

Sierra County Health Assessment
Sierra County Public Health Department
August 2023



Sierra County Health Needs Assessment
Sierra County Oral Health Program

Written by:

Ryan Hoben, MPH – Epidemiologist, Sierra County Public Health

Loriel Arcangel- Sierra County Student Extern

Cover Photo Courtesy of:

LeTina Vanetti

Sierra County Health and Human Services

Public Health Department

202 Front Street

Loyalton, CA 96118

(530) 993-6700

Table of Contents

Introduction..... 5

Methodology..... 7

Demographics..... 8

Health Behaviors and Health Outcomes..... 19

Key Informant Interviews..... 35

Town Hall Meetings..... 37

Next Steps..... 39

References..... 40

Appendix..... 44

Executive Summary

The 2023 Sierra County Community Health Assessment began in the Fall of 2022, starting with the collection of data from many respected sources. Data was collected and analyzed throughout the Fall and through the new year from sources such as California Department of Health, the U.S Census Bureau, Esri, the Federal Reserve, the U.S. Department of Agriculture, the Centers for Disease Control and Prevention, and a variety of California surveys. During the Spring and Summer of 2023, a number of key informant interviews and town hall meetings were conducted in order to obtain thoughts and opinions of local community members.

Key findings in data analysis included:

- Teen Electronic Cigarette Use
 - Teen Mental Health
 - Adult Mental Health
- Adult Cigarette Smoking
 - Adult Drinking
- Access to Healthy Foods

Key findings during town halls and key informant interviews included:

- Recreational Activity
 - Services
- Communication
 - Community

The findings in this report allow for the development of a Community Health Improvement Plan (CHIP), which aims to create strategies and programs in order to improve the health of Sierra County residents. With further implementations of the CHA/CHIP cycle we aim to have a constantly improving health system in Sierra County.

Introduction

Explanation

The 2023 Sierra County Community Health Assessment (CHA) is a planning process led by Sierra County Public Health with a goal for long term positive change in the health of the community. Health is affected not only by individual factors such as behaviors, genetics, and age, but also socioeconomic factors such as education, insurance access, income, and access to healthy foods. In order to analyze these factors, we have written the 2023 CHA.

The Sierra County Community Health Assessment is written to summarize the overall health and wellbeing of Sierra County residents. Using a combination of local and national data, interviews with community members, and town halls involving those in the community gives us a comprehensive look into both the hard data and the thoughts and opinions of community members.

The ability to understand these factors has wide ranging effects on where the community and its partners focus their time and resources in order to best help the community. With further iterations of the CHA, tracking and monitoring key health statistics will become both easier and more informative. Furthermore, implementation of the Community Health Improvement Plan (CHIP) using information revealed during the CHA allows for concrete goals to improve the health of our community.

Assessment and reassessment are key parts of the public health process. With the CHA to highlight room for improvement and the CHIP to ensure positive changes are made in the community, Sierra County will continue to become a happier, healthier, and safer place to live for all individuals.

Assets

Many assets were used in the writing of this report, and there are many assets we would like to highlight for their work in the community. For a full list of resources available in Sierra County, please refer to Appendix C for the Sierra County Resource Guide.

We would like to extend a thank you to all those who participated in our town hall forums, located in Sierra City and Loyaltown, for their respectfulness of the moderators and fellow

participants, their wonderful discussions, and for giving us their honest thoughts. We would also like to thank all of those who participated in our key informant interviews for allowing us to see a glimpse into what makes Sierra County an amazing place to live, work, and play.

Background ⁴¹

Sierra County is located in the heart of the northern section of the Sierra Nevada Mountain range. Prior to 1844, early Native American tribes including the Miwok and Washoe tribes occupied the land. In 1844, the first American immigrants passed through southeastern Sierra County on their way up the Truckee River. The Donner Party used this trail to reach their winter camps in 1846 and by the next year, thousands of migrants followed their lead. ³⁹

In 1850, Downieville, California made the map as a lucrative mining town, bringing the population from 1,000 people to roughly 5,000 within a year. By 1860, Sierra County had a record population of 11,867. However, its population ebbed to roughly 4,000 by 1900, the time when Loyalton became an incorporated city. ³⁹

Sierra County is notorious for its once prosperous gold mining, logging, and agricultural industries. Although many of these industries have declined, Sierra County has held onto its roots and has grown to become a popular tourist area for many people. The diverse geography allows outdoor enthusiasts to do what they love, including mountain biking, river rafting, road biking, hiking, fishing, and camping; a bit of everything for everyone.

Geography ⁴¹

Sierra County is approximately 962 square miles, located in the Sierra Nevada Mountain range. Directly in the middle of Sierra County is the Sierra Buttes, the dominant peak in the Lakes Basin area of the northern Sierra Nevada. ⁴⁰ The Sierra Buttes divide the county into two main regions, the East and the West side. This valley has

Image 1. Location of Sierra County within the state of California (World Atlas, n.d.)



many ranches perfect for raising livestock. Contrarily, Western Sierra County is heavily dense forest with the North Yuba River running through the heart of many communities.

Communities⁴¹

Sierra County comprises one incorporated city and many small communities. The East side of the county consists of Calpine, Loyalton (incorporated city), Sattley, Sierra Brooks, Sierraville, and Verdi. The West side consists of Alleghany, Bassetts, Coyoteville, Downieville, Goodyears Bar, Pike, and Sierra City. Many of these small communities are located in the most remote parts of the county.

Table 1. Communities in Sierra County, California

East	West
Calpine	Alleghany
Loyalton	Bassetts
Sattley	Coyoteville
Sierra Brooks	Downieville
Sierraville	Goodyears Bar
Verdi	Pike
	Sierra City

Methodology

Data Collection

The information presented in this document was collected locally from town hall forums, key informant interviews, and many secondary datasets. There were a total of two town hall forums conducted, with one in Sierra City and one in Loyalton. Town halls consisted of a broad range of adults from across the county. Town halls were open to anyone who was interested. For recruitment, ads were posted in the two local papers: the Mountain Messenger and the Sierra Booster.

Key informant interviews consisted of key stakeholders throughout the county. Selection was intended to reach a wide range of opinions, thoughts, and feelings throughout all of Sierra County. Participation included those from all corners of the county, with many participants completing their interview remotely.

Secondary data was obtained from a wide variety of sources including, but not limited to, the California Department of Health, the U.S Census Bureau, Esri, the Federal Reserve, the U.S. Department of Agriculture, the Centers for Disease Control and Prevention, and a variety of California surveys.

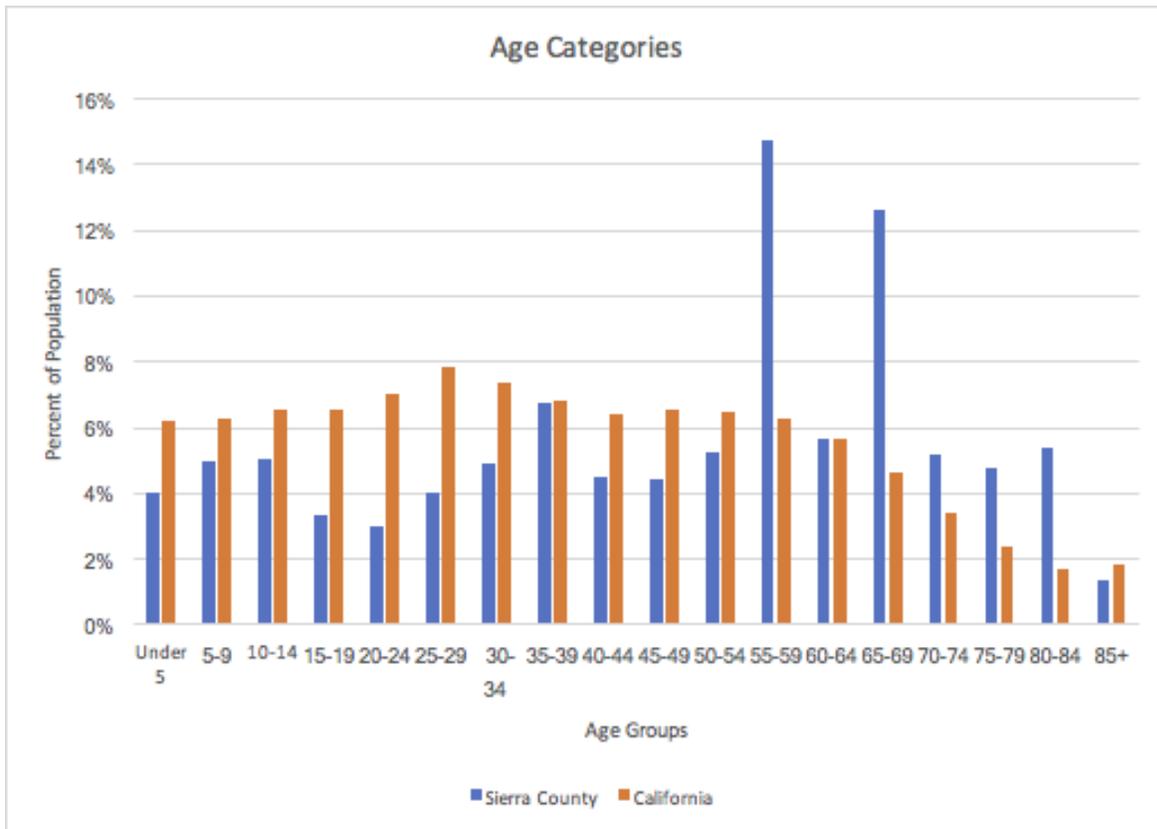
Data for Sierra County births and deaths was collected from the Vital Records Business Intelligence System (VRBIS) and cause of death was determined from the given final cause of death ICD10 code. Death data for California and the U.S. was collected from CDC Wonder. Rural status was used to show state and U.S. rates most comparable to Sierra County. Rural status was based on the NCHS 2013 urbanization criteria, and only data in the NonCore (Nonmetro) category were used. Noncore (Nonmetro) is categorized as the least “urban”, or the most “rural” areas in the country.

Demographics

Age Categories

Sierra County has a higher percentage of people ages 50-59 (14.7%) and ages 65-69 (12.6%) than California (6.30% and 4.65%, respectively). The median age group in Sierra County is people between the ages of 50-54 while California’s median age group is ages 35-39. Sierra County has a lower population of people between the ages of 20 to 24 in comparison to California, but Sierra County has a significantly higher population of people between the ages of 50-59 and 65-69 in comparison to California. Overall, Sierra County has a higher proportion of older populations than the state of California.

Figure 1. Distribution of Sierra County Residents by Age¹



Racial/Ethnic Distribution

According to the American Psychological Association, race can be defined as a social categorization of people who share common physical characteristics, ancestry, and language. Ethnicity can be defined as a “social categorization based on an individual’s membership in or identification with a particular or ethnic group.”³

The US Office of Management and Budget identifies five minimum categories for race. The categories are White, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or other Pacific Islanders.⁴ The US Census Bureau also puts a six-category “other” for those that do not identify with any of the five previous categories mentioned for race.³ Ethnicity is categorized into two groups in the US Census Bureau, which are Hispanic or Non-Hispanic.⁴ People self-identify with each of these racial and ethnic categories and may fall into two or more racial categories.

In Sierra County, CA, the Non-Hispanic White population makes up most of the population at 87%. The Hispanic population makes up the second largest population in the county at 10% of the total population, while the other racial categories are less than 2%. The ethnic and racial diversity of Sierra County greatly differs with the ethnic and racial diversity of California since the Non-Hispanic White percentage of California's total population is less than half of the entire population and most of the racial categories are greater than 2%.

Figure 2. Distribution of Sierra County Residents by Race ²

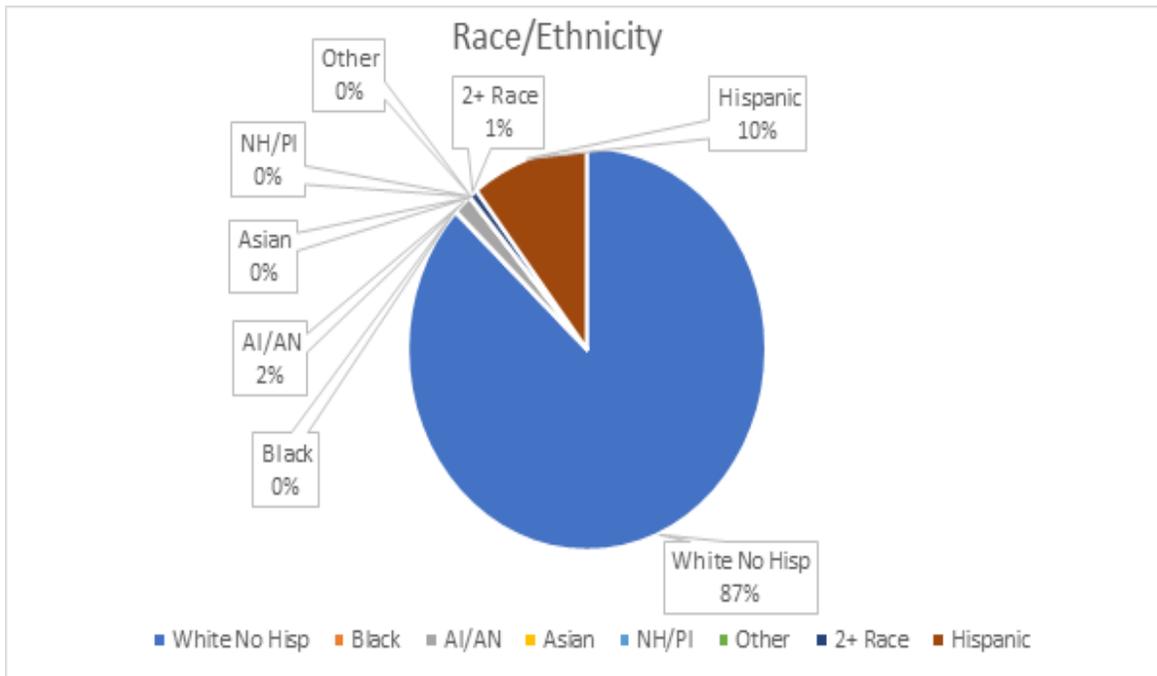
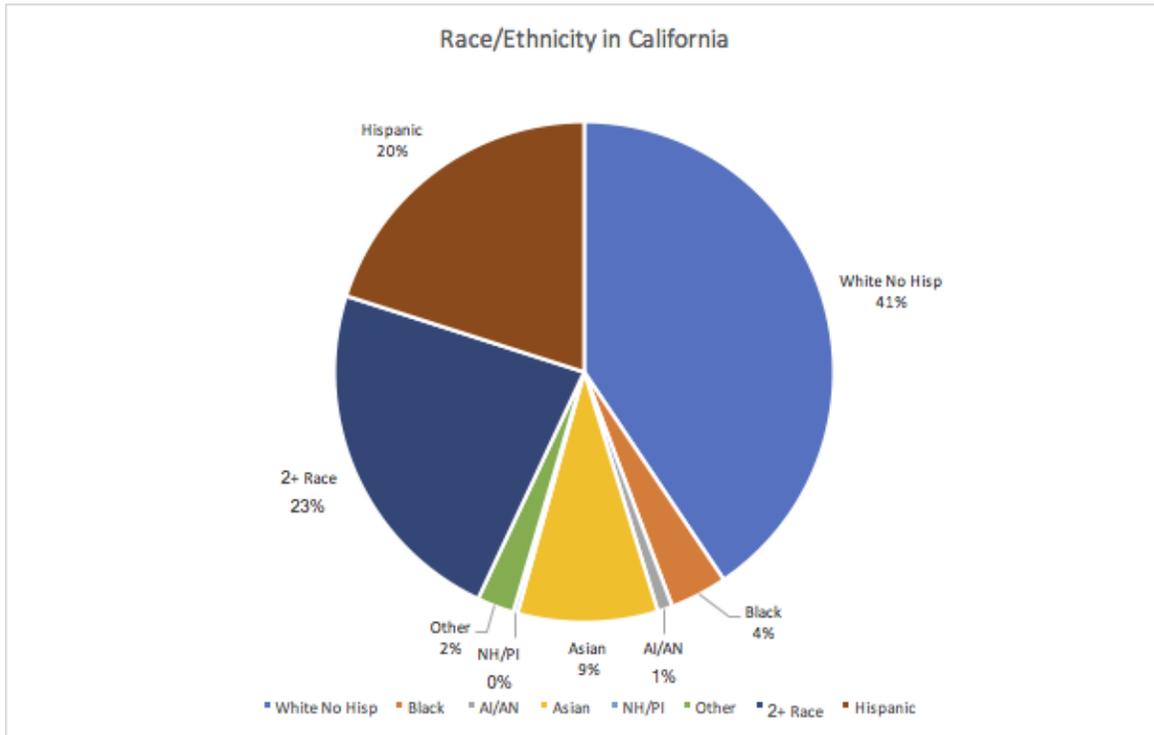


Figure 3. Distribution of California Residents by Race²



Sex Distribution

Sierra County has a higher population of males (53%) to females (47%). California has a direct 50/50 split of males and females in their population.

Figure 4. Distribution of Sierra County Residents by Sex ¹

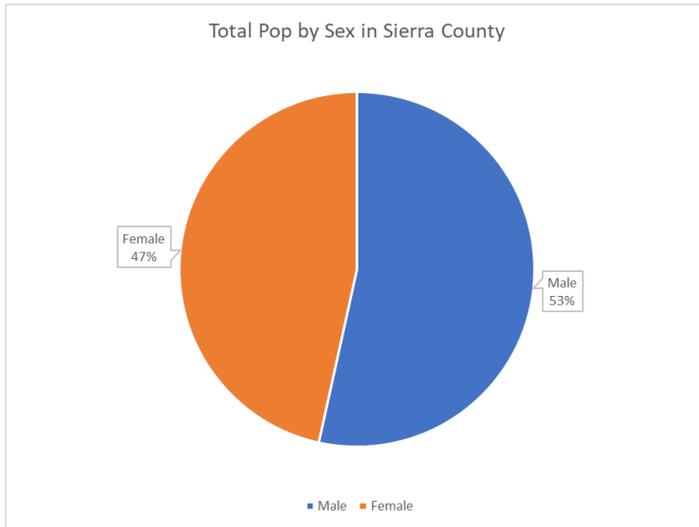
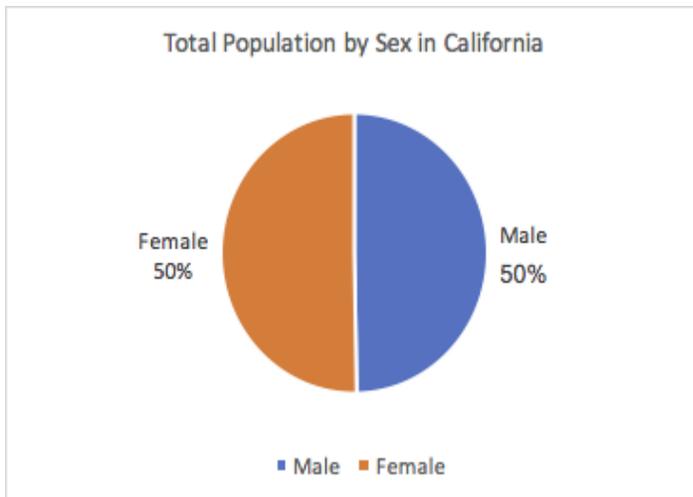


Figure 5. Distribution of California Residents by Sex ¹

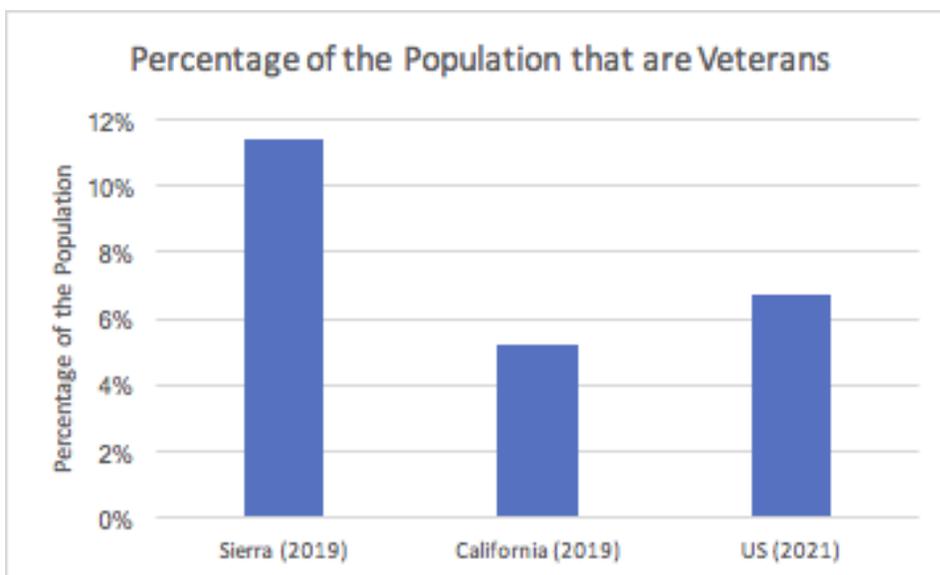


Veteran Population

Veterans represent people who have worked in the military but are no longer a part of or actively serving in the US Army, Navy, Air Force, Marine Corps, or the Coast Guard even if they served for a short time. This also includes people who have been a part of the US Merchant Marines during World War II. Veterans are also defined as people who were called to active duty in the National Guard or Reserves; however, this excludes people who only served 4-6 months for initial training or yearly summer camps. The rest of the civilians are defined as nonveterans.

According to the US Census Bureau, Sierra County has a significantly higher percentage of the veteran population over its total population in comparison to both the state and national percentage of the veteran population over their respective total population.⁵ Sierra County's percentage of veterans over its total population is more than twice California's percentage of veterans over California's total population. The percentage of the total population that is veterans in the US is roughly half of the percentage of the total population that is veterans in Sierra County.

Figure 6. Comparison of Veteran population percentages between Sierra County, California, and U.S.⁵



Educational Attainment

Educational attainment looks at the highest level of education an individual has achieved. Educational attainment can range from receiving a high school diploma to having a graduate or professional degree. High educational attainment has been associated with longer life spans and better health outcomes in comparison to low educational attainment.⁷ Higher educational attainment would also lead to higher-paying jobs. This would allow people to access more resources that can affect their health such as food transportation, housing, etc.⁸

Sierra County has almost double the percentage of people (23%) who have attained a high school diploma as their highest level of education in comparison to California (12%). In

comparison to the national average (27.9%), Sierra County is lower in percentage by roughly 5%. However, the percentage of people with a bachelor's degree in Sierra County (7%) is half of the percentage of people who have a bachelor's degree in California (14%). The percentage of people with a bachelor's degree in Sierra County is even lower when compared to the national average (37.9%).

Figure 7. Highest form of Education as High School Diploma, Sierra County, California, U.S. ⁶

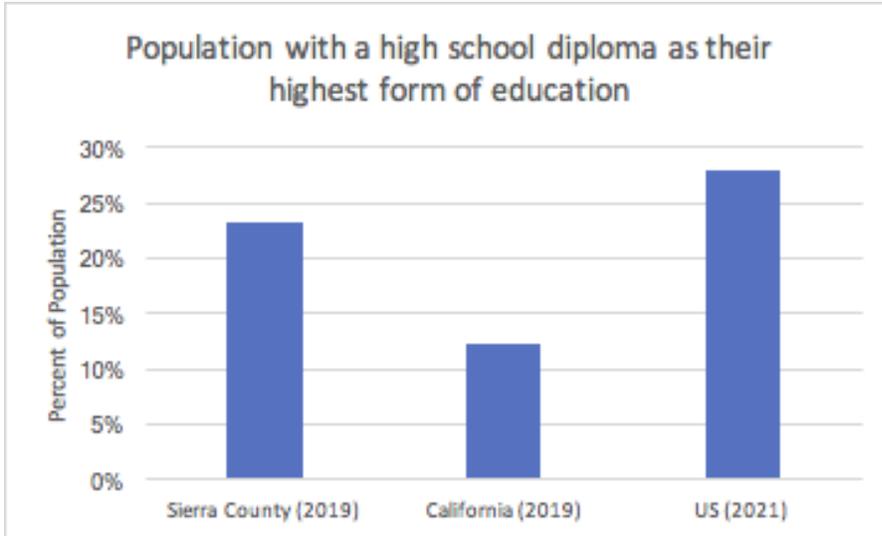
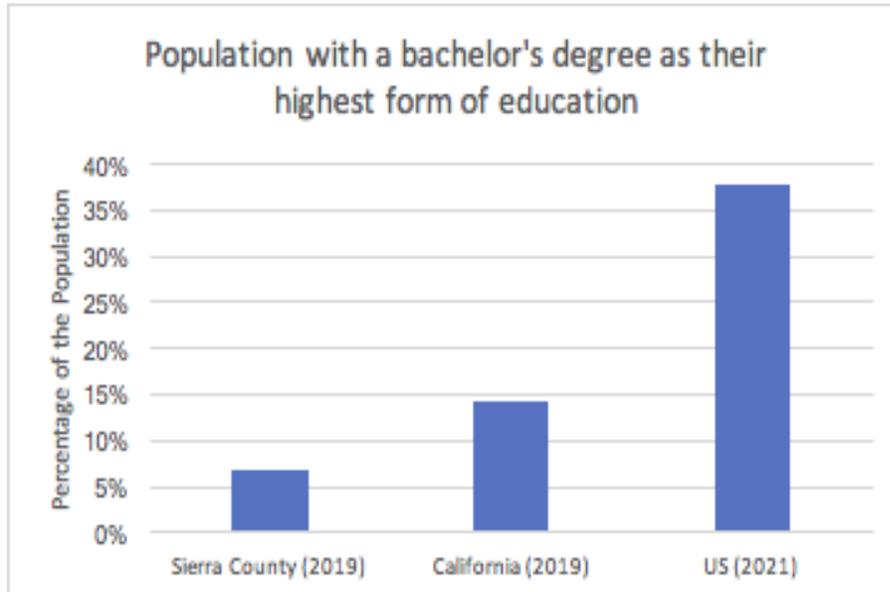


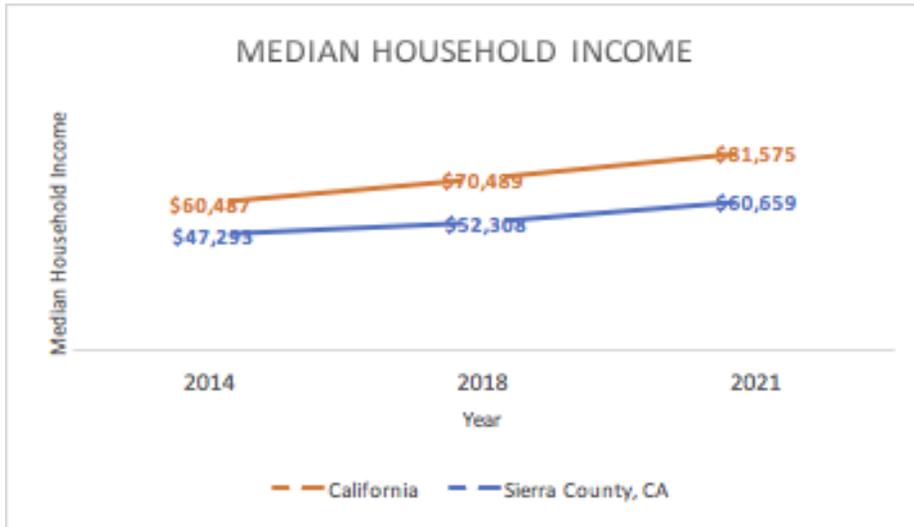
Figure 8. Highest form of Education as Bachelor's Degree, Sierra County, California, U.S ⁶



Household Income

Household income can be defined as the combined total income of all people living in one household. The income that people can make includes salaries and wages, retirement income, government assistance, and capital gain from investments such as real estate or stocks and bonds. Median household income has been increasing for both California and Sierra County over the years from 2014 to 2021; however, Sierra County's median household income has always been lower than the California median household income every year. The difference between the state's median household income and the county's median household income has widened with each passing year.

Figure 9. Median Household Income, Sierra County, California ^{9, 10}



Poverty Level

People who fall below the poverty level are citizens whose amount of annualized income is below a certain level of income that the US government would deem eligible for certain welfare benefits. According to the US Office of the Assistant Secretary for Planning and Evaluation, the federal poverty level for individuals is \$12,880 in 2021.¹¹ The federal poverty level for a family of four is \$26,500 in 2021.¹¹ Poverty can lead to lower access to healthcare services or other health resources such as healthy foods and other health necessities.

In 2020, the % below the poverty level for the total population in California and Sierra County, CA is the same; however, the confidence intervals are wider for Sierra County than in California, suggesting that the true value may be higher or lower than the state level. The percentage of children living in poverty is lower in Sierra County, CA compared to the California state level by 1.1% in 2020.

Figure 10. Total Population in Poverty, Sierra County, California¹¹

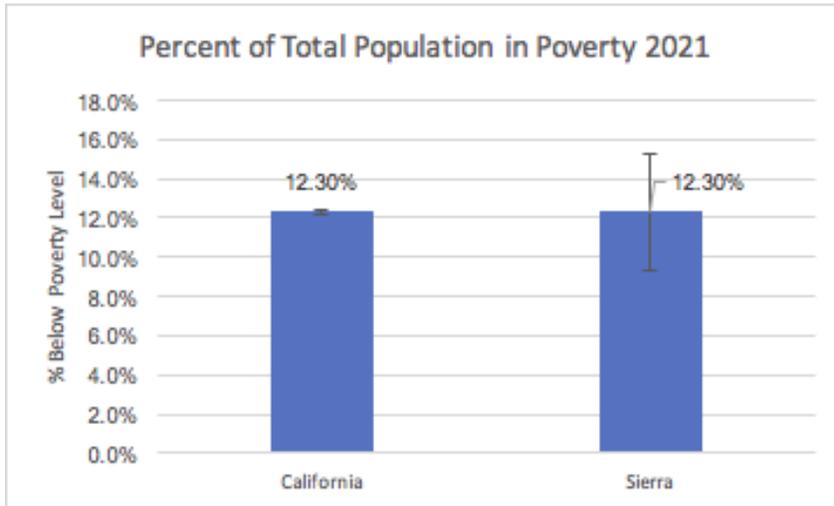
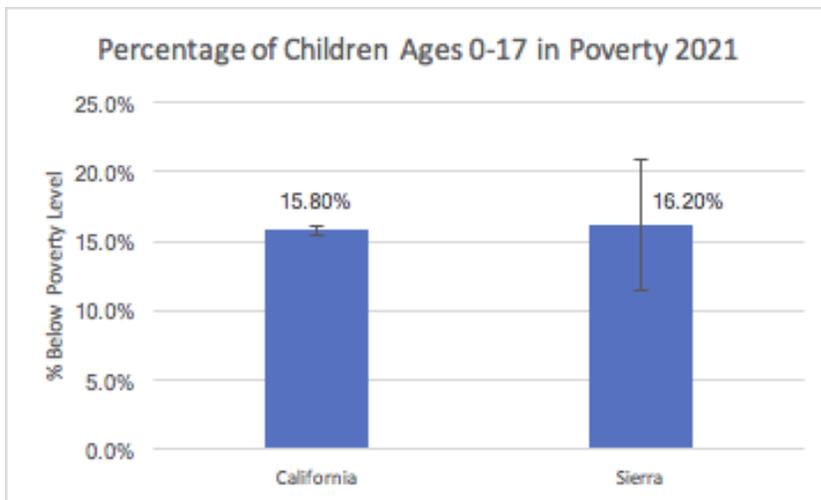


Figure 10. Children Aged 0-17 in Poverty, Sierra County, California¹¹



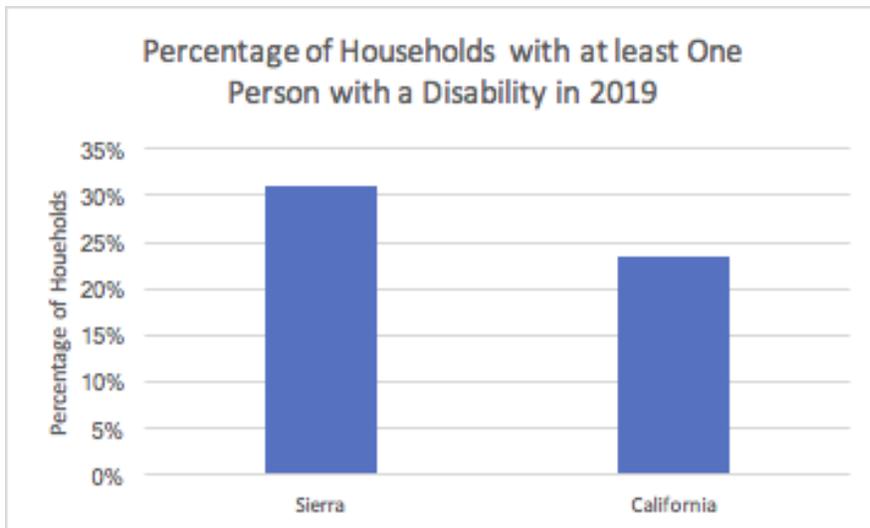
Disability

According to the Centers for Disease Control and Prevention (CDC), a disability can be defined as any type of condition concerning the mind or body that makes conducting specific tasks or interact with the world more difficult for the individual with the condition.¹² Disabilities include but are not limited to impairments to vision, hearing, movement, thinking, remembering, communicating, and learning as well as disabilities that affect a person's mental health and social relationships.¹² According to the World Health Organization (WHO), people with disabilities have twice the risk of developing poorer health outcomes such as depression, asthma, poor oral

health, obesity, and diabetes, which could be due to the health inequities that people with disabilities face such as stigma, discrimination, and barriers to accessing the health system.¹³

In Sierra County, there is a higher percentage of households with at least one person with a disability (31%), in comparison to California (23%) in the year of 2019.

Figure 11. Households with at Least One Person Disabled¹



Summary of Sierra County Demographics

There are multiple factors that need to be taken into consideration from the demographics of Sierra County. Age, sex, race, veteran status, educational achievement, income, and disability status are all important factors that can have large impacts on the health of a community.

Age is an important factor that contributes to a variety of poor health outcomes. Although everybody ages, having a higher proportion of older individuals in a community increases the burden of disease throughout a community. Sierra County has nearly 50% of its population over the age of 55 which causes a higher health burden than other areas with a lower proportion of older residents. With Sierra County lacking an abundance of healthcare resources within the county, commutes for medical care are necessary.

Veteran status in Sierra County is significantly higher than that of California or the U.S. Studies have shown that veteran status contributes to poorer health outcomes in a variety of categories.³³ Some of these poor health outcomes include cancer, heart disease, stroke, arthritis,

and others. These outcomes increase the health burden on the healthcare system around Sierra County, and it is a good idea to monitor our veteran population.

Educational achievement is a socio-economic factor that plays a part in the health of residents. It has been found that Californians with less than a high school degree or a high school degree have higher risk of all cause death than those with more than a high school degree.³⁴ It is theorized that those with higher educational attainment can more effectively garner resources such as higher wages, health insurance, and ability to travel that contribute to a healthier, longer life³⁴. With Sierra County having significantly lower bachelor's degree attainment than California or the U.S. and a higher rate of high school diplomas as higher education than California, it may be worth focusing on programs such as health education in the future.

Income is also connected to health outcomes. Those with higher income have a longer life expectancy than those with low income, a trend that has been widening in recent years.³⁵ It is important to note that Sierra County has a significantly lower median household income than California, a trend that has only grown from 2014 to 2021. While it is not the place of public health to increase an individual family's income, an important part of public health is to educate residents on what resources are available to them and their families.

Disability status has clear connections to the health of a community. Disabilities come in many forms including vision, hearing, movement, and mental health. With Sierra County having a significantly higher proportion of those living with disabilities, it is important to educate this population on the availability of resources throughout the county.

Health Behaviors and Health Outcomes

Teen Alcohol Use

Underage drinking for high school students can cause poorer health outcomes and other problems for the student and the people around him. The Centers for Disease Control and Prevention (2022) states that underage drinking is associated with school problems, legal problems, social problems, and other health and developmental issues in youth.¹⁴ These types of issues include higher rates of absence or lower school grades, increased acts of violence, and changes in brain development, which may have life-long effects.

In Sierra County, there has been an increase in the percentage of 7th grade students who currently drink alcohol and have ever used alcohol overtime. The percentage of 9th grade students who have ever used alcohol has declined overtime; however, the percentage of 9th grade students who currently drink alcohol had an increase in the percentage of students from 2016 to 2022. The percentage of 11th grade students who have ever used alcohol went down from 2011 to 2016 but increased following the year of 2022. The percentage of 11th grade students who currently drink alcohol remain almost the same from 2011 to 2022.

Figure 12. Sierra County Adolescents that Currently Drink Alcohol ^{15, 16, 17}

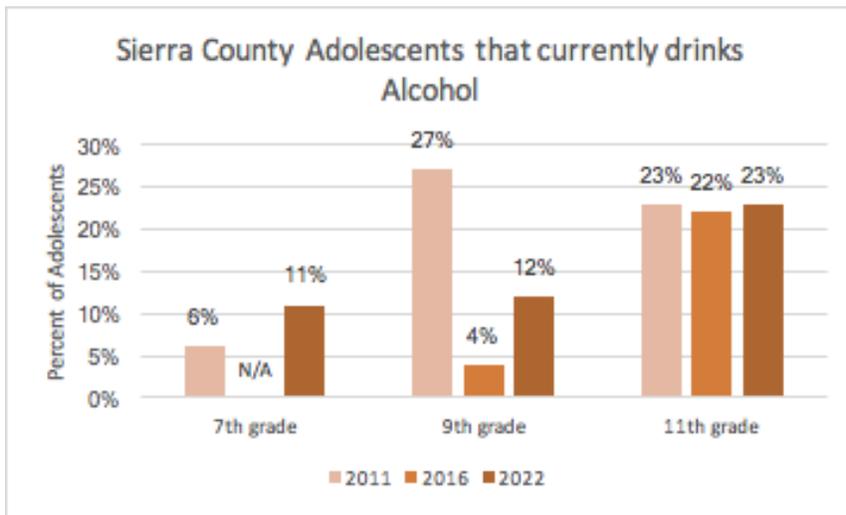
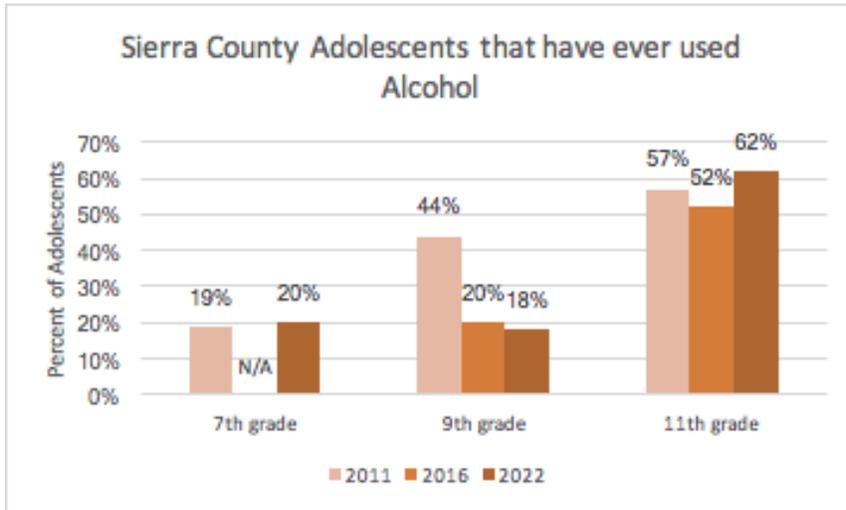


Figure 13. Sierra County Adolescents that Have Ever Used Alcohol ^{15, 16, 17}



Teen Tobacco and Vaping

The use of tobacco and vaping contributes to adverse health outcomes in youth. According to the Centers for Disease Control and Prevention, different types of tobacco products such as electronic cigarettes have been associated with harm to children's brain development.¹⁹ This includes alterations in the parts of the brain that control attention, learning, mood, and impulse control. Use of tobacco products are also associated with depression, reduced lung growth, reduced lung function, and early cardiovascular damage.²⁰

Electronic cigarettes are defined as devices powered by electricity that heat liquid to produce small particles in the air that people inhale just like a regular cigarette.²¹ These products usually contain nicotine. Nicotine is a highly addictive chemical substance that leaves the person craving for more due to its effects in the brain's reward system.²² Getting addicted to nicotine at an early age would make quitting difficult later in life.

According to the CDC, roughly 2.55 million US middle and high school students have reported to currently use electronic cigarettes.¹⁹ Around 85% of those students use flavored e-cigarettes and more than half use disposable cigarettes.

The number of Sierra County students from grades 7th, 9th, and 11th who have ever used a cigarette has decreased from 2011 to 2022. However, the number of students who have used

e-cigarettes or other vaping products at least once has increased over the years in 7th and 11th grade but recently decreased in 9th grade students.

There has been an increase in the number of 7th grade students and 11th grade students who currently use e-cigarettes and an increase in the number of 11th grade students who currently use regular cigarettes in Sierra County.

Figure 14. Sierra County Adolescents that Have Ever Smoked a Whole Cigarette ^{15, 17, 18}

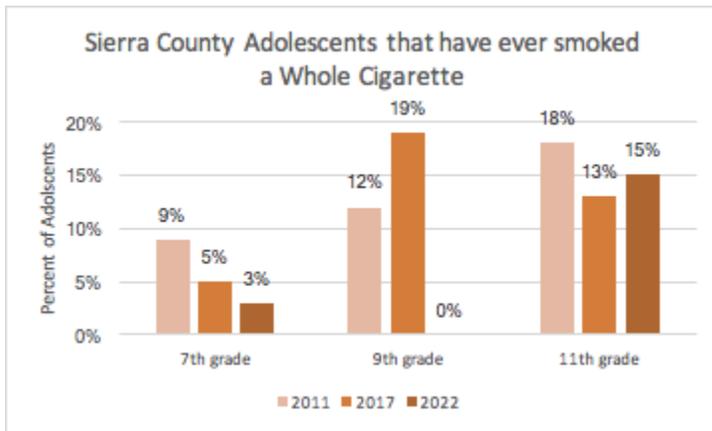


Figure 15. Sierra County Adolescents that Have Ever Used Electronic Cigarettes or Other Vaping Devices ^{16, 17, 18}

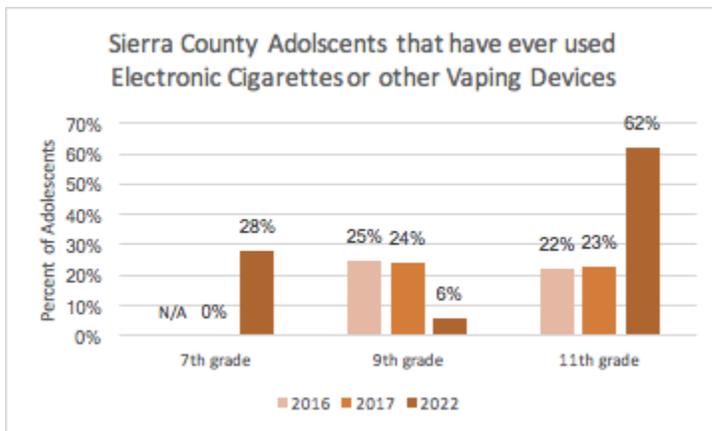


Figure 16. Sierra County Adolescents that Have Smoked Cigarettes in the Last 30 Days ^{15, 17, 18}

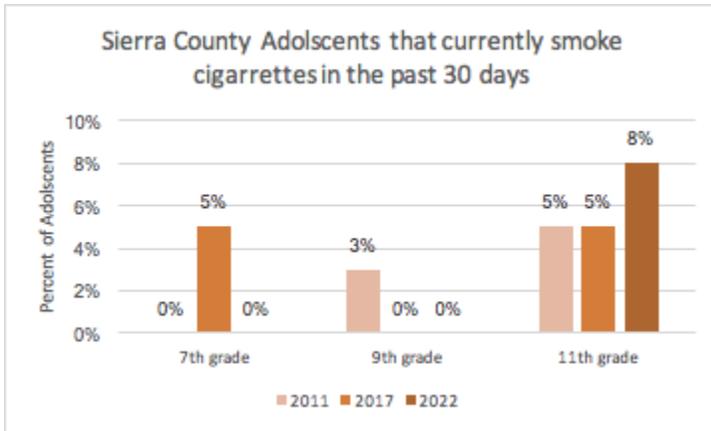
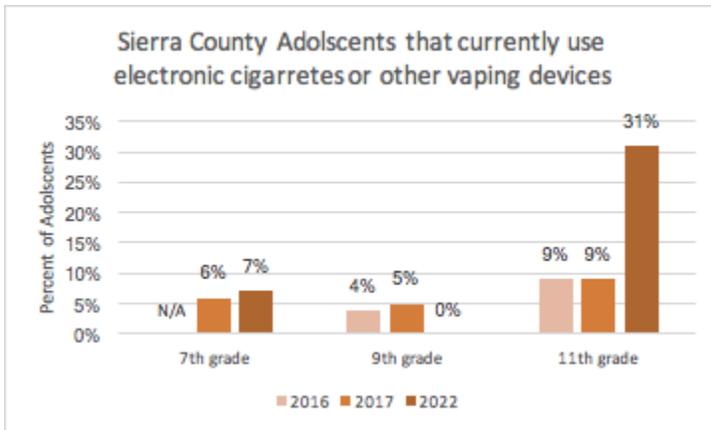


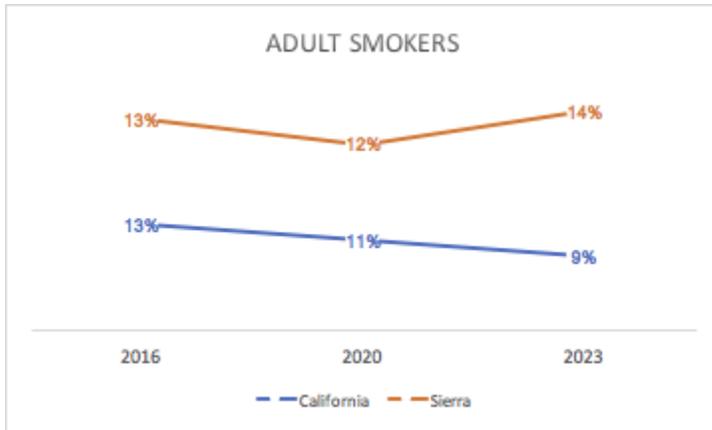
Figure 17. Sierra County Adolescents that Currently Use Electronic Cigarettes or Vaping Devices ^{16, 17, 18}



Adult Tobacco Use

The Healthy People 2030 objective for tobacco use is to reduce the percentage of current cigarette smokers in the US to 6.1%.²⁴ Currently, 11.2 percent of the US adult population are current cigarette smokers. In California, there has been a decline of cigarette smokers from 2016 to 2023; however, Sierra County started to decrease from 2016 to 2020 but then increased again in 2023. Overall, Sierra County has a higher percentage of cigarette smokers in comparison to California and the nation.

Figure 18. Sierra County Adult Smokers % ²³



Teen Physical Fitness

Having a regular physical activity routine helps improve one's health. Physical activity has been known throughout research to be associated with a longer life span and less risk for severe health problems such as diabetes, obesity, and heart disease.²⁵ Physical activity is also known to lower one's anxiety and help with sleep.²⁶ The CDC recommends that people do a moderate-intensity aerobic physical activity for roughly 150 minutes, 75 minutes of vigorous-intensity physical activity, or anything equivalent to those types of workouts each week.²⁷ These types of exercises include brisk walking or running, push-ups, swimming, etc.

California has created a California Education code that requires each school district to conduct a physical activity performance test for students in grades 5th, 7th, and 9th.²⁸ The main purpose of this test is to encourage students to adopt life-long habits of physical exercise. The fitness test is done to assess whether students have the minimum amount of fitness to have a resistance to diseases that are caused by physical inactivity.²⁹ The Health Fitness Zone (HFZ) scores the fitness standards of the students in six fitness areas to see if they meet the minimum requirements.

Sierra County has a higher percentage of students in 5th, 7th, and 9th grade that meet the HFZ requirements for body composition in comparison to California. Sierra County has increased in the percentage of students that meet the HFZ requirements for body composition over the years for 7th and 9th grade students. In Sierra County, 5th grade students who meet the

HFZ requirements for body composition have increased from 2011 to 2015 but had a slight decrease from 2015 to 2019.

Figure 19. Sierra County Students in HFZ ³⁰

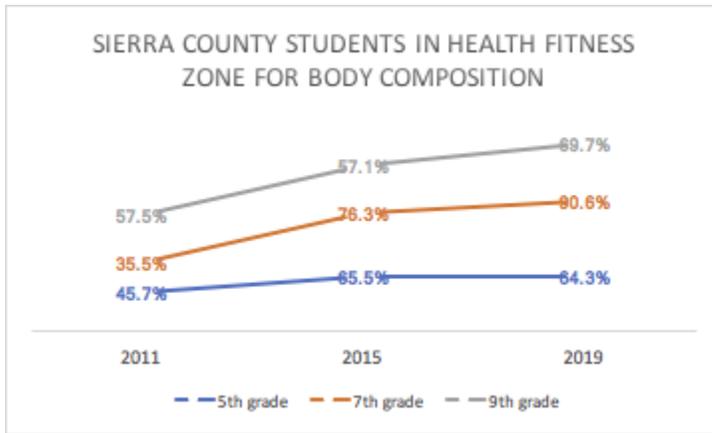
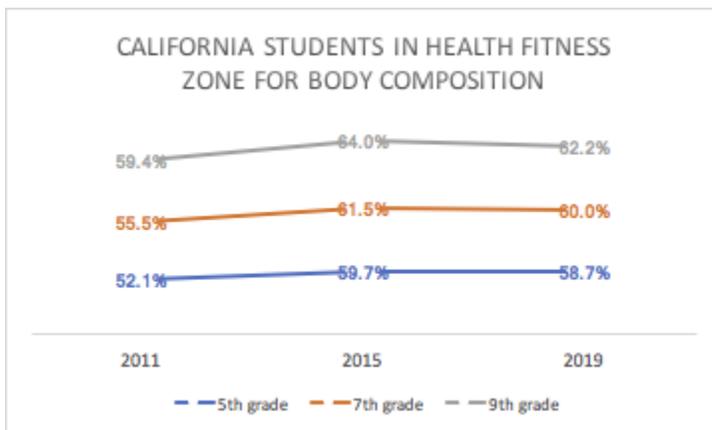


Figure 20. California Students in HFZ ³⁰



Teen Mental Health

Teen Mental Health has been a topic of concern for some years, coming to a head during the Covid-19 pandemic. It has been found that children and adolescents were more likely to experience higher rates of depression and anxiety during, and after the Covid-19 pandemic.³⁶ Children and adolescents that are experiencing depression or anxiety have higher rates of risk taking, substance abuse, suicide, and poorer academic outcomes.³⁶

Figures 21 and 22 compare the percent of students that reported feeling chronic sadness or hopelessness in the past 12 months in Sierra County and California. This survey was

completed for 7th grade students, 9th grade students, and 11th grade students in the years 2011, 2017, and 2022. Sierra county 7th and 9th grade students reported a lower percentage of sadness or hopelessness for all years than California 7th and 9th grade students. However, the major cause of concern for Sierra Counties teen mental health is with the 11th graders. Two thirds (67%) of Sierra County 11th grade students reported chronic sadness or hopelessness in 2022, growing from 54% in 2017. California also saw an increase in students reporting chronic sadness or hopelessness throughout the years studied, but not to the extent that Sierra County has seen.

Figure 21. Sierra County Students with Chronic Sadness or Hopelessness ^{15, 17, 18}

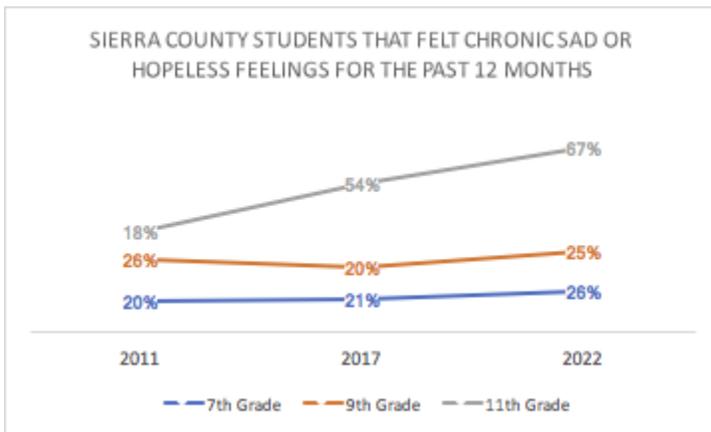
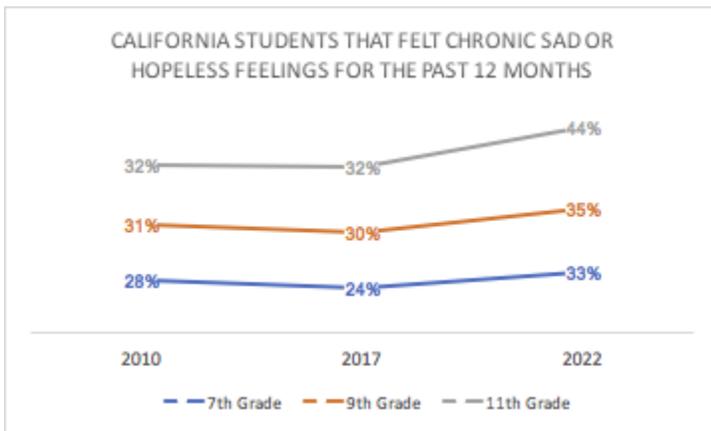


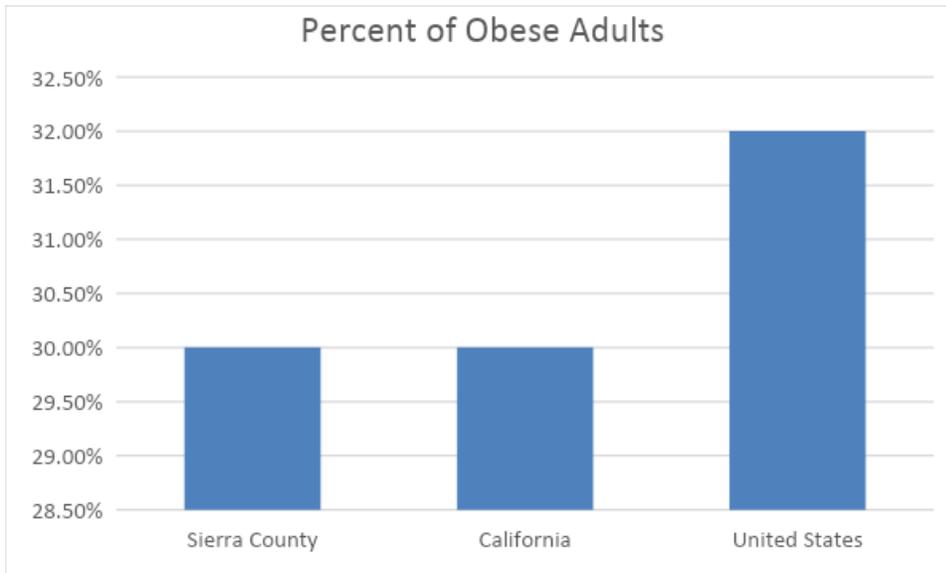
Figure 22. California Students with Chronic Sadness or Hopelessness ^{31, 32}



Adult Obesity

Adult obesity in Sierra County is on par with that of California, both of which are lower than that of the United States. Figure 23 shows the percent of adults qualifying as obese in Sierra County, California, and the U.S.

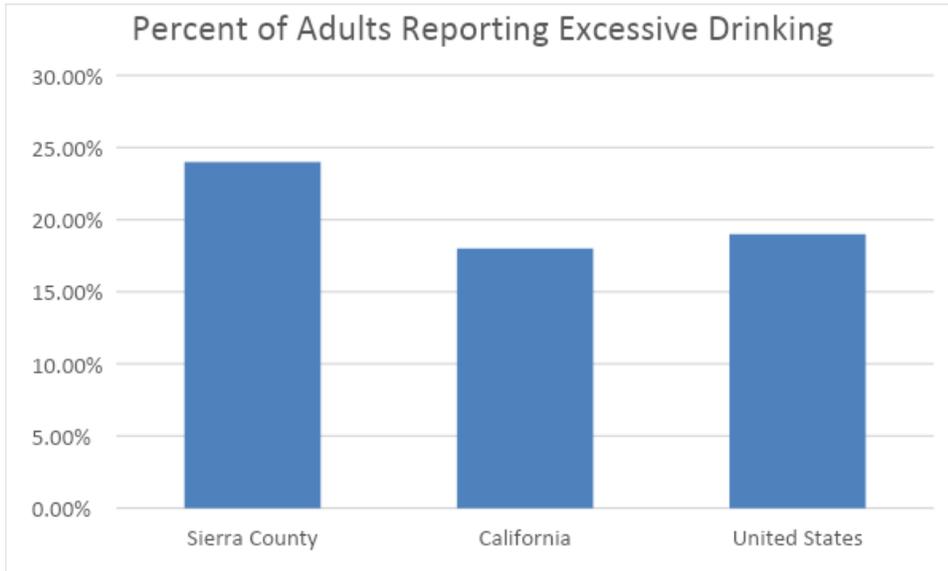
Figure 23. Comparison of Sierra County, U.S. and California Obese Adults ²³



Excessive Drinking

Figure 24 shows the percentage of adults in Sierra County, California, and the U.S that report excessive drinking. Sierra County is higher than both California and the U.S, with just under a quarter of the population reporting that they drink excessively. California reports 18%, and the U.S reports 19%.

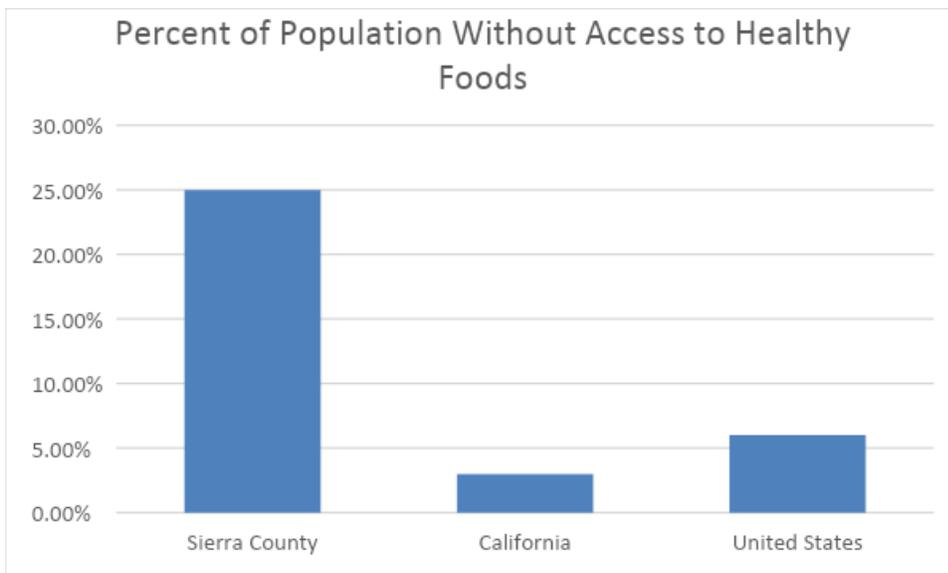
Figure 24. Comparison of Sierra County, U.S. and California Excessive Drinking²³



Access to Healthy Foods

With very few grocery options, access to healthy foods is a known issue around Sierra County. Figure 25 shows how stark the issue is. 25% of Sierra County residents report that they do not have access to healthy foods, while California and the U.S report 3% and 6% respectively. Access to healthy foods can reduce obesity, malnutrition, and increase well-being.

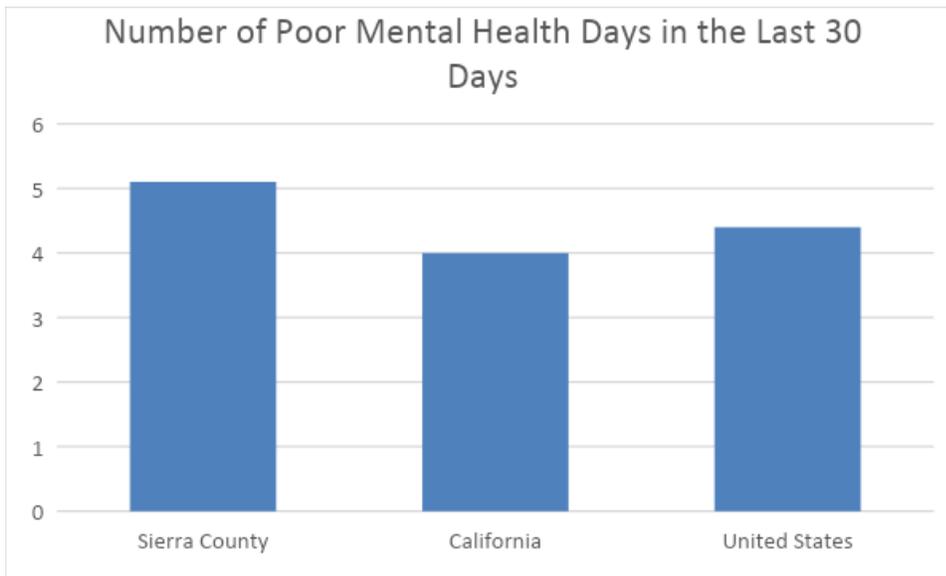
Figure 25. Comparison of Sierra County, U.S. and California Access to Healthy Foods²³



Mental Health

Mental health is a key component to an individual's overall health and well-being but can be difficult to quantify on a population level. Figure 26 compares the average number of reported poor mental health days in the last 30 days for adults in Sierra County, California, and the United States. Unfortunately, Sierra County has the highest number of days with 5.1, followed by California with 4.0, and the U.S with 4.4.

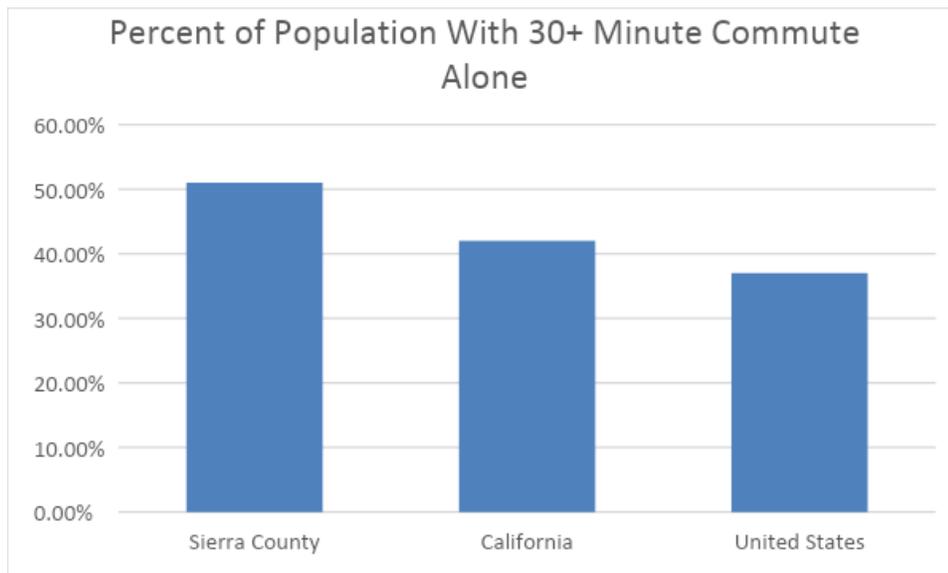
Figure 26. Comparison of Sierra County, U.S. and California Days with Poor Mental Health²³



Commute Alone

Commuting increases sedentary time, time away from home, and time alone. All of these can have physical and mental health repercussions. In Sierra County, over 50% of people have a 30 minute or longer commute alone. In California, 42% of individuals have a 30-minute commute alone, and the U.S has 37%. While this may not be news to most Sierra County residents, it is important to highlight the number of individuals who commute largely out of county for work.

Figure 27. Comparison of Sierra County, U.S. and California Population with 30+ Minute Commute Alone.²³



Deaths in Sierra County

Figure 28 shows all cause death rates in Sierra County, Rural U.S., and Rural California. U.S. and California rates were limited to rural only areas for comparability. Overall, Sierra had a lower death rate than both the U.S. and California in 2018-2021 and all year combined comparison. While Sierra County may struggle in some categories throughout this report, it is good to see that death is not one of them.

Figure 29 shows the top three causes of death in Sierra County from 2018 to 2021, determined from VRBIS data, compared to the rates of death in rural U.S. and rural California for these three categories. Circulatory was the highest category in Sierra County, followed by neoplasms and respiratory diseases. Circulatory includes ICD codes I00-I99 and common causes of death in this category are hypertension, heart diseases, cerebrovascular diseases, etc. Neoplasm includes ICD codes C00-D48 and includes all cancers. Respiratory includes ICD codes J00-J98 and common causes of death in this category are pneumonia, acute upper respiratory disease, and chronic lower respiratory diseases. Figure 24 shows that Sierra County has a lower rate of death in its top three categories than rural U.S. or rural California.

Figure 28. Comparison of Sierra County, U.S. and California Death Rates per 100,000

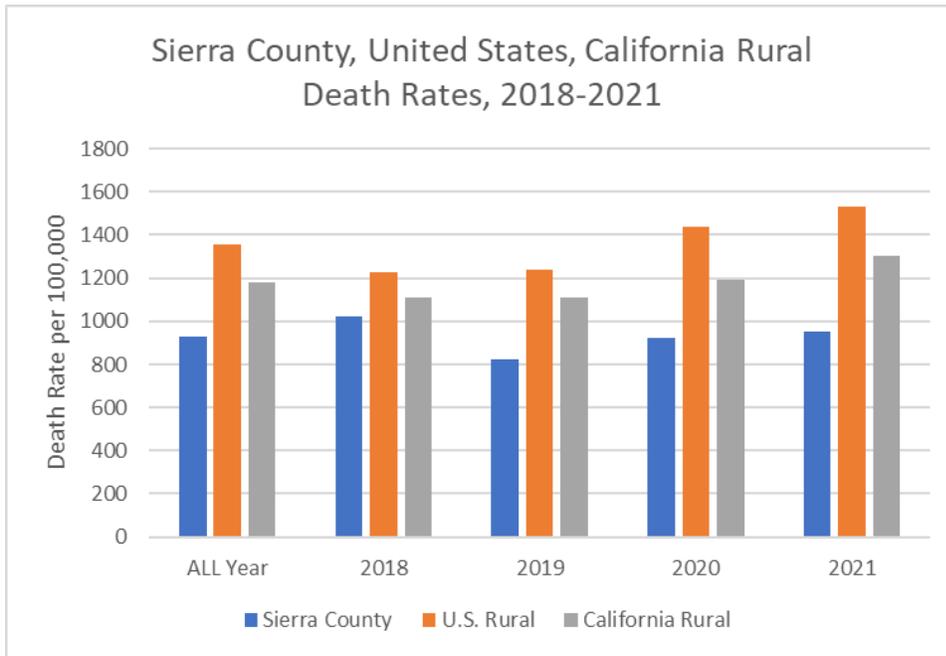
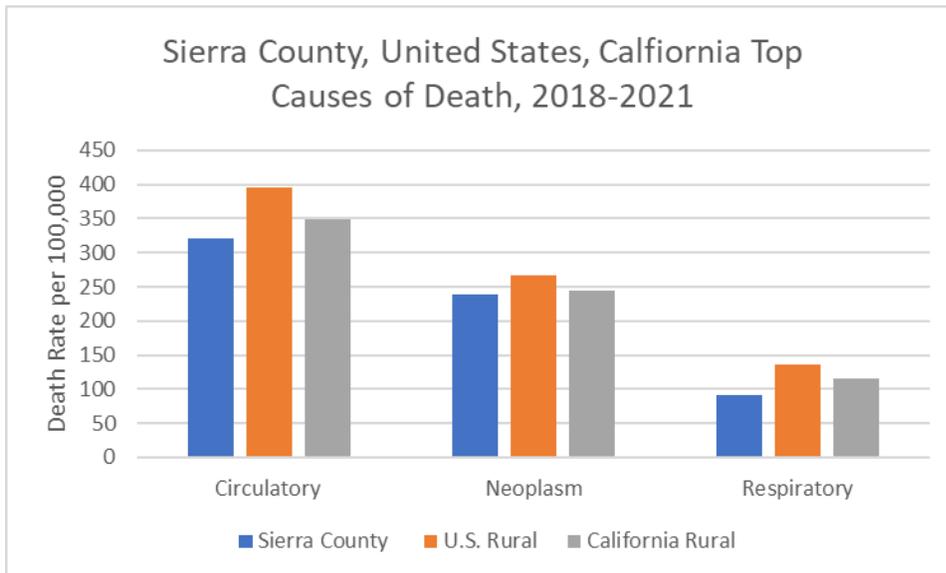


Figure 29. Sierra County's Top Causes of Death Compared to Rural U.S. and Rural California

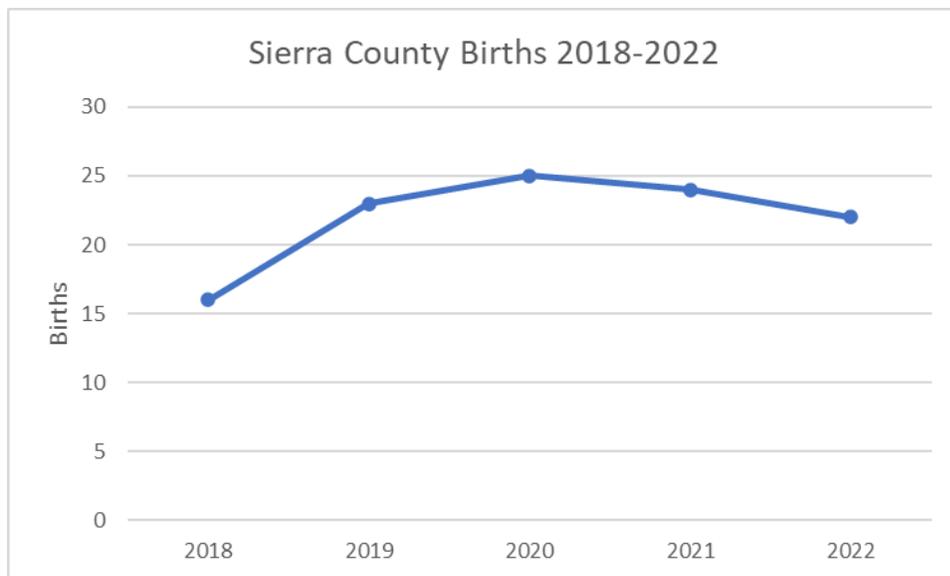


Births

Figure 30 highlights the number of registered births for Sierra County residents. Over the years, there has been a slight increase in the births per year, hitting its peak in 2020 and slowly coming down in the years thereafter. While there is a slight decrease from 2020 to 2022, the

increased births could highlight a need for more prenatal and infant education throughout the county.

Figure 30. Sierra County's Births, 2018-2022



Summary of Health Behaviors and Outcomes

There are many health behaviors and outcomes in Sierra County that could use improvement, such as teen and adult smoking rates, and teen mental health. With improvement in these categories, we will see improvements in both long-term and short-term health outcomes.

Teen tobacco use in this county, and the U.S., is on a concerning trend. With the development and mainstreaming of electronic cigarettes, “vapes”, more youth are consuming tobacco products than we have seen in decades. Evidence suggests that while the anti-smoking campaigns of the 2000s and 2010s were successful in reducing smoking in youth, vaping and flavored tobacco products have rolled back the many successes. Electronic cigarettes were introduced to the U.S. in 2007 and became more popular than cigarettes in youth in 2014. While there was an outbreak of vaping related illness in 2019, there is little to no knowledge of the long-term effects of vaping. As such, efforts should be concentrated on limiting the population using both tobacco and electronic cigarettes.

You can see the evidence of increasing electronic cigarette use in the Sierra County data. It is greatly concerning that 62% of 11th grade students have tried electronic cigarettes in 2022

and that nearly 1/3rd of 11th grade students currently use vaping devices, up from less than 10% in 2016 and 2017. In comparison, the highest prevalence of combustible cigarettes was 36.4% in 1997.³⁷ With electronic cigarette prevalence in 11th grade students in Sierra County being nearly double that percent, it is clear that intervention is needed.

Adult smoking also rose from 2016 to 2023. While a 1% increase could be argued little cause for concern, when compared to California's net drop in smokers it is seen as concerning. California dropped by 4% from 13% to 9% in the same time frame.

Sierra County students are doing well in terms of physical fitness over the years. In almost all grades, the students' HFZ scores have increased from 2011 to 2019. On the other hand, California students' HFZ scores have stayed relatively level throughout the same years. While this is wonderful to see, we should continue to monitor and improve this health measure.

Another very concerning trend is seen with teen mental health measures. It has been talked about how teen mental health was deteriorating for some time and has only been accelerated by the Covid-19 pandemic. Through this data, we are able to see a very worrisome trend. In 2022, 67% of 11th grade students in Sierra County described feeling chronically sad or hopeless in the last year. California had 44% in the same grade and year. Obviously, this can have profound repercussions on students health in a variety of ways, including but not limited to, substance and alcohol abuse, suicide, weight gain, lack of physical activity, poor grades, poor job attainment, and poor health outcomes. This is without a doubt, something that needs to be investigated more, and requiring intervention through programs may be necessary.

Similarly, adult mental health measures are worse in Sierra County than California and the U.S. This can have similar outcomes to that of teens, with worries of suicide, substance and alcohol abuse, poor health outcomes, and others being of concern. With there being a lack of mental health services throughout the county, looking into other options to assist with teen and adult mental health should be a priority.

There is also a lack of healthy foods throughout the county. 25% of residents do not have access to healthy foods, largely due to the long commute to Reno, Truckee, or Grass Valley for grocery options. While there is not much to be done on the government side for this, lacking

healthy food can cause long term health issues such as malnourishment, obesity, heart disease, and others.

Along with long drives to obtain groceries, Sierra County residents tend to also have long commutes for work. It won't come as a surprise to many that over 50% of individuals have a 30+ minute commute to work that they do alone. It has been found that long commutes can influence musculoskeletal issues: (migraines, back pain, shoulder pain and others), gastrointestinal issues: (heartburn, constipation, diarrhea, stomach pain), and pseudo-neurologic issues: (depression, anxiety, sleeping problems, and others).³⁸ Long commutes also lower the amount of time away from friends, family, and participating in activities which also has an affect on physical and mental health.

Vital statistics in Sierra County are doing well. Our top three causes of death in the county in order were circulatory, neoplasms, and respiratory. Circulatory deaths include deaths caused by heart disease, hypertension, cerebrovascular disease, and others. Neoplasm deaths include deaths caused by all cancers. Respiratory deaths include deaths caused by Influenza and pneumonia, chronic upper respiratory infections, chronic lower respiratory infections, and others. We are lower than the rural California and rural U.S. rates in all three categories. Along with this, we are lower in all cause deaths from 2018-2021 and in the 4 year combined rates.

Births in Sierra County are expected to be low due to the low population. The trend of births from 2018-2022 did go up. This is a good thing, however it could highlight a need for more prenatal care and education in the county along with a growing demand for other services such as infant care and day care.

This report was able to highlight multiple areas of concern within Sierra County. Nearly 2/3rds of 11th grade students have tried electronic cigarettes and nearly 1/3 state that they currently use electronic cigarettes. Teen smoking rates, specific to electronic cigarette use, demands immediate attention. Similarly, adult cigarette smoking prevalence has also increased, in contrast to California. Teen mental health also demands immediate attention. 67% of 11th grade students feeling chronically sad or hopeless is something that should not happen, but unfortunately it has. Adult mental health in Sierra County is also worse than that of California and the U.S.. Excessive drinking and access is also an issue that should be explored in the future.

Summary Key Informant Interviews

For the Community Health Assessment in Sierra County, California, key informant interviews (KIIs) were done to highlight the concerns of the county not visible from the other data that had been collected in the CHA report. The KIIs were done from April 2023 to May 2023. The participants were prominent key stakeholders in the community. The KIIs were done either in-person or online via Zoom. The facilitator of the KIIs asked questions to the participants about topics concerning the health and wellbeing of Sierra county. Most of the KIIs were audio recorded and transcribed for qualitative analysis. Only three KIIs were analyzed from the facilitators notes due to some participants not wanting to be recorded. Qualitative analysis was done through a thematic analysis of all of the participants' responses where themes were created to categorize their responses. The top three themes were generated by how often each theme was mentioned and how many people commented on the topic. The top three most frequently mentioned themes from the KII were recreational activities, services, and the community environment.

The number one theme that was mentioned the most in the KIIs was recreational activities. Participants stated that the nature and beauty of Sierra County and the many outdoor recreational activities in the area such as hiking and swimming make Sierra county a wonderful place to live. Participants suggested bringing back recreational activities such as the wilderness challenge for school age children and having more organized sports events and opportunities to improve the health of the community and promote physical activity in adults and children. Specifically, participants suggested having non-motorized days in certain areas to encourage outdoor recreational activities such as having a non-motorized day at Gold Lake Highway. The participants also suggested more adult recreational activities in Sierra county such as adult exercise courses and sports programs to improve the health of Sierra county residents and foster a sense of community in the county.

The second major theme that was mentioned in the KIIs was the topic of services in Sierra County. Many participants commented on the lack of services in Sierra County. Services that were mentioned include dental care, healthcare, mental health, behavioral health, primary care, and sanitation services. Participants commented that a bedrock to a healthy community is a

community that has access to tobacco control services, alcohol treatment services, mental health services, primary care services, and emergency medical services within the county. Participants also stated that veterans, mothers, and elderly individuals need to have more services provided for them. For elderly individuals, participants stated that due to the distance that people had to travel to access medical, dental, and health care, adults 65 and older had a difficult time making appointments and receiving care for their health and wellbeing. Participants also shared concerns for residents in the county that were barely above the cut-off point that allowed people with low income to have resources available to them. Participants stated that this cut off makes a lot of people above the cut-off fall in the cracks of receiving the health care that they need. Participants understood the limited resources of the county but desired for alternative solutions such as outdoor or mobile services to give Sierra County residents options for their healthcare.

The third major theme that was mentioned in the KIIs was the topic of the community environment. Participants stated that a healthy community is a community that sought to work with one another to help care for the county at large. Participants mentioned multiple times about the importance of the community's culture. For example, according to the participants, types of community cultures such as the culture that shamed people for vocalizing their mental or health concerns negatively impacts the health of the county. Other types of negative culture within the community that participants talked about were the stigma of adult education programs that made it difficult for adults within the program to continue, people getting overly involved in other people's business within the county, and small town politics. Participants did state that the positive aspects of Sierra county were the community members looking out for each other and having events that foster a sense of community in the county. Participants suggested having more events in the county to foster camaraderie in the community between the young and old residents such as conducting TimberFest or conducting little league teams to get community members more active and social with one another.

Summary Town Hall Meetings

For the Community Health Assessment in Sierra County, California, two community town hall discussions were done to highlight the concerns of the county that were not fully captured from the other data that had been collected in the CHA report. Two county town hall discussions were done in-person at Loyalton and Sierra City. The town hall discussions were done at the end of April 2023. The participants were local residents in Sierra County. The Sierra City town hall had 15 participants, and Loyalton town hall had 6 participants. The facilitators of the town hall meetings asked questions to the participants about topics concerning the health and the wellbeing of Sierra County. The town hall meetings were audio recorded and transcribed for qualitative analysis. Qualitative analysis was done through a thematic analysis of all of the participants' responses where themes were generated to categorize their responses. The top three themes were generated by how often each theme was mentioned and how many people commented on the topic. The top three most commonly mentioned themes from the town hall meetings were services in Sierra County, communication within the county, and outdoor recreation.

The number one theme that was talked about the most in the town hall meetings was services in Sierra County. Specifically, participants stated the lack of services and the limited hours of services within the county. Participants stated that the county lacked dental services, maternal and child health services, services that checked on and cared for senior citizens, hospice services, health care services, and mental health services. Participants commented on the con of not having many permanent dental clinics near their area since dental service vans would be unable to come to the county whenever there was bad weather such as snow.

Participants did comment positively on the work of current dental health programs where they disseminated information and set up dental fairs for the population. For the elderly population, many participants shared concerns for people ages 65 and older about not getting enough services to check up on them and suggested bringing back home visits to help the older population in their health and social wellbeing. The participants also commented on the lack of hospitals and clinics within the area but greatly appreciated Eastern Plumas Hospital District expanding its operation to cover parts of Sierra County.

The second most frequently mentioned theme in the town hall meetings was communication within the county. Participants praised the communication concerning COVID-19 information during the pandemic; however, they also stated that a lack of communication within the county during emergencies made Sierra County an unhealthy place to live since power outages and phone lines going down would cause residents to not have access to the fire department or emergency services, which would allow them to get ambulatory or other services during times of need. The participants also stated their concern for the lack of health and resource information being shared within the county. For example, one participant shared their concern for the disposal process of vaping products. Since there was no information shared to the Sierra County residents about the proper way to dispose vaping products, the participants became concerned about the product's effects in the environment. Many residents also commented about not knowing about the county resource guide that shared information about the resources available at Sierra County. They suggested that this might be partly the reason why people in Sierra County did not know about the services and resources available in the area. Participants suggested sharing this and any other type of health information through healthcare or other community events. They also suggested having public health personnel go

out to community gatherings more to share public health information to the county and raise awareness for the resources available in the area. The third most frequently mentioned theme in the town hall meetings was outdoor recreation. Participants stated that outdoor recreation is what made Sierra county a healthy place to live and a great way for adults and youth to get out and be physically healthy, especially during the COVID-19 pandemic. However, participants shared concerns about the unsafe environment for some outdoor recreational activities. For example, participants commented on how dangerous walking was in Sierra county trails with bikers. They also stated that some of the roads and places in Sierra county were old and worn out, which made it hazardous for residents to continue doing outdoor recreation. Participants also shared their concerns about accidents that happened during outdoor recreation activities such as locating mountain bikers who got into accidents during the trail. They suggested having a better identification system along the trail and requiring bikers and hikers to have locators on them during the trail to help pinpoint their location during a search and rescue. Participants also mentioned their interest in more outdoor recreation programs such as the wilderness challenge to get children active, programs that taught youth fishing, festivals, and other activities that could bring the community together. Participants also shared promoting outdoor recreation amenities to the community since residents might be unaware of the amenities available to them.

Next Steps

Sierra County Public Health has begun the process with the collaboration of the Regional Public Health Office to build on the information gained through the CHA process. This will be done through the development of a Community Health Improvement Plan. Sierra County Public Health is intent on meeting the identified needs of the community, this will be documented and published as the CHIP within the next two years following this document. Through the creation of the CHIP, we will prioritize health needs based upon data discovered in this document. Developing an action plan that creates strategies, interventions, and goals to address the health needs of Sierra County is a key part of a CHIP. With the implementation of these strategies, interventions, and goals comes the need for further evaluation. With further iterations of the CHA/CHIP cycle, we are confident that Sierra County will become a happier, healthier, and stronger county.

References

1. U.S. Census Bureau (2020). 2015-2019 American Community Survey 5-year Public Use Microdata Samples [Excel Data File].
2. US Census Bureau. US Census Bureau QuickFacts: California. census.gov. Accessed June 2, 2023. <https://www.census.gov/quickfacts/CA>
3. American Psychological Association. Race and Ethnicity. apa.org. Published October 2022. Accessed June 20, 2023. <https://www.apa.org/topics/race-ethnicity>
4. Jensen E, Jones N, Orozco K, Medina L, Perry M, Bolender B, Battle K. Measuring Racial and Ethnic Diversity for the 2020 Census. census.gov. Published August 4, 2021. Accessed June 20, 2023. <https://www.census.gov/newsroom/blogs/random-samplings/2021/08/measuring-racial-ethnic-diversity-2020-census.html>
5. US Census Bureau. US Census Bureau QuickFacts: United States. census.gov. Accessed June 20, 2023. <https://www.census.gov/quickfacts/fact/table/US/PST045222>
6. US Census Bureau. Census Bureau Releases New Educational Attainment Data. census.gov. Published February 24, 2022. Accessed June 20, 2023. <https://www.census.gov/newsroom/press-releases/2022/educational-attainment.html#:~:text=The%20high%20school%20completion%20rate,10.5%25%20between%202011%20and%202021.>
7. Raghupathi, Raghupathi, W. The influence of education on health: an empirical assessment of OECD countries for the period 1995-2015. *Archives of Public Health = Archives Belges de Santé Publique*. 2020;78(1):20–20. <https://doi.org/10.1186/s13690-020-00402-5>
8. O'Hare, WP. The forgotten fifth: Child poverty in rural America. *The Carsey School of Public Policy at the Scholars' Repository*. 2009; 10(76): 3-24. <https://dx.doi.org/10.34051/p/2020.76>
9. Federal Reserve Bank of St. Louis. Median Household Income in California. fred.stlouisfed.org. Updated September 13, 2022. Accessed June 20, 2023. <https://fred.stlouisfed.org/series/MEHOINUSCAA646N>
10. Federal Reserve Bank of St. Louis. Estimate of Median Household Income for Sierra County, CA. fred.stlouisfed.org. Updated December 21, 2022. Accessed June 20, 2023. <https://fred.stlouisfed.org/series/MHICA06091A052NCEN>
11. Economic Research Service: US Department of Agriculture. Poverty. data.ers.usda.gov. <https://data.ers.usda.gov/reports.aspx?ID=17826>

12. US Office of the Assistant Secretary for Planning and Evaluation. 2021 Poverty Guidelines. aspe.hhs.gov. Published February 1, 2021. Accessed June 20, 2023.
<https://aspe.hhs.gov/2021-poverty-guidelines>
12. Centers for Disease Control and Prevention. Disabilities and Health Overview. cdc.gov. Updated September 16, 2020. Accessed June 20, 2023.
<https://www.cdc.gov/ncbddd/disabilityandhealth/disability.html>
13. World Health Organization. Disability. who.int. Published March 7, 2023. Accessed June 20, 2023. <https://www.who.int/news-room/fact-sheets/detail/disability-and-health>
14. Centers for Disease Control and Prevention. (2022, October 26). *Underage Drinking*.
<https://www.cdc.gov/alcohol/fact-sheets/underage-drinking.htm>
15. Sierra-Plumas Joint Unified School District. *California Healthy Kids Survey, 2010-11: Main Report*. San Francisco: WestEd Health and Human Development Program for the California Department of Education. 2011. Accessed June 2, 2023.
https://data.calschls.org/resources/SierraPlumasUSD_sec1011_main.pdf
16. Sierra-Plumas Joint Unified School District. *California Healthy Kids Survey, 2015-16: Main Report*. San Francisco: WestEd Health & Human Development Program for the California Department of Education. 2016. Accessed June 2, 2023.
https://data.calschls.org/resources/Sierra-Plumas_Joint_Unified_1516_Sec_Grd9-12_CHKS.pdf
17. Sierra-Plumas Joint Unified School District. *California Healthy Kids Survey, 2021-2022: Main Report*. San Francisco: WestEd for the California Department of Education. 2022. Accessed June 2, 2023.
https://data.calschls.org/resources/Sierra-Plumas_Joint_Unified_2122_Sec_CHKS.pdf
18. Sierra County. *California Healthy Kids Survey, 2015-2017: Main Report*. San Francisco: WestEd for the California Department of Education. 2017. Accessed June 2, 2023.
https://data.calschls.org/resources/Sierra_County_1517_Sec_CHKS.pdf
19. Centers for Disease Control and Prevention. (2022a, October 6). *More than 2.5 million youth reported e-cigarette use in 2022*.
<https://www.cdc.gov/media/releases/2022/p1007-e-cigarette-use.html#:~:text=Youth%20use%20of%20tobacco%20products,future%20addiction%20to%20other%20drugs.>
20. Centers for Disease Control and Prevention. (n.d.). Smoking and youth [Fact Sheet].
https://www.cdc.gov/tobacco/sgr/50th-anniversary/pdfs/fs_smoking_youth_508.pdf
21. Centers for Disease Control and Prevention. (2022b, November 10). *Quick facts on the risks of e-cigarettes for kids, teens, and young adults*.
https://www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html

22. De Biasi, M., & Dani, J. A. (2011). Reward, addiction, withdrawal to nicotine. *Annual review of neuroscience*, 34, 105–130. <https://doi.org/10.1146/annurev-neuro-061010-113734>
23. University of Wisconsin Population Health Institute. (2023). *Sierra, CA*. <https://www.countyhealthrankings.org/explore-health-rankings/california/sierra?year=2016>
24. US Department of Health and Human Services. (n.d.). *Reduce current cigarette smoking in adults*. <https://health.gov/healthypeople/objectives-and-data/browse-objectives/tobacco-use/reduce-current-cigarette-smoking-adults-tu-02>
25. Centers for Disease Control and Prevention. (2023, February 24). *About physical activity*. <https://www.cdc.gov/physicalactivity/about-physical-activity/index.html>
26. Centers for Disease Control and Prevention. (2022a, May 2022). *Physical activity*. <https://www.cdc.gov/physicalactivity/index.html>
27. Centers for Disease Control and Prevention. (2022b, June 3). *Walking*. <https://www.cdc.gov/physicalactivity/walking/index.htm#:~:text=The%20Physical%20Activity%20Guidelines%20for,an%20equivalent%20combination%20each%20week.>
28. Centers for Disease Control and Prevention. (2022b, June 3). *Walking*. <https://www.cdc.gov/physicalactivity/walking/index.htm#:~:text=The%20Physical%20Activity%20Guidelines%20for,an%20equivalent%20combination%20each%20week.>
29. California Department of Education. (2023, April 17). *Physical fitness test*. <https://www.cde.ca.gov/ta/tg/pf/>
30. California Department of Education. (2023) *Data Quest*. <https://data1.cde.ca.gov/dataquest/>
31. California Department of Education. (2023). *Secondary student*. CALSCHLS. <https://calschls.org/reports-data/public-dashboards/secondary-student/>
32. Let's Get Health California. (2016). *Healthy beginnings: Decreasing frequency of sad or hopeless feelings in youth*. <https://letsgethealthy.ca.gov/goals/healthy-beginnings/decreasing-frequency-of-sad-and-hopeless-feelings-in-youth/>
33. Betancourt JA, Granados PS, Pacheco GJ, et al. Exploring Health Outcomes for U.S. Veterans Compared to Non-Veterans from 2003 to 2019. *Healthcare (Basel)*. 2021;9(5):604. Published 2021 May 18. doi:10.3390/healthcare9050604
34. Montez JK, Zajacova A, Hayward MD, Woolf SH, Chapman D, Beckfield J. Educational Disparities in Adult Mortality Across U.S. States: How Do They Differ, and Have They Changed Since the Mid-1980s?. *Demography*. 2019;56(2):621-644. doi:10.1007/s13524-018-0750-z

35. Chetty R, Stepner M, Abraham S, et al. The Association Between Income and Life Expectancy in the United States, 2001-2014 [published correction appears in JAMA. 2017 Jan 3;317(1):90]. *JAMA*. 2016;315(16):1750-1766. doi:10.1001/jama.2016.4226
36. Meherali S, Punjani N, Louie-Poon S, et al. Mental Health of Children and Adolescents Amidst COVID-19 and Past Pandemics: A Rapid Systematic Review. *Int J Environ Res Public Health*. 2021;18(7):3432. Published 2021 Mar 26. doi:10.3390/ijerph18073432
37. Bover Manderski MT, Delnevo CD, Warner KE. Toward a More Comprehensive Index of Youth Cigarette Smoking: Average Number of Cigarettes Smoked per Day among Students in the United States over Two Decades. *International Journal of Environmental Research and Public Health*. 2021; 18(2):478. <https://doi.org/10.3390/ijerph18020478>
38. Urhonen T, Lie A, Aamodt G. Associations between long commutes and subjective health complaints among railway workers in Norway. *Preventive Medicine Reports*. 2016;4:490-495. doi:10.1016/j.pmedr.2016.09.001
39. Copren WG. A General History of Sierra County.
40. Sierra Buttes. SummitPost.org. Accessed September 12, 2023. <https://www.summitpost.org/sierra-butttes/150520>.
41. Ures, K. Sierra County Oral Health Assessment. 2020

Appendix A

Key Informant Interview Questions

Below we will highlight sections and subsequent questions for focus groups. The idea is to get a wide grasp of the issues facing residents of Sierra County, while also being specific and avoiding fatigue.

1. What are your visions of a healthy community?
2. What is your favorite part of living in Sierra County?
3. What is your least favorite part of living in Sierra County?
2. General thoughts on services provided by Sierra County.
 - a. Public Health
 - b. Oral Health
 - c. Maternal and Child Health
 - d. Tobacco Use Reduction
 - e. Mental Health Services
 - f. WIC
3. Thoughts on the general health of Sierra County
 - i. What do you believe is the greatest health issue facing Sierra County?
 - ii. What factors do you believe are impacting the health of Sierra County?
 - iii. What types of unhealthy behaviors do you think Sierra County struggles with the most?
4. What are we doing good at?
 - i. What makes Sierra County a healthy place to live?
 - ii. What programs that we provide are we excelling at?
5. What Could improve
 - i. What do you think could make Sierra County a healthier county?
 - ii. How can programs better reach you?
 - iii. What programs do you want to see in Sierra County that would help improve the health of its residents?
6. Personal Questions for Sierra County Residents
 1. What factors do you think prevent people in Sierra County from having healthy behaviors?
 2. What programs in Sierra County were helpful in encouraging healthy behaviors?
7. Physical Activities
 1. What factors/programs/amenities in Sierra County make it easier for you or your family to be physically active?

2. What factors in Sierra County make it difficult for you or your family to be physically active?
8. Outside questions possible depending on who is being interviewed.

Appendix B

Town Hall Questions

The purpose of this document is to provide an overview of the town hall questions that will be asked. These questions are meant to be similar to those in the focus groups but reworded for a larger group setting/open comment period.

1. What do you think makes Sierra County a Healthy place to live?
2. What are your general thoughts on the services that Sierra County Provides?
Some examples of services are.....
 - a. Public Health
 - b. Oral Health
 - c. Maternal and Child health
 - d. Tobacco Reduction programs
 - e. Mental health services
 - f. Etc etc etc
3. What factors do you believe are impacting Sierra County's health negatively?
4. What factors do you believe are impacting Sierra County's health positively?
 - a. What are some resources in Sierra County that have been beneficial to the health of the community?
 - i. This question is kind of the same as question 4, but I think the highlighted question would narrow down people's answers to amenities that Sierra County offers (both by public health and by the local community)
5. What are some current public health programs that you think are beneficial in Sierra County?
 - a. This question is a little bit similar to "4a" but targets specifically public health programs.
6. What programs do you think Sierra County could add in order to improve the health of its residents? You can also suggest current programs in Sierra County that need improvement as well.
7. How would you like to see communication about public health matters in the future?
8. What factors in Sierra County make it easier to be physically active in the area?
9. What factors in Sierra County make it difficult to be physically active in the area?
10. What are some unhealthy behaviors that you see in Sierra County that need to be addressed?

Appendix C
Resource Guide

[Sierra-County-Resource-Guide \(ca.gov\)](http://Sierra-County-Resource-Guide.ca.gov)

