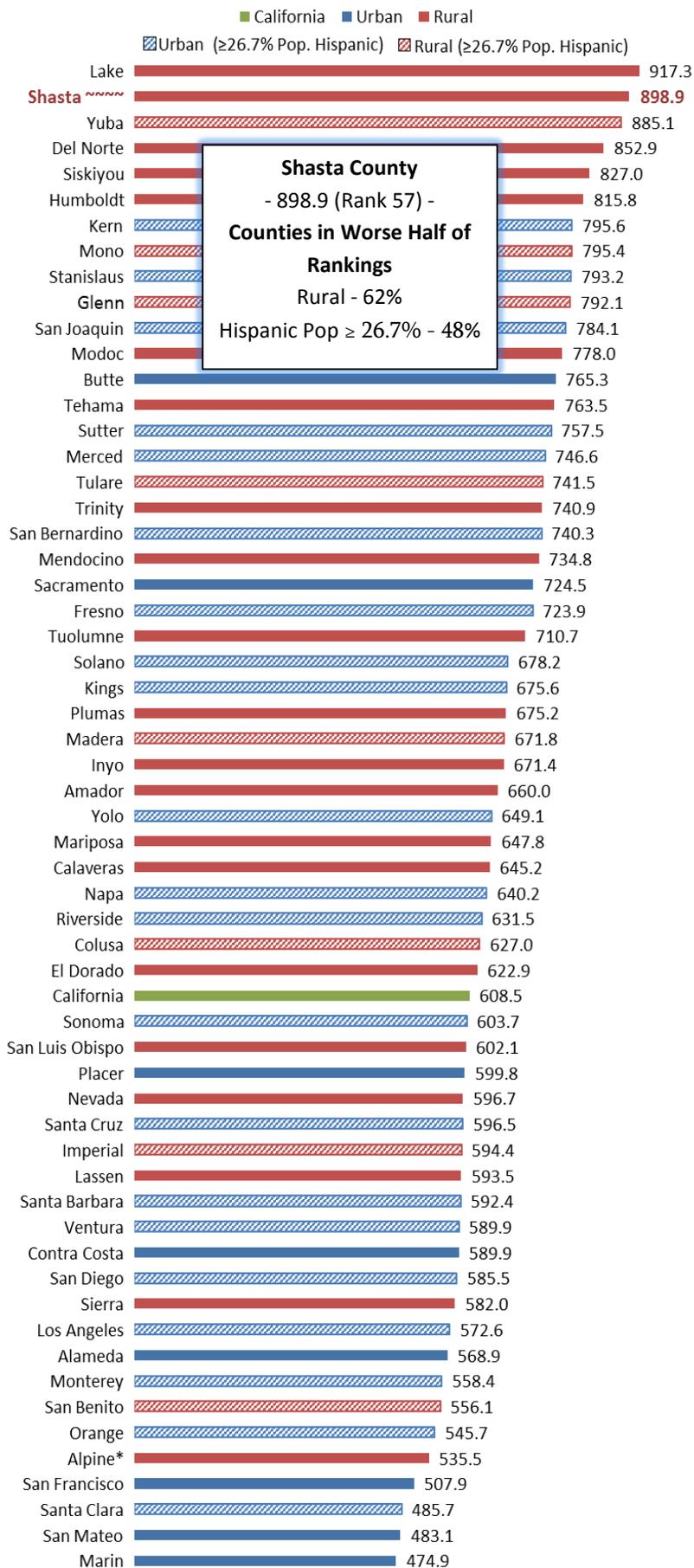
§ Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

References:

[1] Centers for Disease Control and Prevention. Sexually Transmitted Diseases: Gonorrhea - CDC Fact Sheet. <http://www.cdc.gov/std/Gonorrhea/STDFact-gonorrhea.htm>, Accessed 10/15/2018.

Deaths Due to All Causes (Age-Adjusted Death Rate per 100,000 Population)



According to the World Health Organization, “Measuring how many people die each year and why they died is one of the most important means...for assessing the effectiveness of a country’s health system.” [1] Thus, the age-adjusted death rate for a given population is a necessary tool for determining the overall health and corresponding lifespan of a population in order to provide the information crucial to protecting and improving the health and well-being of its current and future population. It is interesting to note that, generally speaking, rural residents tend to have poor determinants of health: “rural residents smoke more, exercise less, have less nutritional diets, and are more likely to be obese than suburban residents.” [2]

Based on the 2014-2016 three-year age-adjusted death rates provided in the California Department of Public Health’s 2018 County Health Status Profiles, the death rates due to all causes are greater among Rural Counties, making up 62% of the bottom half of the rankings (29 counties). Shasta County’s age-adjusted death rate of 898.9 per 100,000 population ranks as 57th and is worse than the overall California age-adjusted death rate of 608.5 per 100,000.

Where We Were		
2011-13	2012-14	2013-15
859.1	860.2	884.0

Data Definition: Death rates are age-adjusted per 100,000 population and include all causes of death regardless of manner.

* Rates are deemed unreliable based on fewer than 20 data elements

Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

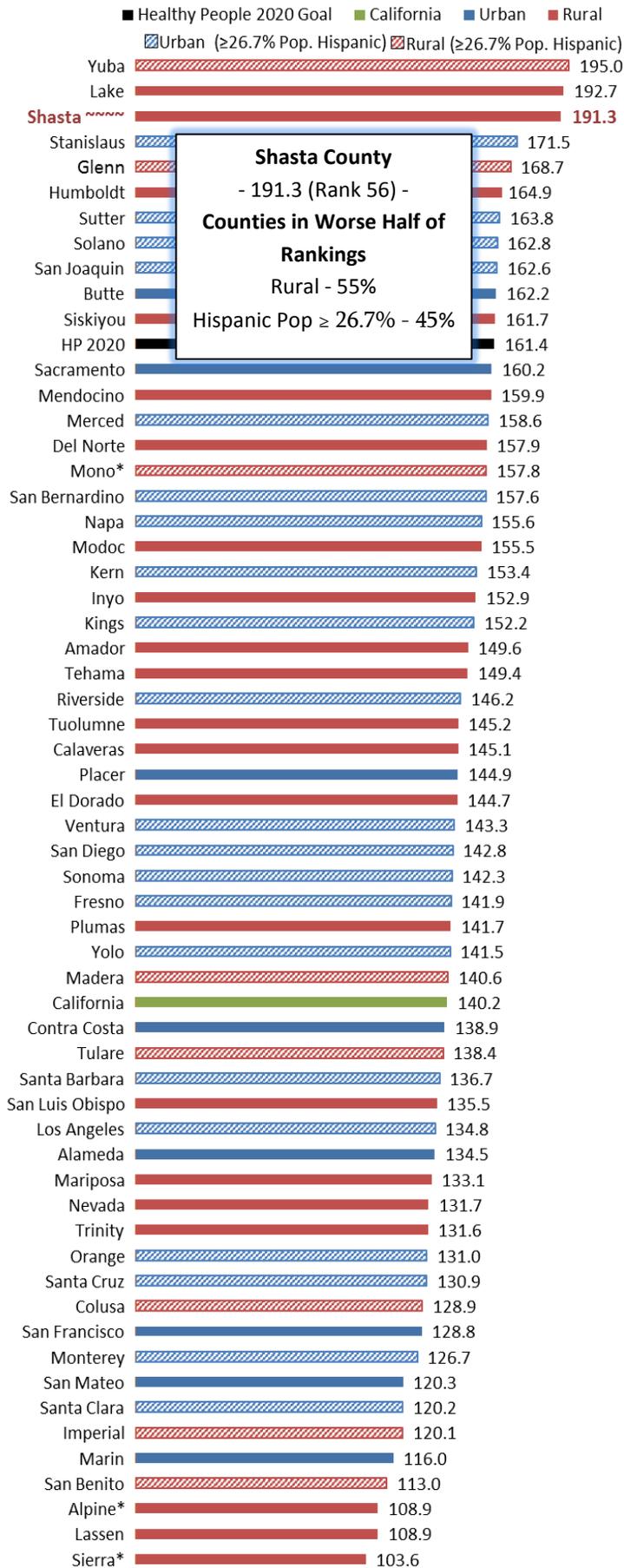
References:

[1] <http://www.who.int/mediacentre/factsheets/fs310/en/in dex4.html>, Accessed 10/15/2018.

[2] Hartley D. Rural health disparities, population health, and rural culture. American Journal of Public Health. 2004;94(10):1675–1678.

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448513/> Accessed 10/15/2018.

Deaths Due to All Cancers (Age-Adjusted Death Rate per 100,000 Population)



More than 1.5 million people are diagnosed with cancer each year in the United States. [1] The four leading types cancer diagnosis and deaths in California are breast, prostate, lung and bronchus, and colon and rectum. [2]

Half of cancer deaths could have been prevented through healthy choices such as not smoking, limiting drinking, getting enough sleep, being physically active, eating a healthy diet of fruits and vegetables, reducing red meat intake, and participating in screenings and vaccinations. [1]

Based on the 2014-2016 three-year age-adjusted death rates provided in the California Department of Public Health's 2018 County Health Status Profiles, the death rates due to all cancers are greater among Rural Counties, making up 55% of the bottom half of the rankings (29 counties). Shasta County's age-adjusted death rate due to cancer of 191.3 per 100,000 population ranks as 56th and is worse than the overall California age-adjusted death rate of 140.2 per 100,000.

Where We Were		
2011-13	2012-14	2013-15
176.3	178.8	192.6

Data Definition: Death rates are age-adjusted per 100,000 population and include all cancer deaths.

* Rates are deemed unreliable based on fewer than 20 data elements

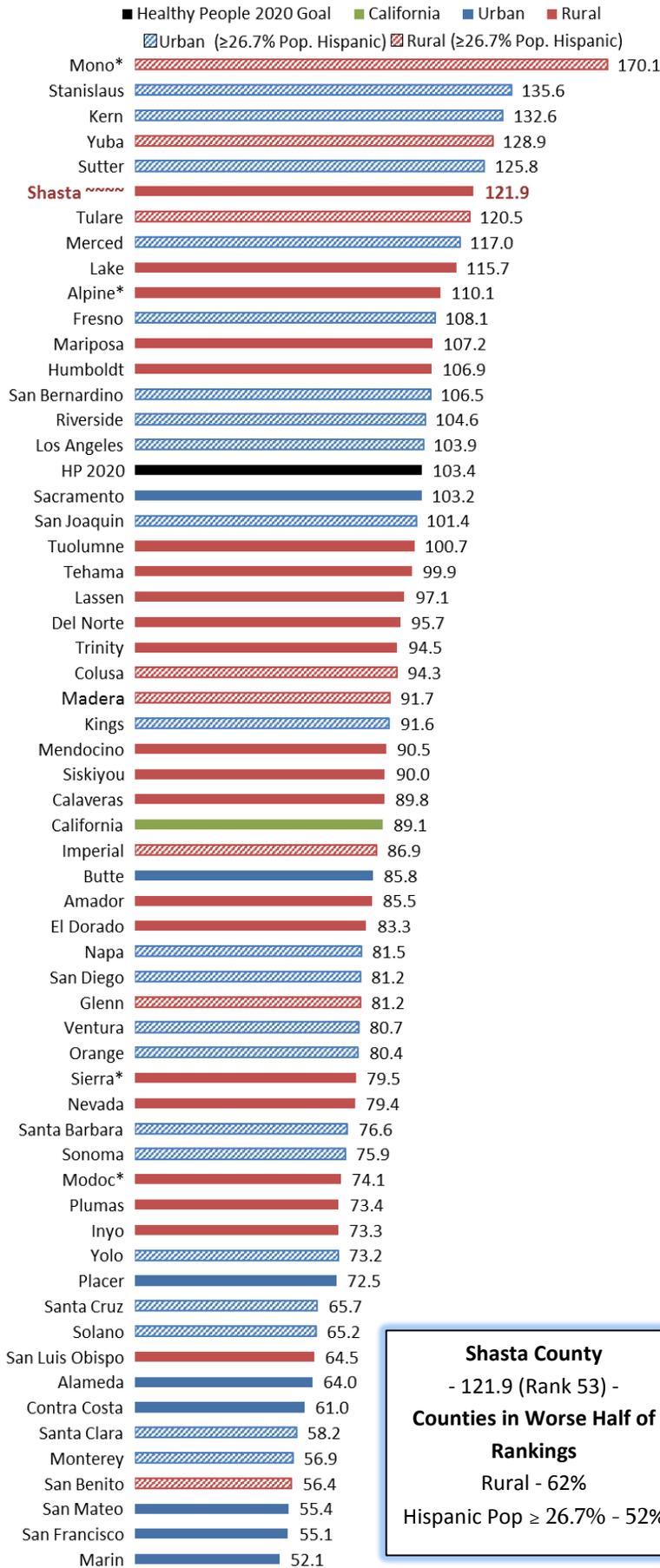
Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

References:

[1] Centers for Disease and Control and Prevention, Cancer, <https://www.cdc.gov/chronicdisease/resources/publications/aag/dccpc.htm>, Accessed 10/16/2018.

[2] Centers for Disease and Control and Prevention, United States Cancer Statistics: Data Visualizations, California 2015, <https://gis.cdc.gov/Cancer/USCS/DataViz.html>, Accessed 10/16/2018.

Deaths Due to Coronary Heart Disease (Age-Adjusted Death Rate per 100,000 Population)



Shasta County
- 121.9 (Rank 53) -
Counties in Worse Half of Rankings
Rural - 62%
Hispanic Pop ≥ 26.7% - 52%

Heart disease is the leading cause of death in the United States and can result in serious illness and disability, decreased quality of life, and hundreds of billions of dollars in economic loss every year. Fortunately, heart disease is also one of the most preventable diseases. The leading modifiable (controllable) risk factors for heart disease are high blood pressure, high cholesterol, cigarette smoking, diabetes, poor diet and physical inactivity, and overweight and obesity. [1]

Based on the 2014-2016 three-year age-adjusted death rates provided in the California Department of Public Health's 2018 County Health Status Profiles, the death rates due to coronary heart disease are greater among Rural Counties, making up 62% of the bottom half of the rankings (29 counties). Shasta County's age-adjusted death rate of 121.9 per 100,000 population ranks as 53rd and is worse than the overall California age-adjusted death rate of 89.1 per 100,000.

Where We Were		
2011-13	2012-14	2013-15
117.8	118.6	125.9

Data Definition: Death rates are age-adjusted per 100,000 population and include all coronary heart disease deaths.

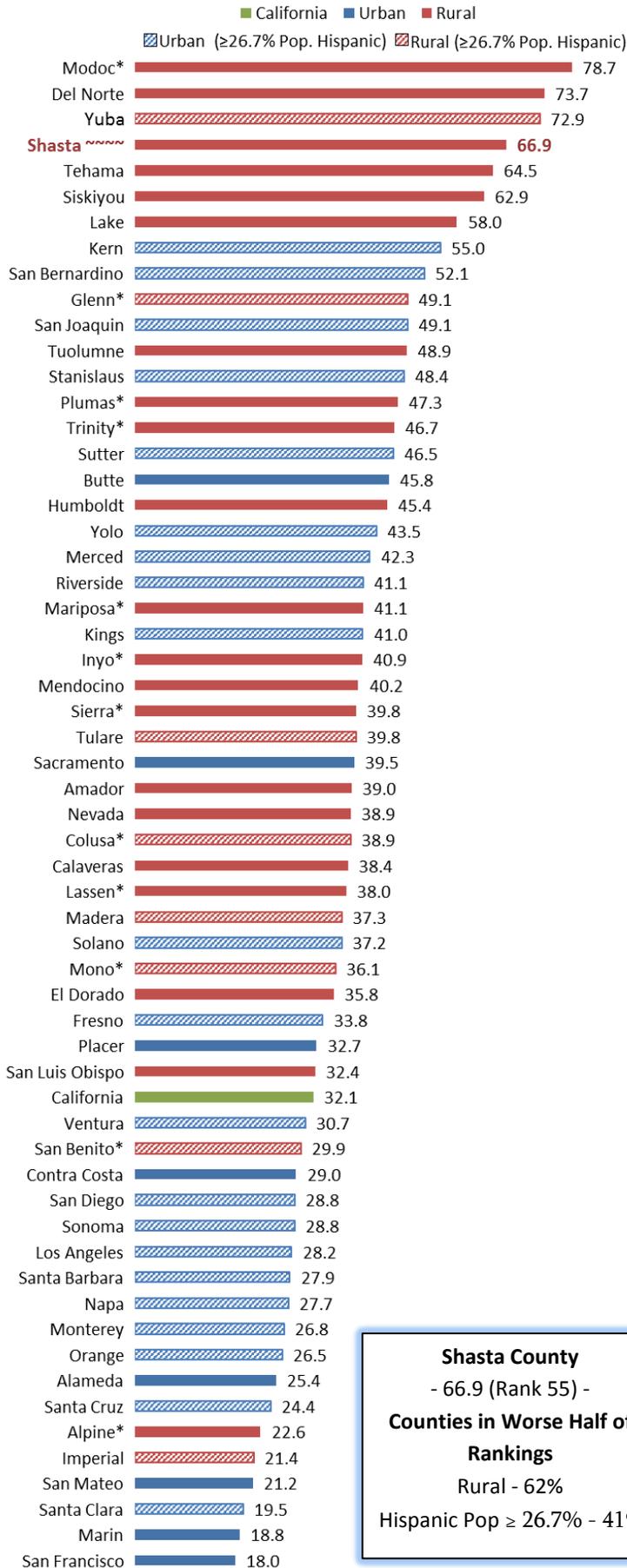
* Rates are deemed unreliable based on fewer than 20 data elements

Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

References:

[1] U.S. Department of Health and Human Services, Healthy People 2020. Heart Disease and Stroke. <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21> Accessed 10/15/2018.

Deaths Due to Chronic Lower Respiratory Disease (Age-Adjusted Death Rate Per 100,000 Population)



Shasta County
- 66.9 (Rank 55) -
Counties in Worse Half of Rankings
Rural - 62%
Hispanic Pop ≥ 26.7% - 41%

Chronic lower respiratory disease is ranked as the fourth leading cause of death in the U.S. [1] Smoking is the most common cause of chronic respiratory disease however indoor and outdoor air pollutants may also cause respiratory issues. Avoiding these pollutants is key to preventing respiratory disease. [2]

Based on the 2014-2016 three-year age-adjusted death rates provided in the California Department of Public Health's 2018 County Health Status Profiles, the death rates due to CLRD are greater among Rural Counties, making up 62% of the bottom half of the rankings (29 counties). Shasta County's age-adjusted death rate of 66.9 per 100,000 population ranks as 55th and is worse than the overall California age-adjusted death rate of 32.1 per 100,000.

Where We Were		
2011-13	2012-14	2013-15
72.4	72.7	75.9

Data Definition: Death rates are age-adjusted per 100,000 population and include all chronic lower respiratory disease deaths.

* Rates are deemed unreliable based on fewer than 20 data elements

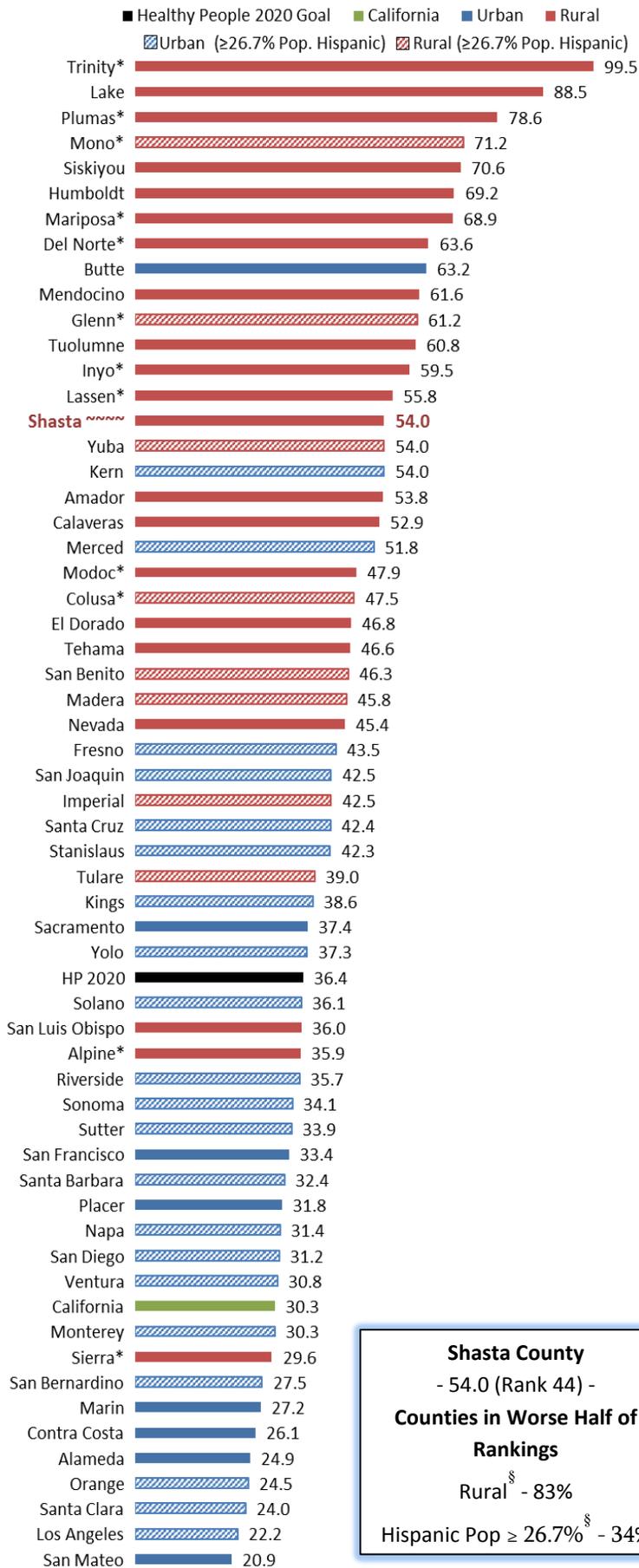
Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

References:

[1] Centers for Disease Control and Prevention, National Vital Statistics Reports, Deaths: Final Data for 2016, Volume 67, Number 5, July 2018, https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67_05.pdf, Accessed 10/16/2018.

[2] Centers for Disease Control and Prevention, Chronic Respiratory Disease, <https://www.cdc.gov/healthcommunication/toolstemplates/entertainment/tips/ChronicRespiratoryDisease.html>, Accessed 10/15/2018.

Deaths Due to Unintentional Injuries (Age-Adjusted Death Rate Per 100,000 Population)



Shasta County
- 54.0 (Rank 44) -
Counties in Worse Half of Rankings
Rural[§] - 83%
Hispanic Pop ≥ 26.7%[§] - 34%

Unintentional injuries were among the top 10 leading causes of death for Americans of all ages in 2016. [1] Many people accept them as “accidents,” “acts of fate,” or as “part of life.” However, most events resulting in injury, disability, or death are predictable and preventable. [2]

Based on the 2014-2016 three-year age-adjusted death rates provided in the California Department of Public Health’s 2018 County Health Status Profiles, the death rates due to unintentional injuries are greater among Rural Counties, making up 83% of the bottom half of the rankings (29 counties). Shasta County's age-adjusted death rate of 54.0 per 100,000 population ranks as 44th and is worse than the overall California age-adjusted death rate of 30.3 per 100,000.

Where We Were		
2011-13	2012-14	2013-15
63.6	59.8	56.9

Data Definition: Death rates are age-adjusted per 100,000 population and include all unintentional injury deaths.

* Rates are deemed unreliable based on fewer than 20 data elements

§ Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

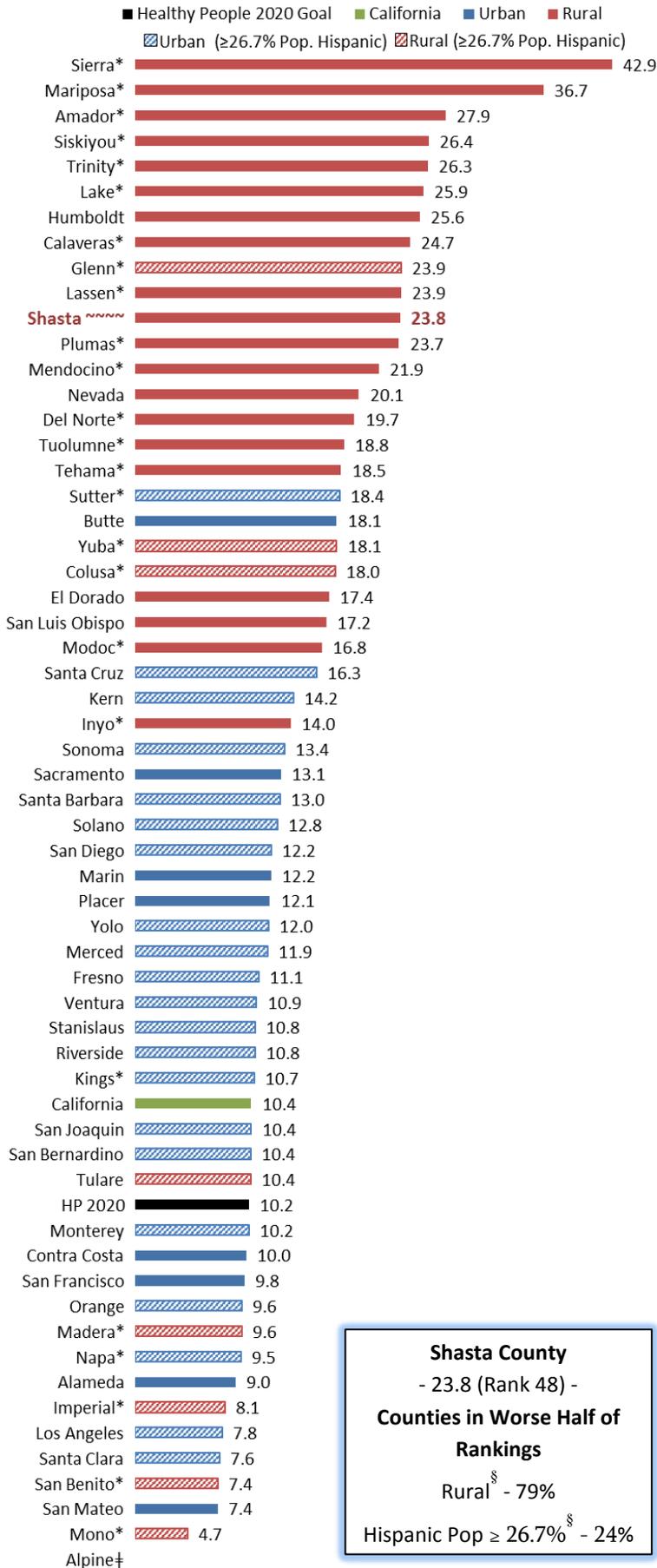
Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

References:

[1] Centers for Disease Control and Prevention (CDC), National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) [Internet]; Accessed on 10/15/18, Available from: https://www.cdc.gov/injury/images/lc-charts/leading_causes_of_death_age_group_2016_1056w814h.gif

[2] U.S. Department of Health and Human Services, Healthy People 2020. <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=24>, Accessed on 10/15/2018

Deaths due to Suicide (Age-Adjusted Death Rate Per 100,000 Population)



Shasta County
- 23.8 (Rank 48) -
Counties in Worse Half of Rankings
Rural[§] - 79%
Hispanic Pop ≥ 26.7%[§] - 24%

In 2016, just under 45,000 U.S. lives were lost to suicide. More than half of the people who commit suicide did not have a known mental health condition. Warning signs for suicide can include isolation, increased anger, extreme mood swings, substance abuse, changes in sleep patterns, and hopelessness. Everyone can help prevent suicide by asking if a party is contemplating suicide, keeping them safe by reducing access to lethal means, by being supportive and listening, helping them connect with ongoing support, and by checking in to see how they are doing. [1]

Based on the 2014-2016 three-year age-adjusted death rates provided in the California Department of Public Health's 2018 County Health Status Profiles, the death rates due to suicide are greater among Rural Counties, making up 79% of the bottom half of the rankings (29 counties). Shasta County's age-adjusted death rate of 23.8 per 100,000 population ranks as 48th and is worse than the overall California age-adjusted death rate of 10.4 per 100,000.

Where We Were		
2011-13	2012-14	2013-15
21.4	21.2	22.3

Data Definition: Death rates are age-adjusted per 100,000 population and include all suicide deaths.

* Rates are deemed unreliable based on fewer than 20 data elements

† Rates, percentages, and confidence limits are not calculated for zero events.

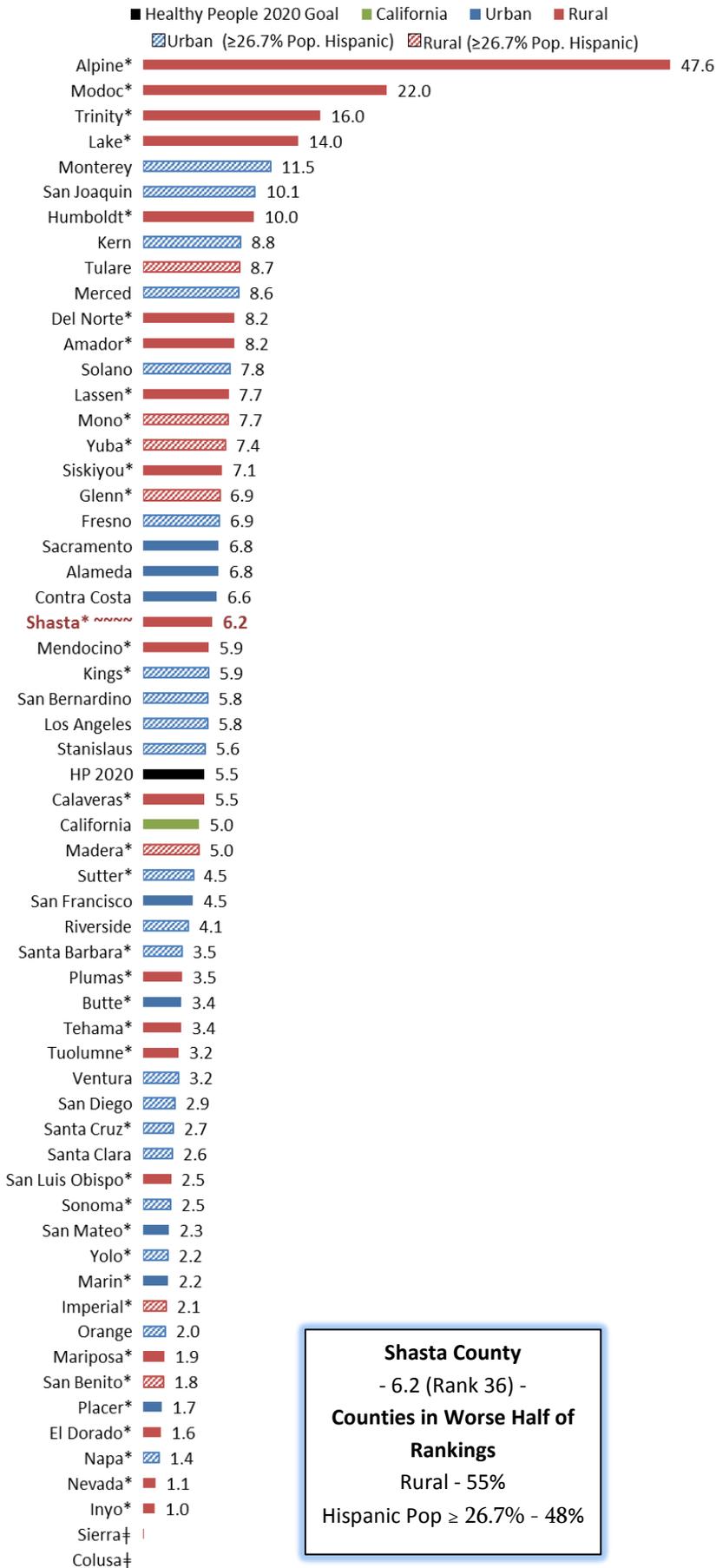
§ Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥26.7% vs. Hispanic Population < 26.7%)

Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

References:

[1] Centers for Disease Control and Prevention (CDC), Suicide Rising Across the US <https://www.cdc.gov/vitalsigns/suicide/index.html>, Accessed 10/16/18

Deaths Due to Homicide (Age-Adjusted Death Rate Per 100,000 Population)



Shasta County
- 6.2 (Rank 36) -
Counties in Worse Half of
Rankings
Rural - 55%
Hispanic Pop ≥ 26.7% - 48%

Violence is a serious public health problem in the United States. [1] From infants to the elderly, it affects people in all stages of life. In 2016, over 19,300 people were victims of homicide in the United States. [2] The number of violent deaths tells only part of the story. Many more survive violence and are left with permanent physical and emotional scars. Violence also erodes communities by reducing productivity, decreasing property values, and disrupting social services. [1]

Based on the 2014-2016 three-year age-adjusted death rates provided in the California Department of Public Health's 2018 County Health Status Profiles, the death rates due to homicide are greater among Rural Counties, making up 55% of the bottom half of the rankings (29 counties). Shasta County's age-adjusted death rate of 6.2 per 100,000 population ranks as 36th and is worse than the overall California age-adjusted death rate of 5.0 per 100,000.

Where We Were		
2011-13	2012-14	2013-15
*5.9	*6.2	*6.5

Data Definition: Death rates are age-adjusted per 100,000 population and include all homicide deaths.

* Rates are deemed unreliable based on fewer than 20 data elements

† Rates, percentages, and confidence limits are not calculated for zero events.

Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

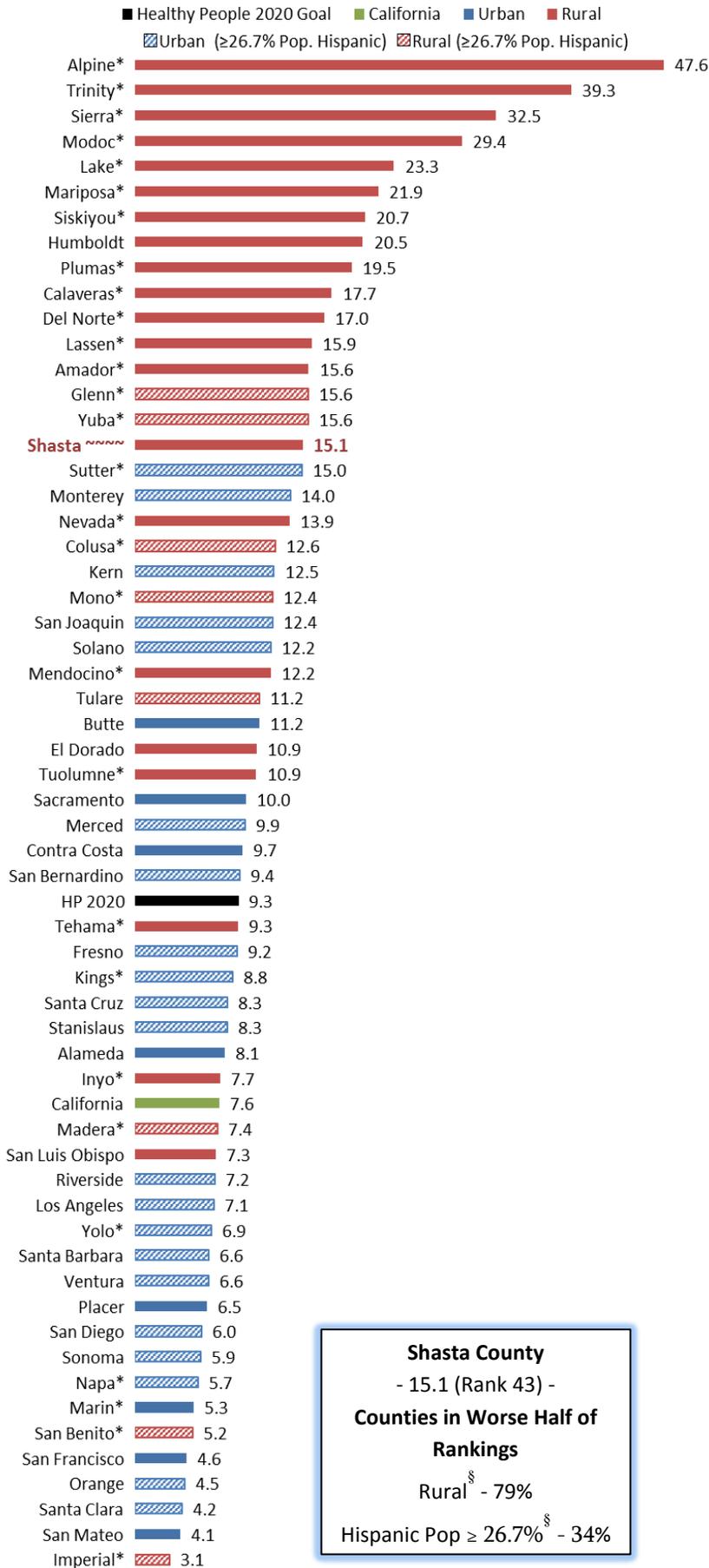
References:

[1] Centers for Disease Control and Prevention (CDC), Violence Prevention at CDC,

<https://www.cdc.gov/violenceprevention/overview/index.html>, Accessed 10/16/2018.

[2] Centers for Disease Control and Prevention, National Vital Statistics Reports, Deaths: Final Data for 2016, Volume 67, Number 5, July 2018, https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67_05.pdf, Accessed 10/16/2018.

Firearm-Related Deaths (Age-Adjusted Death Rate Per 100,000 Population)



Shasta County
- 15.1 (Rank 43) -
Counties in Worse Half of
Rankings
Rural[§] - 79%
Hispanic Pop ≥ 26.7%[§] - 34%

In 2016, over 38,600 lost their lives to firearm-related deaths in the United States. The two major causes of firearm injury deaths were suicide (59.3%) and homicide (37.3%). [1]

Based on the 2014-2016 three-year age-adjusted death rates provided in the California Department of Public Health's 2018 County Health Status Profiles, the firearm-related death rates are greater among Rural Counties, making up 79% of the bottom half of the rankings (29 counties). Shasta County's age-adjusted death rate of 15.1 per 100,000 population ranks as 43rd and is worse than the overall California age-adjusted death rate of 7.6 per 100,000.

Where We Were		
2011-13	2012-14	2013-15
14.5	14.2	15.0

Data Definition: Death rates are age-adjusted per 100,000 population and include all firearm-related deaths.

* Rates are deemed unreliable based on fewer than 20 data elements

† Rates, percentages, and confidence limits are not calculated for zero events.

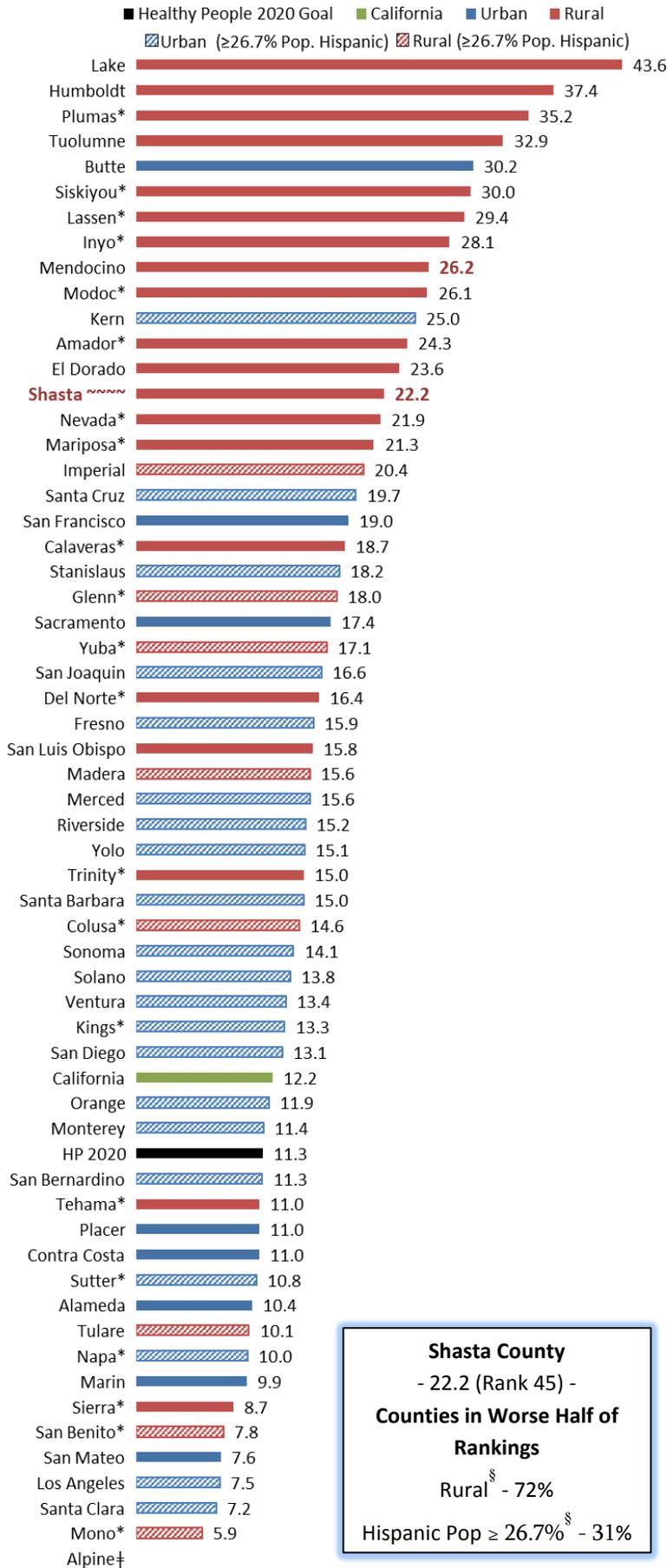
§ Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥ 26.7% vs. Hispanic Population < 26.7%)

Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

References:

[1] Centers for Disease Control and Prevention, National Vital Statistics Reports, Deaths: Final Data for 2016, Volume 67, Number 5, July 2018, https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67_05.pdf, Accessed 10/16/2018.

Drug-Induced Deaths (Age-Adjusted Death Rate Per 100,000 Population)



Shasta County
- 22.2 (Rank 45) -
Counties in Worse Half of Rankings
Rural[§] - 72%
Hispanic Pop ≥ 26.7%[§] - 31%

In the U.S., over 63,600 deaths in 2016 were due to drug overdoses which increased 21.5% from 2015. Prescription drugs and illicit opioids accounted for 66% of these deaths. Overdose deaths have been increasing across America within demographics such as sex, race, ethnicity, age, and level of urbanization.

Based on the 2014-2016 three-year age-adjusted death rates provided in the California Department of Public Health's 2018 County Health Status Profiles, the drug-induced death rates are greater among Rural Counties, making up 72% of the bottom half of the rankings (29 counties). Shasta County's age-adjusted death rate of 22.2 per 100,000 population ranks as 45th and is worse than the overall California age-adjusted death rate of 12.2 per 100,000.

Where We Were		
2011-13	2012-14	2013-15
28.4	27.2	23.6

Data Definition: Death rates are age-adjusted per 100,000 population and include all drug-induced deaths.

* Rates are deemed unreliable based on fewer than 20 data elements

† Rates, percentages, and confidence limits are not calculated for zero events.

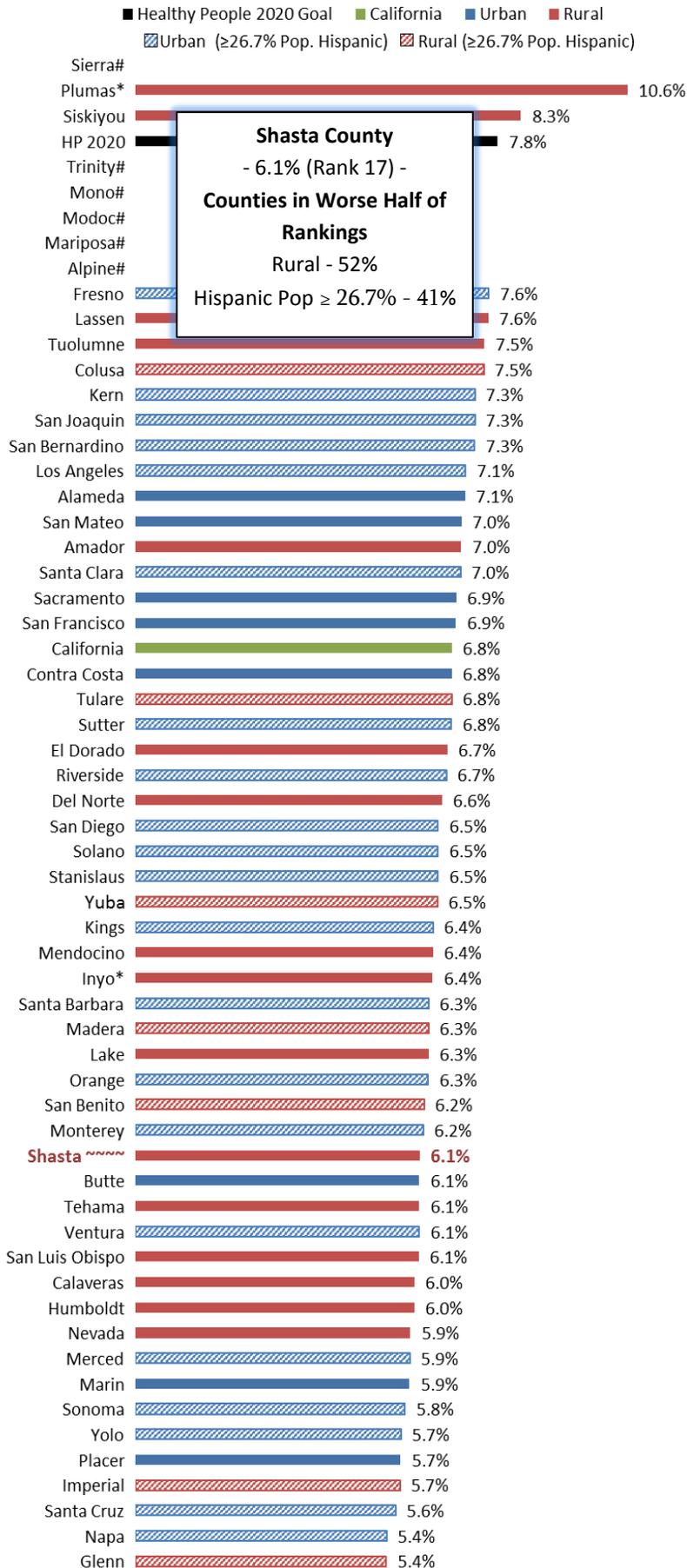
§ Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥ 26.7% vs. Hispanic Population < 26.7%)

Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

References:

[1] Centers for Disease Control and Prevention, CDC Newsroom, U.S. drug overdose deaths continue to rise; increase fueled by synthetic opioids, March 2018, <https://www.cdc.gov/media/releases/2018/p0329-drug-overdose-deaths.html>, Accessed 10/16/2018.

Low-Birthweight Infants (Rate per 100 Live Births)



Low birth weight is the single most important factor affecting neonatal mortality and morbidity. [1] The two main reasons why a baby may be born with low birthweight are premature birth and fetal growth restriction. [2] A key factor in low birthweight prevention is consistent prenatal care. During prenatal visits, the health of both the mother and baby are monitored including maternal nutrition and weight gain which is linked with fetal weight gain and birthweight. [3]

Based on the 2014-2016 three-year rate of low birthweight (LBW) infants provided in the California Department of Public Health's 2018 County Health Status Profiles, the rate of LBW infants are greater among Rural Counties, making up 52% of the bottom half of the rankings (29 counties). Shasta County's LBW rate of 6.1% ranks as 17th and is better than the overall California rate of 6.8%.

Where We Were		
2011-13	2012-14	2013-15
6.3%	6.0%	6.0%

Data Definition: Percent of all babies born that are of low birthweight (less than 2,500 g).

* Rates are deemed unreliable based on fewer than 20 data elements

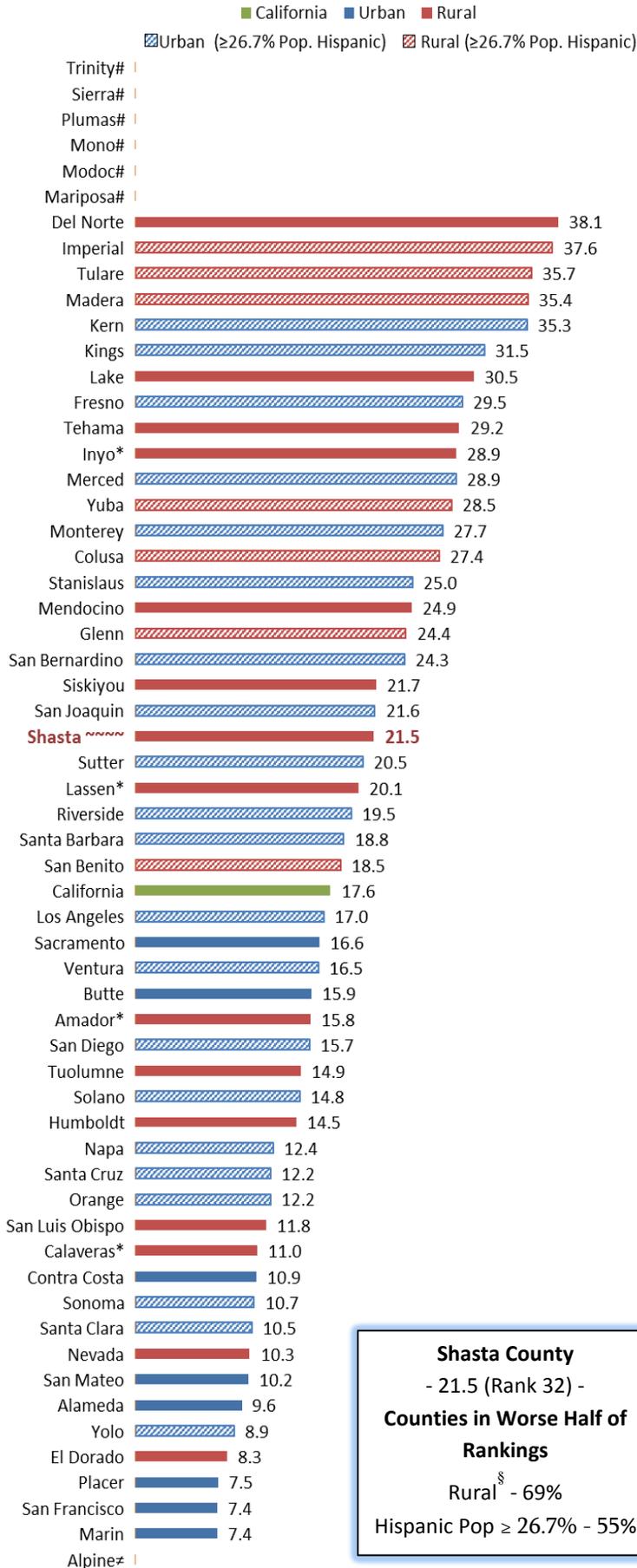
Results masked per California Health and Human Services Data De-Identification Guidelines (DDG).

Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

References:

- [1] Keram A, Aljohani A (2016) Low Birth Weight Prevalence, Risk Factors, Outcomes in Primary Health Care Setting: A Cross-Sectional Study. *Obstet Gynecol Int J* 5(5): 00176. <https://medcraveonline.com/OGIJ/OGIJ-05-00176.php>, Accessed 10/16/18.
- [2] <https://www.marchofdimes.org/complications/low-birthweight.aspx>, Accessed 10/16/18
- [3] Stanford Children's Health, Low Birthweight, <https://www.stanfordchildrens.org/en/topic/default?id=low-birthweight-90-P02382>, Accessed 10/16/18.

Births to Teenage Mothers (Rate per 1,000 Females Age 15-19)



Shasta County
- 21.5 (Rank 32) -
Counties in Worse Half of
Rankings
Rural[§] - 69%
Hispanic Pop ≥ 26.7% - 55%

There were over 21,400 births to Californian teens in 2016 which was an 11% decrease in birth rate from 2015. [1] Teen parents are more likely to attain lower education and be financially burdened. Children born to teens are more likely to experience low birthweights, academic and behavioral problems, foster care, and become teen parents themselves. [2]

Based on the 2014-2016 three-year rate of births to teenage mothers provided in the California Department of Public Health’s 2018 County Health Status Profiles, the rate of births to teenage mothers are greater among Rural Counties, making up 69% of the bottom half of the rankings (29 counties). Shasta County's rate of 21.5 ranks as 32nd and is worse than the overall California rate of 17.6.

Where We Were		
2011-13	2012-14	2013-15
28.3	25.1	24.5

Data Definition: Rate of babies born to mothers 15 to 19 years old per 1,000.

* Rates are deemed unreliable based on fewer than 20 data elements

† Rates, percentages, and confidence limits are not calculated for zero events

Results masked per California Health and Human Services Data De-Identification Guidelines (DDG).

§ Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥ 26.7% vs. Hispanic Population < 26.7%)

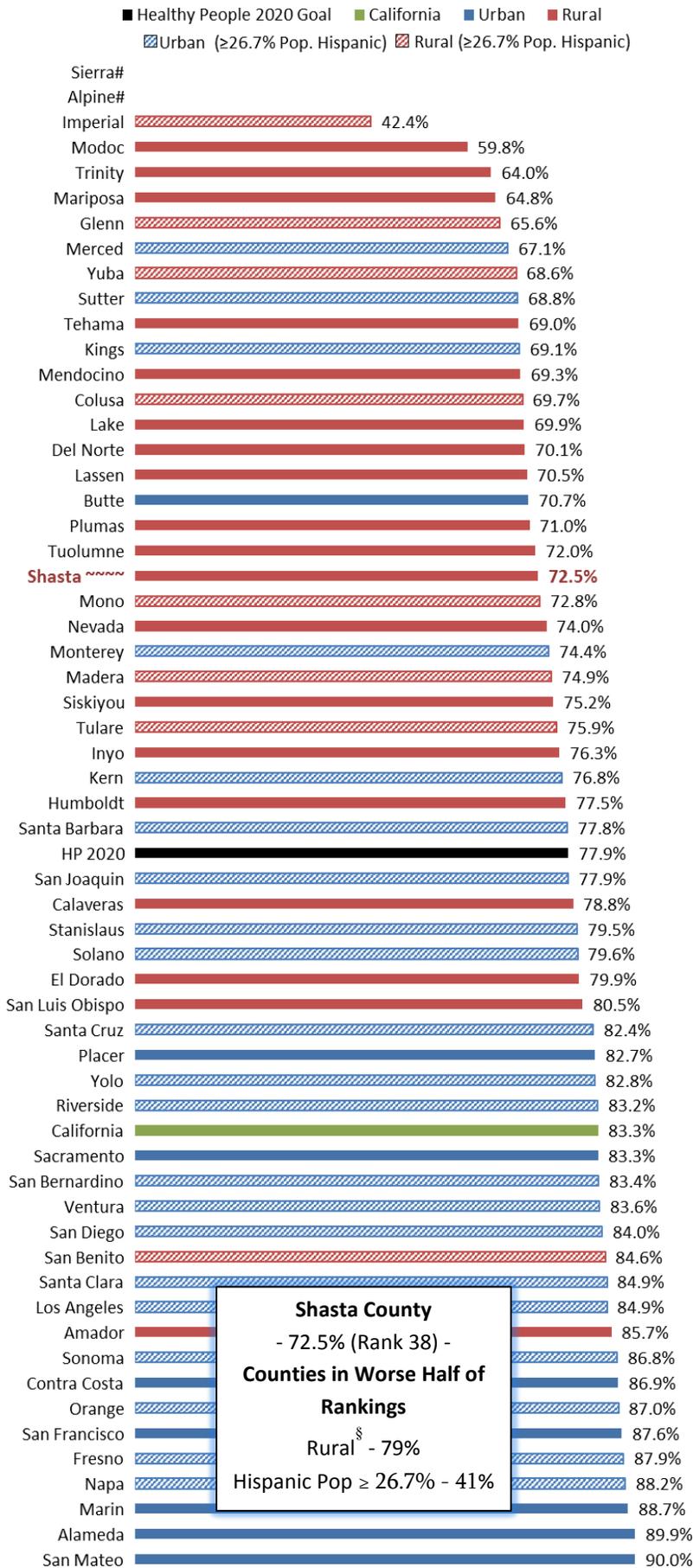
Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

References:

[1] Power to Decide, California Data, <https://powertodecide.org/what-we-do/information/national-state-data/california>, Accessed 10/16/18.

[2] Kids Data, Teen Births in California, <https://www.kidsdata.org/export/pdf?cat=60>, Accessed 10/16/18.

Percent of All Pregnancies with Prenatal Care Begun During First Trimester



Infants born to mothers who received no prenatal care have an infant mortality rate five times that of mothers who received appropriate prenatal care in the first trimester of pregnancy. [1]

Based on the 2014-2016 three-year rate of pregnant mothers beginning prenatal care in the first trimester provided in the California Department of Public Health's 2018 County Health Status Profiles, the rates are lower among Rural Counties, making up 79% of the bottom half of the rankings (29 counties). Shasta County's rate of 72.5% ranks as 38th and is worse than the overall California rate of 83.3%.

Where We Were		
2011-13	2012-14	2013-15
67.6%	67.9%	70.7%

Data Definition: Percent of pregnant mothers beginning prenatal care in the first trimester of pregnancy.

Results masked per California Health and Human Services Data De-Identification Guidelines (DDG).

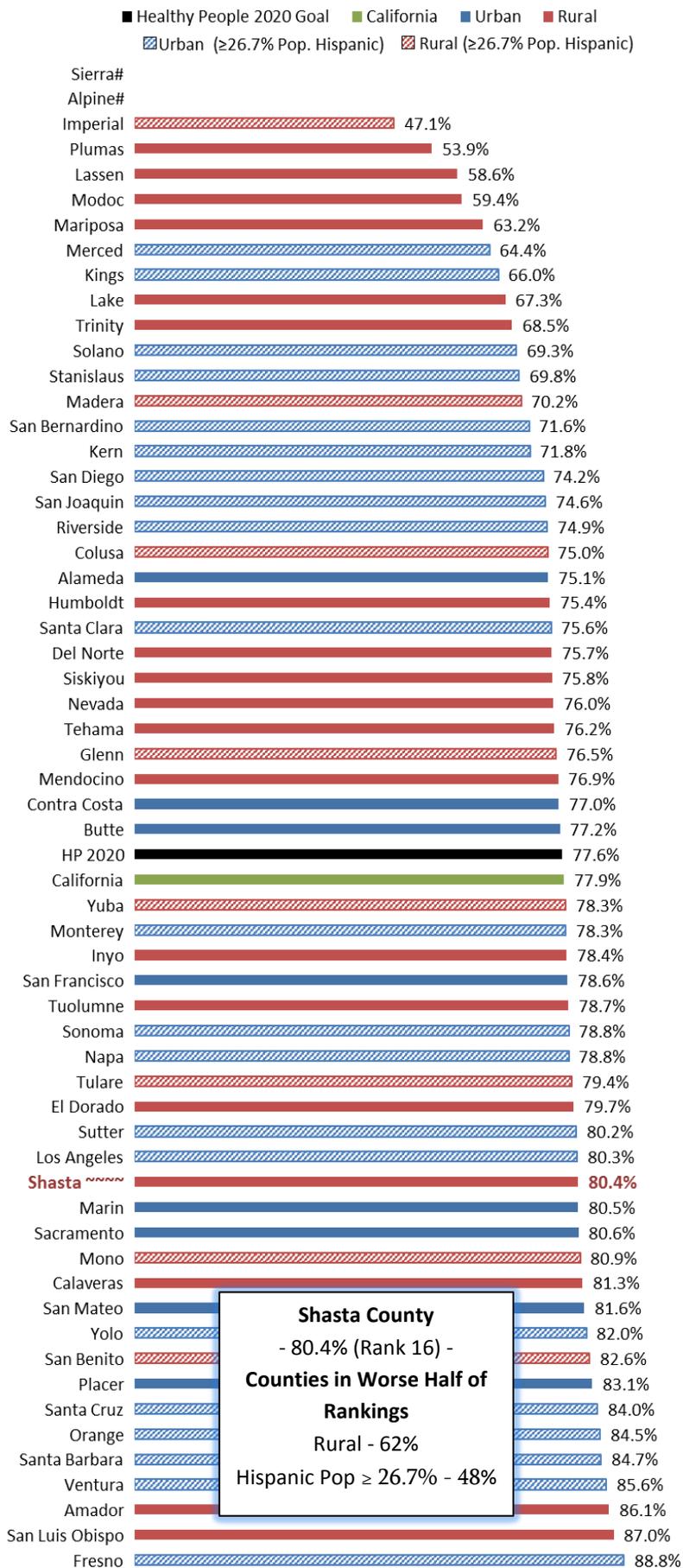
§ Difference in proportion is statistically significant between groups (Rural vs. Urban, Hispanic Population ≥ 26.7% vs. Hispanic Population < 26.7%)

Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

References:

[1] U.S. Department of Health and Human Services Health Resources and Services Administration, Prenatal – First Trimester Care Access, <https://www.hrsa.gov/sites/default/files/quality/toolbox/508pdfs/prenatalmoduleaccess.pdf>, Accessed 10/23/18.

Percent of All Pregnancies with Adequate Prenatal Care



Prenatal care is the health care the pregnant mother receives that includes regular checkups and prenatal testing. Since prenatal care keeps the mother and child safe by allowing the healthcare provider to identify and therefore treat health problems, [1] having an adequate number of visits with the healthcare provider increases the likelihood that complications are detected and treated. “Women who do not seek prenatal care are three times as likely to deliver a low birthweight infant. Lack of prenatal care can also increase the risk of infant death.” [2]

Based on the 2014-2016 three-year rate of pregnant mothers beginning prenatal care in the first trimester provided in the California Department of Public Health’s 2018 County Health Status Profiles, the rates are lower among Rural Counties, making up 62% of the bottom half of the rankings (29 counties). Shasta County's rate of 80.4% ranks as 16th and is better than the overall California rate of 77.9%.

Where We Were		
2011-13	2012-14	2013-15
74.5%	77.0%	79.4%

Data Definition: Ratio of prenatal care visits a pregnant woman receives by the number of visits she would be expected to receive based on the date she first received care and the length of her pregnancy.[4]

Results masked per California Health and Human Services Data De-Identification Guidelines (DDG).

Data Source: California Department of Public Health and California Conference of Local Health Officers. County Health Status Profiles, 2015-2018.

References:

- [1] MedlinePlus, Prenatal Care, <http://www.nlm.nih.gov/medlineplus/prenatalcare.html>, Accessed 10/23/18.
- [2] US Department of Health and Human Services, National Institutes of Health, About Preconception Care and Prenatal Care, <http://www.nichd.nih.gov/health/topics/preconceptioncare/conditioninfo/Pages/default.aspx>, Accessed 10/23/18.

Appendix A

County	Percent of Population in Rural Area	Population Density per Square Mile	Total Population	Status	Percent of Population Hispanic	Hispanic Population Greater Than or Equal to 26.7%
Alameda	0.4%	2043.6	1,668,399	Urban	23.4%	No
Alpine	100.0%	1.6	1,108	Rural	4.2%	No
Amador	60.4%	64.1	37,184	Rural	14.8%	No
Butte	18.9%	134.4	227,804	Urban	17.0%	No
Calaveras	75.4%	44.7	44,692	Rural	13.0%	No
Colusa	31.7%	18.6	22,768	Rural	61.9%	Yes
Contra Costa	0.8%	1465.2	1,151,442	Urban	26.2%	No
Del Norte	33.7%	28.4	26,901	Rural	18.7%	No
El Dorado	34.7%	106.0	187,232	Rural	14.5%	No
Fresno	10.8%	156.2	1,010,899	Urban	53.7%	Yes
Glenn	40.9%	21.4	29,365	Rural	42.7%	Yes
Humboldt	29.8%	37.7	136,785	Rural	11.7%	No
Imperial	17.4%	41.8	191,120	Rural	85.2%	Yes
Inyo	46.4%	1.8	18,633	Rural	25.1%	No
Kern	10.2%	103.3	908,597	Urban	53.6%	Yes
Kings	10.9%	110.1	151,821	Urban	57.1%	Yes
Lake	33.1%	51.5	65,038	Rural	21.5%	No
Lassen	70.5%	7.7	30,647	Rural	16.0%	No
Los Angeles	0.6%	2419.6	10,327,815	Urban	48.9%	Yes
Madera	32.9%	70.6	159,168	Rural	59.6%	Yes
Marin	6.5%	485.1	263,394	Urban	17.3%	No
Mariposa	100.0%	12.6	17,998	Rural	10.4%	No
Mendocino	45.2%	25.1	89,459	Rural	26.2%	No
Merced	14.3%	132.2	279,570	Urban	59.6%	Yes
Modoc	70.0%	2.5	9,484	Rural	16.5%	No
Mono	45.8%	4.7	13,848	Rural	29.4%	Yes
Monterey	9.8%	126.5	446,873	Urban	58.6%	Yes
Napa	13.4%	182.4	142,337	Urban	36.1%	Yes
Nevada	42.1%	103.1	98,757	Rural	10.8%	No
Orange	0.1%	3807.7	3,220,451	Urban	35.1%	Yes
Placer	13.8%	247.6	386,706	Urban	14.0%	No
Plumas	74.0%	7.8	19,439	Rural	10.2%	No
Riverside	4.6%	303.8	2,425,939	Urban	47.9%	Yes
Sacramento	2.1%	1470.8	1,537,189	Urban	23.8%	No
San Benito	24.0%	39.8	58,938	Rural	60.3%	Yes
San Bernardino	4.7%	101.5	2,185,083	Urban	53.8%	Yes
San Diego	3.3%	735.8	3,346,155	Urban	34.6%	Yes
San Francisco	0.0%	17179.2	888,817	Urban	15.1%	No
San Joaquin	8.5%	492.6	760,173	Urban	42.0%	Yes
San Luis Obispo	16.6%	81.7	280,488	Rural	23.5%	No
San Mateo	1.9%	1602.2	779,546	Urban	26.2%	No
Santa Barbara	5.0%	155.0	453,733	Urban	47.2%	Yes
Santa Clara	1.1%	1381.0	1,967,519	Urban	27.5%	Yes
Santa Cruz	12.0%	589.4	278,495	Urban	34.8%	Yes
Shasta	29.3%	46.9	178,899	Rural	10.1%	No
Sierra	99.7%	3.4	3,132	Rural	8.5%	No
Siskiyou	65.8%	7.2	44,206	Rural	12.9%	No
Solano	3.7%	503.0	442,796	Urban	26.8%	Yes
Sonoma	12.4%	307.1	507,490	Urban	27.1%	Yes
Stanislaus	8.0%	344.2	558,353	Urban	46.9%	Yes
Sutter	14.8%	157.3	99,528	Urban	32.4%	Yes

Appendix A

County	Percent of Population in Rural Area	Population Density per Square Mile	Total Population	Status	Percent of Population Hispanic	Hispanic Population Greater Than or Equal to 26.7%
Tehama	51.5%	21.5	64,526	Rural	26.6%	No
Trinity	100.0%	4.3	13,424	Rural	10.1%	No
Tulare	15.5%	91.7	477,679	Rural	66.0%	Yes
Tuolumne	49.0%	24.9	53,980	Rural	12.5%	No
Ventura	3.1%	446.7	860,426	Urban	43.9%	Yes
Yolo	6.9%	197.9	222,745	Urban	34.6%	Yes
Yuba	26.2%	114.2	77,490	Rural	28.3%	Yes

Population used to calculate Percent of Population in Rural Area and Population Density was from 2010 Census data.

Total Population and Percent Hispanic data was based on 2018 Department of Finance Projections.

Created by: Outcomes, Planning, and Evaluation

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