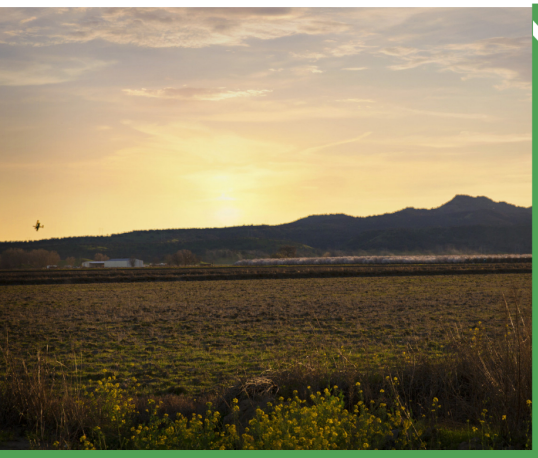
2019
Community Health Needs Assessment

Orchard Hospital



2019

COMMUNITY

HEALTH

NEEDS
ASSESSMENT

Orchard
HOSPITAL

Growing Healthy Communities

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Mission, Vision, and Values

Our Mission

Growing Healthy Communities

Our Vision

Orchard Hospital will be a Health Center of Excellence, nationally recognized for providing quality, compassionate, and personalized care that improves the health and well-being of our patients and their communities.

Our Values

At Orchard Hospital, our governance and decision making will always be based upon integrity, respect, innovative processes, ethical foundations, and continual self-improvement.

H - Honesty and Integrity

We will make decisions with honesty and integrity that will ensure Orchard Hospital's future.

E - Engaged and Empowered Staff

We will hire staff that are engaged and empowered to make a positive difference in the lives of our patients and each other.

R - Responsive

We will respond to the needs of our community by implementing programs that align with our Community Health Needs Assessment (CHNA).

O - Outcomes-Driven

We will be recognized for having excellent outcomes for the services we provide at Orchard Hospital.

Growing Healthy Communities

Introduction

Orchard Hospital located in Gridley, California is a 501(c)(3) Critical Access Hospital offering 24 hour emergency services, inpatient, outpatient and rural health clinic services. Orchard Hospital is dedicated to always providing the finest personalized healthcare to North Valley communities by offering a wide range of integrated services, from prevention through treatment to wellness.

Orchard Hospital is the only acute care hospital in Gridley, as well as along Highway 99 between Sacramento and Chico, providing needed emergency and inpatient services.

Orchard Hospital is certified for 24 general acute care beds (4 Monitored Beds and 20 Unspecified General Acute Care).

SERVICES AVAILABLE

- Acute/Skilled Inpatient Care
- Cardiology
- Cardiopulmonary
- Emergency Services
- Geriatric Clinic Services
- Inpatient/Outpatient GeneralSurgery
- Laboratory Services
- Long Term Care
- Occupational Therapy
- Physical Therapy
- Primary and Specialty Clinic Services
- Radiology Services
- Speech Language Pathology
- Social Services

Rural Health Clinic Services

- DEXA Scanning
- Digital Mammography
- Digital Radiology
- Drug Screening
- Industrial Medicine
- Internal Medicine
- Interventional
- Laboratory
- MRI
- Nephrology
- Pain Management
- Pathology
- Physicals
- Physical Therapy
- Podiatry
- Psychotherapy
- Ultrasound
- Workers Comp

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Purpose and Overview of the Community Health Needs Assessment

Under the Affordable Care Act, hospitals throughout the country are required to conduct a Community Health Needs Assessment (CHNA) every three years.

The primary purpose of conducting a CHNA is to objectively look at the current health needs of a community, as well as the existing resources available to address those needs, then prioritize the unmet health needs and create an action plan to address them in the coming years. In Butte County, this has been a comprehensive and collaborative project, bringing together Orchard Hospital, Enloe Medical Center, Adventist Health Feather River, and Butte County Public Health.

Using the community feedback and health data gathered, the resulting response and action plan will help shape programs over the next three years

Report Adoption, Availability, and Comments

This CHNA report was adopted by the Orchard Hospital Board of Directors on November 2019.

This report is widely available to the public on the hospital's web site, www.orchardhospital.com. Written comments on this report can be submitted to llittle@orchardhospital.com.

2016 CHNA Response

In 2016, Orchard Hospital partnered with Butte County Public Health and the three other hospitals in our county to conduct the Community Health Needs Assessment. The outcome was an action plan that focused our community outreach efforts on three main areas affecting community health:

- Social determinants of health
- Chronic diseases
    - Obesity
    - Diabetes
- Substance abuse and mental illness

Orchard Hospital is committed to identifying opportunities to collaborate with community partners throughout the region to break down barriers associated with these pressing health and social needs as well as providing the education and other tools members of our community need to be proactive in their health and lifestyle choices.

Action Plan and Results from the 2016 Community Health Needs Assessment:

Social Determinates of Health:

The Centers for Medicare and Medicaid Services promotes the concept of an accountable healthy community model for addressing social needs that can improve health outcomes and reduce costs. Orchard Hospital will continue fostering relationships throughout the community that support this model and promote connections between community members and essential services such as access to healthy foods, transportation, safe living environments, etc.

Response - Through community partnerships and outreach events such as Orchard Hospital's annual community health fair and other health education programs, we increased awareness and access to necessary support services. Programs and activities included:

- Orchard Hospital Health Ambassador Program
    - Educating youth on healthy eating options and fitness goals.
- Orchard Hospital Case Management
    - Offering support services for patients and family members during their inpatient status and following discharge.
- Center for Healthy Communities, CalFresh Outreach Program
    - Nutrition education and CalFresh
    - Referrals to food benefits for qualified individuals
- Help Central Inc./Butte 2-1-1
    - Community resource database and referral assistance
- California Health Care Options
    - Education and enrollment support for Medi-Cal benefits
- Passages
    - Education and enrollment support for Medicare benefits

Chronic Disease:

Butte County residents have a higher than average incidence of chronic conditions including adult/childhood obesity, chronic obstructive pulmonary disease (COPD, asthma), and depression. Addressing the unmet social needs and influencing the health of the community is one way in

which we can work to lower the incidence of these chronic conditions. There is also the expressed need for one-on-one, inpatient, outpatient, and community education to empower individuals to take charge of their health and move toward wellness.

Response- Throughout the last three years, Orchard Hospital has hosted community health education programs and provided opportunities for individuals to learn directly from health care professionals in the specialty areas linked to top identified health needs.

In addition to facilitating physician-community engagement opportunities through community events, Orchard Hospital was able to create a new program called Accessible Intervention Respiratory Education program (AIRE). This program was designed to assess and monitor disease, reduce risk factors, manage stable COPD, and manage exacerbations. We were able to teach our community members suffering from lung disease about living a healthier and active lifestyle with minimal exacerbations.

Orchard Hospital partnered with Gridley Unified School District to offer the Health Ambassador Program to help curb and prevent childhood obesity. Through weekly P.E. classes, Health Science Pathway students from Gridley High School mentored middle school and elementary-aged children about the importance of nutrition and fitness. The Health Ambassadors taught 15-20 minute nutritional lessons using MyPlate and provided a healthy snack along with a 25-minute fitness lesson from play 60.

Orchard Hospital will continue extending our reach and impact in high need areas through collaboration, partnerships, and support of programs including:

- Center for Healthy Communities
- Gridley Unified School District
- Diabetes Prevention Education
- Nutritional Counseling
- MyPlate Education
- AIRE Program
- Orchard Hospital Senior Life Solutions
- Psychotherapy

Substance Abuse & Mental Illness:

Mental illness and substance abuse; including alcohol, tobacco, illicit drugs, and prescription opioids, continue to rise toward the top of pressing health needs facing Butte County residents. In

our region, nearly one-third of youth and adults struggle with mood disorders, such as depression, and roughly 20% of youth and adults experience a form of substance use disorder.

Feedback from participants in the focus group discussions called for a community-wide focus on prescription overdose problems, easy access to safe disposal of medications, and a need to educate youth on the consequences of flavored tobacco, vaping, e-cigarettes, and nicotine. Orchard Hospital partnered with local programs, agencies, coalitions, and task-forces dedicated to addressing these needs.

Response: Orchard Hospital offers easy access for safe disposal of medications and syringes.

Orchard Hospital implemented best-practices for managing prescription pain medications by hiring an integrated pain management physician to help provide additional approaches to pain management. Orchard Hospital is also providing Continuing Medical Education (CME) for Butte County prescribing providers regarding prescription opioid misuse and abuse.

Orchard Hospital created a program called Senior Life Solutions. This program helps individuals suffering from depression, anxiety, loss/grief, trauma, life transition, and other mild to moderate forms of psychiatric issues. We will continue to grow this program to serve our geriatric patients better.

In the spirit of an accountable health community model, Orchard Hospital will continue collaborating, partnering with and supporting other programs and organizations to extend our reach and impact in high needs areas including:

- Butte County Behavioral Health
- Butte County Drug Abuse Prevention Task Force
- Butte County Tobacco Prevention Coalition
    - Smoking Cessation
- Orchard Hospital Pain Management Doctor
- Orchard Hospital Senior Life Solutions
- Psychotherapy

Representatives from these areas span health care, law enforcement, treatment providers, pharmacists, educators, advocates, and community members at large. Together, we provide educational opportunities and develop and promote policy changes to improve contributing factors such as density of retail alcohol and tobacco establishments, public smoking (including the use of vaping devices), and substance use among youth.

A Commitment to Our Community

Work on the 2019 Butte County Community Health Needs Assessment (CHNA) began in the Spring/Summer of 2018 with the convening of core partners who share a common service area: Butte County Public Health, Orchard Hospital, Enloe Medical Center, and Adventist Health Feather River Hospital. This collaborative effort has reduced redundancies and increased data collection efficiency. Of note, the most destructive wildfire in California's history, the Camp Fire, interrupted these collaborative CNHA efforts in the Fall of 2018 through the Spring of 2019; which dramatically affected Butte County across a myriad of health care delivery system factors and community health determinants. The full impact of natural disaster has had on the community's health will not be evident for some time, and the results of the current assessment do not adequately address them.

Prioritization Process

Significant health needs were identified from secondary data using the size of the problem (relative portion of population afflicted by the problem) and the seriousness of the problem (impact at individual, family, and community levels). To determine the size or severity of the problem, the health need indicators identified in the secondary data were measured against benchmark data from county rates, state rates and/or Healthy People 2020 objectives. Indicators related to the health needs that compared unfavorably against one or more of the benchmarks met the "health need" criteria.

The list of significant health needs informed primary data collection. The primary data collection process was designed to validate secondary data findings, identify additional community issues, solicit information on disparities among subpopulations, ascertain community assets to address needs, and discover gaps in resources. Community focus groups and stakeholder interviews were used to gather input and prioritize the significant health needs.

Top priorities identified in partnership with our communities:

Community stakeholders were asked to rank order the significant health needs according to the highest level of importance in the community.

- Access to Care
- Mental Health
- Substance Use Disorders
- Chronic Conditions
- Adverse Childhood Experiences and Childhood Maltreatment
- Dental health
- Overweight & obesity
- Transportation
- General Health

From 2020-2022, Orchard Hospital will address the following health needs through a commitment of community programs and resources.

Lead members of the collaborative team include:

Orchard Hospital | Lyndi Little Wallace, Director of, Physician Recruitment, Marketing & Community Outreach

Enloe Medical Center | Suzie Lawry-Hall, Community Outreach Coordinator

Adventist Health Feather River Hospital | Paul Sandman, Senior Community Integration Analyst Mission Integration

Butte County Public Health | Gene Azparren, Program Manager, Accreditation, and Sandy Henley, MS, MHPA, Public Health Epidemiologist

Service Area

Orchard Hospital is located at 240 Spruce St., Gridley, CA 95948. The service area includes four communities consisting of 5 ZIP Codes in Butte County.

Orchard Hospital Service Area

ZIP Code	Place
95948	Gridley
95917	Biggs
95974	Richvale
95965	Oroville
95966	Oroville

Community Profile

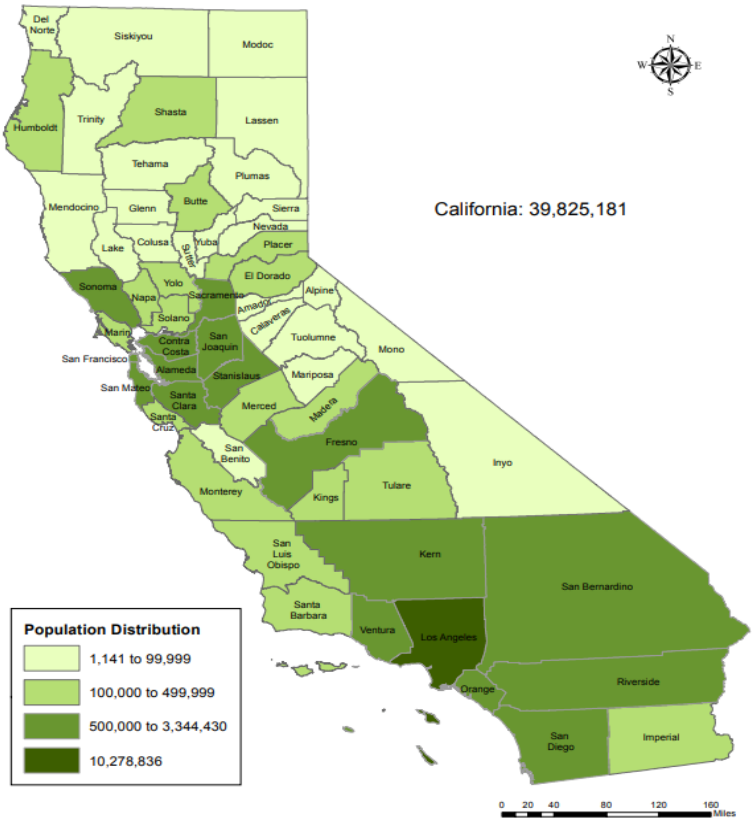

Figure 1: Population distribution

Source: State of California, Department of Finance, E-2. California County Population Estimates and Components of Change by Year, July 1, 2010-2018. Sacramento, California, December 2018

Butte County is in the northern portion of the Sacramento Valley Region of North Central California and encompasses approximately 1,677 square miles, of which 1,636.5 square miles are land, and 41 square miles are water. According to the 2018 California Department of Finance County Population State and County Population Estimates, California's population is 39,825,181, and Butte County is ranked the 27th largest county with a population of 227,837 (see Figure 1).

Population estimates for California have increased every year since 2010. Butte County estimates have also increased every year since 2010. California had an average estimated increase in population of 0.8% each year while Butte County's population estimates increased by an average of 0.4% each year (see Table 1).

Table 1: Population of Butte County and California, 2010-2013

	Butte County		California	
	Number	Percent	Number	Percent
2010	220,202	-	37,334,578	-
2011	220,636	0.20%	37,678,534	0.92%
2012	221,823	0.54%	38,045,271	0.97%
2013	222,541	0.32%	38,425,695	1.00%
2014	223,978	0.65%	38,756,940	0.86%
2015	224,533	0.25%	39,076,128	0.82%
2016	225,094	0.25%	39,328,337	0.65%
2017	226,661	0.70%	39,610,556	0.72%
2018	227,837	0.52%	39,825,181	0.54%

Source: State of California, Department of Finance, E-2. California County Population Estimates and Components of Change by Year — July 1, 2010–2018, December 2018

Age and Gender

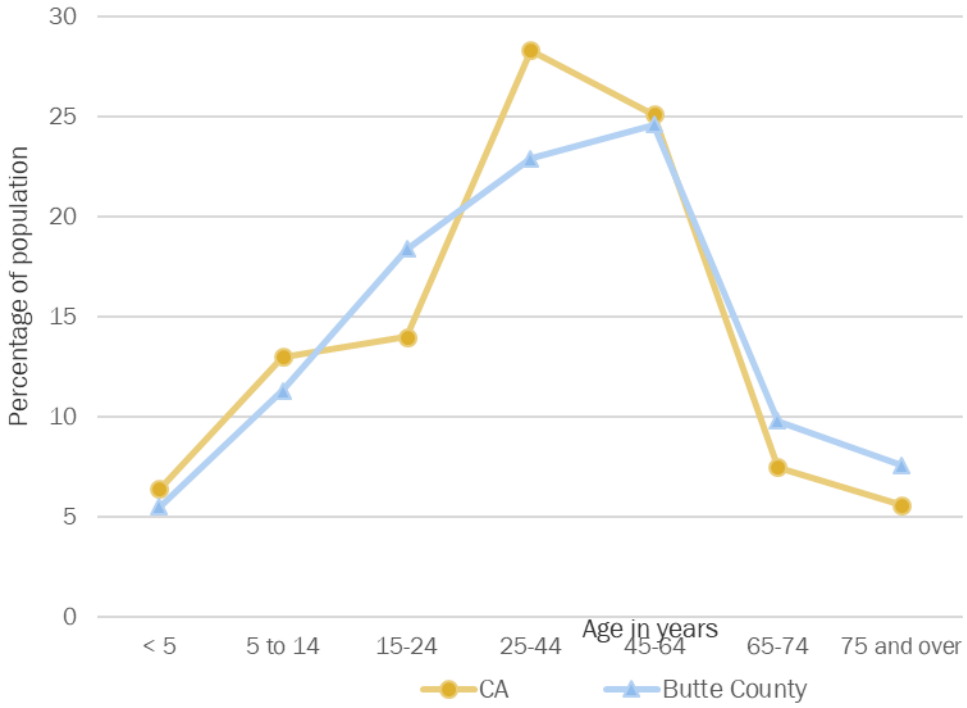

Figure 2: Population by age group: Butte County and. California, 2013-2017

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, Table S0101

The population of Butte County is slightly older than the population of California. The median age in Butte County is 36.9 years old compared to California, which is 36.1 years old1. Butte County has a higher percentage of individuals, ages 15 to 24 years old, and seniors, over the age of 65 years old, but a lower percentage of adults, ages 25 to 64 years old, when compared to California (see Figure-2).

The population increase has been steady in Butte County with an increase between 2015 and 2017 of 3,883 (1.7%) people. As predicted in a growing population, many age groups had increasing numbers. Exceptions included children under age 5, which remained unchanged in population; and decreases in the number of school-age children, between the ages of 5 and 9, young teens, between the ages 10 and 14, and teens and young adults, between the ages 15 and 24 (see Table 2).

[1] U.S. Census Bureau, 2013-217 American Community Survey 5-Year Estimates, Table S0101

Table 2: Age distribution in Butte County, 2015-2017					
	2015		2017		Trend, 2015-2017
	Number	Percent	Number	Percent	
Total population	225,411		229,294		↑
Under 5 years	12,172	5.4%	12,387	5.4%	↔
5 to 9 years	15,103	6.7%	14,888	6.5%	↓
10 to 14 years	11,045	4.9%	10,780	4.7%	↓
15 to 24	41,025	18.2%	40,138	17.5%	
25 to 64	106,394	47.2%	109,678	47.9%	
65 to 84	33,586	14.9%	35,887	15.6%	
85 and over	5,635	2.5%	5,536	2.6%	

Source: U.S. Census Bureau, 2015 and 2017 American Community Survey 1-Year Estimates. Table-S0101-age and sex

In 2017, the distribution of males to females in Butte County was similar to that of California (see Table 3). Although there are more females than males in Butte County, men (67%) outnumber women (64.7%) among working-age adults, ages 15 to 64 years old. For seniors, ages 70 and over, there is a greater percentage of females (13%) compared to males (10.1%).

Table 3: Gender distribution in Butte County, 2017				
	Butte County		**California**	
	Number	Percent	Number	Percent
Male	113,399	49.5%	19,650,051	49.7%
Female	115,895	50.5%	19,886,602	50.3%

Source: U.S. Census Bureau, 2017 American Community Survey 1-Year Estimates. T-S0101 - age and sex

Race and Ethnicity

Based on the U.S. Census Bureau there are seven major race and ethnicity categories: African American/Black, American Indian/Alaska Native, Asian, Hispanic/Latino, Native Hawaiian/Pacific Islander, White, and other. In addition, an individual may identify as belonging to two or more races, and an individual who identifies as being Hispanic/Latino may identify as belonging to any race. These race and ethnicity categories are self-determined, meaning that individuals identify their own race or ethnicity in the census. *Race* refers to groups of people who have differences and similarities in biological traits deemed by society to be socially significant, addition, a lower percentage of Butte County residents spoke Spanish at home than residents of California (see Table 5).

Table 5: Language other than English spoken at home				
	Butte County		**California**	
Language at home, ages 5 to 17 years				
English only	85.6%	185,707	55.6%	20,596,574
Spanish	9.0%	19,495	28.9%	10,698,137
Other	5.4%	11,705	15.6%	5,781,517
Language at home, ages 18 years and over				
English only	88.3%	155,805	64.4%	16,526,703
Spanish	7.1%	12,465	21.3%	5,455,874
Other	4.6%	8,171	14.3%	3,667,878

Source: 2017 American Community Survey 1-Year Estimates. Table S1601

Most people over the age of 5 in Butte County spoke only English at home (85.7%). Of these English speakers, 15.2% were between the ages of 5 and 17, 65.1% were between the ages of 18 and 64, and 19.7% were age 65 or older (see *Table 6*).

Table 6: Characteristics of people by language spoken at home, Butte County, 2013-2017			
	Total	People who speak only English at home	People who speak a language other than English at home
Total population, 5 years and over	212,825	182,365 (85.7%)	30,460, (14.3%)
5 to 17 years	15.5%	15.2%	17.6%
18 to 64 years	66.2%	65.1%	72.3%
65 years and over	18.3%	19.7%	10.1%

Source: 2013-2017 American Community Survey 5-Year Estimates. Table - S1603

Disability Prevalence

According to the Centers for Disease Control and Prevention (CDC), the number of adults reporting a disability is expected to increase, along with the need for appropriate medical and public health services. People with disabilities face many barriers to good health. Studies show that individuals with disabilities are more likely than people without disabilities to report having poorer overall health, less access to adequate health care, limited access to health insurance, skipping medical care because of cost, and engaging in risky health behaviors including smoking and physical inactivity.

Independent living difficulty

The percent of the population with an independent living difficulty is based on the 2013-2017 American Community Survey question asked of persons ages 15 and older: "Because of a physical, mental, or emotional condition, does this person have difficulty doing errands alone such as visiting a doctor's office or shopping?" with response categories "yes" or "no."

Self-care difficulty

The percentage of the population with a self-care difficulty provides a narrower measure of the need for personal assistance services, similar to having difficulty in one or more activities of daily living (ADL). It is based on questions from the 2013-2017 American Community Survey questionnaire asked in a series to person's ages 5 years and older: "Because of a physical, mental, or emotional condition, does this person have serious difficulty concentrating, remembering, or making decisions? Does this person have serious difficulty walking or climbing stairs? Does this person have difficulty dressing or bathing?" with response categories "yes" or "no."

In Butte County, a higher percentage of adults, between the ages of 18 and 64, have disabilities than in the state (see Table 7).

Table 7: Disability prevalence, Butte County and California, 2013- 2017

	Ages 18-64			Ages 65 and over		
	With an independent living difficulty	With a self-care difficulty	Total persons	With an independent living difficulty	With a self-care difficulty	Total persons
Butte County	5.8%	2.7%	139,388	16.1%	9.8%	37,864
California	3.0%	1.6%	24,335,458	17.2%	9.9%	5,052,924

Source: 2013-2017 American Community Survey 5-Year Estimates. Table S1810

Household Characteristics

Like the state of California, the majority of households in Butte County are family households. Married-couple families make up slightly less than half of the county's households. The percentage of single-parent families in Butte County is lower than the statewide average and a notably greater percentage of Butte County residents live alone or in non-family households than the statewide average. Nearly 13% of Butte County households include adults, ages 65 and over (see *Table 8*).

Table 8: Household characteristics, 2013-2017

	Butte County	California
Total households	86,167	12,888,128
Family households (families)	59.8%	68.8%
Married-couple family	43.4%	49.5%
Male householder, no wife present, family	5.1%	5.9%
Female householder, no husband present, family	11.3%	13.3%
Non family household	40.2%	31.2%
Aged 65 years and over	12.8%	9.1%
Number of grandparents responsible for own grandchildren under 18 years	2,001 of 4,298 (46.6%)	270,310 of 1,149,466 (23.5%)
Grandparents responsible who are female	61.9 %	61.7%
Grandparents responsible who are married	73.6%	71.1%

Source: 2013-2017 American Community Survey 5-Year Estimates; Tables S1101; S1201; DPO2

Primary and Secondary Data Sources Were Gathered

Primary health survey sample data was collected in Spring/Summer 2019 from over 700 Butte County residents using the Behavioral Risk Factor Surveillance System (BRFSS) survey protocol and methodology. Results are hereafter referred to as the Behavioral Risk Factor Survey (BRFS) and treated as equivalent to state and national BRFSS results for comparisons. Qualitative focus group data with underrepresented groups and other hard to reach subpopulations were also conducted in the Spring and Summer of 2019. Quantitative secondary data was collected beginning in the Fall of 2018 from several sources including the Robert Wood Johnson Foundation (RWJF), California Health Interview Survey (CHIS), Office of Statewide Health Planning and Development (OSHPD), and the California Department of Public Health (CDPH).

Primary Data Collection

In 2019,the Butte County Public Health Department partnered with Orchard Hospital, Enloe Medical Center, and Adventist Health Feather River Hospital to retain the services of Issues & Answers Network, Inc. to administer the Butte County Behavioral Risk Factor Survey in order obtain an estimate of the prevalence of behaviors and conditions in Butte County. This survey also follows the CDC protocol for the BRFSS and uses the standardized core questionnaire and modules.

Respondents were drawn from a random sample of Butte County residents. The phone call campaign resulted in 711 completed interviews, 184 refusals, 2,359 non-working or disconnected numbers, 6,357 no answers, 1,849 numbers that were not private residences, 2,348 numbers and/or respondents with undetermined eligibility, 61 households and/or respondents with physical or mental impairment, 66 eligible respondents selected but not interviewed, 176 households and/or eligible respondents with language barriers, 946 households with telecommunication barriers and special technological circumstances, 537 households on a do-not-call list, 498 households that were out-of-sample, 149 fax or modem lines, 5,038 answering machines, 68 pagers, 28 landline numbers in the cell phone sample, and 126 interviews that were terminated/partial completes. The American Association for Public Opinion Research (AAPOR) response rate was 18.41%. The refusal rate was 1.48%.

All of the interviews were completed between April 17 and June 16, 2017, with each completed interview lasting, on average, approximately 35 minutes.

Moreover, considering the 2018 November Campfire, additional steps were taken to ensure that the temporarily relocated residents of Paradise (95965) and Magalia (95954) were included and adequately represented in the survey process. This was achieved via a series of screening questions asked of respondents (both landline and cell phone) who said they did not live in Butte County.

The collected BRFSS data were weighted to adjust for gender, age, and race using the 2010 Butte County Census population distributions.

The full report and summary table of risk factors data from the 2019 Butte County Risk Factors Survey can be found in the Appendix.

Secondary Data Collection

To gather valuable insights from community members to inform the Community Health Needs Assessment, Butte County Public Health (BCPH) contracted the firm Morrision and Company (Chico, California) to facilitate numerous community focus groups.

Representatives from Orchard Hospital, Enloe Medical Center, Adventist Health Feather River, and BCPH organized each focus group, collaborating with existing Butte County community organizations on several occasions to host focus groups in coordination with previously scheduled events or meetings. This leveraged the established relationships these groups have with the individuals they serve, facilitating active participation by community members. Focus groups were also held at various times throughout the day to best accommodate the schedules of participants. The focus groups ranged in size, with an average of 10 attendees per group.

In total, 12 focus groups reaching 114 participants were conducted, with participants representing a broad spectrum of the community. Participation was received from seniors, college students, individuals receiving mental health services, individuals participating in programs at both the African American Family and Cultural Center and the Hmong Cultural Center, high-school students, physicians, general community members, veterans, and individuals experiencing homelessness. Of those 114 participants, 88 completed a written survey utilized in data collection as displayed for the purposes of this reporting section. A series of questions were designed with input from representatives from Orchard Hospital, Enloe Medical Center, Adventist Health Feather River, and Butte County Public Health, as well as the Morrison facilitator. Participants were asked questions as a group and encouraged to share their own personal experiences or anecdotal experiences observed from friends and family in accessing health care and living healthy lives.

The full report and summary of data from the 2019 Butte County Focus Groups can be found in the Appendix: 3 Supporting Documents Community Engagement Focus Group Summary, Morrison Inc.

2019 Executive Summary

The results of all three-assessment methods were reviewed for their degree of commonality. Secondary health metric data was made to align with health survey and qualitative focus group data, such that those health factors with the greatest alignment became evident. The health factors most substantially implicated that emerged through this process are:

- Access to Care
- Mental Health and Substance Use Disorders
- Chronic Disease and Conditions
- Adverse Childhood Experiences and Childhood Maltreatment

***Access to Care*:** Access to health services is a leading health indicator (LHI) for the Healthy People 2020 (HP-2020) national health objectives. A person's ability to access health services profoundly affects their health and well-being. Having a usual primary care provider (PCP) is associated with: greater patient trust in the provider; better patient-provider communication; increased likelihood that patients will receive appropriate care; and lower mortality from all causesi. Access to mental health and oral health care are also important, as both mental health conditions and oral health correlate strongly with physical health and well-being.

Primary Care Shortage: The Health Resources & Services Administration (HRSA) has designated Butte County as provider "shortage areas" in primary care, dental care, and mental health. While only parts of the county meet primary care and dental care shortage area criteria, the entire county meets "Mental Health Shortage Area" criteria. Population to provider ratios also demonstrate that Butte County has fewer primary care physicians and dental care providers per capita than the statewide average; however, Butte County does have more non-physician primary care providers (e.g. physician's assistants and nurse practitioners) and mental health care providers per capita than the statewide average.

Table – Access 1: Population to Provider Ratios: Butte County and California, 2012 & 2016.

	Butte County			Statewide Average		
	2012	2016	Percent Change	2012	2016	Percent Change
Primary Care Physician	1497:1	1660:1	10.9%	1294:1	1270:1	-1.9%
Other Primary Care (Non Physician)	1241:1	1042:1	-16.0%	2406:1	1770:1	-26.4%
Dental Care	1461:1	1410:1	-3.5%	1291:1	1200:1	-7.0%
Mental Health Care	238:1	170:1	-28.6%	388:1	310:1	-20.1%

Source: 2012 and 2016 Area Health Resource Data File via County Health Rankings. Retrieved From: http://www.countyhealthrankings.org/app/california/2019/rankings/butte/county/outcomes/overall/snapshot

The BRFS indicated slightly more than one-third (34.1%) of Butte County adult respondents do not have a personal doctor or health care provider, which is substantially above California state and national averages (24.5% and 22.5%, respectively.) In addition, 14.5% of Butte County respondents reported not seeing a doctor because of the cost, while just 11.8% of respondents statewide cited cost as a barrier to seeking medical care. Focus group results revealed that access to care was ranked as the most important health topic across all groups, with 81% of the 88 total focus group participants ranking access to care as very important for community health in Butte County and 40.9% ranking transportation as a substantial barrier to care for county residents.

Preventative Practices: Preventive health practices are health services that prevent illnesses or diseases, such as screenings and immunizations, or patient counselling to prevent illnessii. Examples include standard immunizations; and screenings for blood pressure, cancer, cholesterol, depression, obesity, and Type 2 diabetesiii. In recent years, several preventable diseases once on the verge of eradication, such as measles, have reemerged in the United States, with outbreaks occurring throughout California, including Butte County. Likewise, sexually transmitted infections (STIs) once thought to be declining or close to eradication, such as syphilis, have shown increasing rates nationally. Many STIs are treatable, but if undetected, may continue to be transmitted; and many more are preventable through education and patient counseling.

The percentage of students having all required immunizations for enrollment into Butte County schools is slightly below the statewide percentage (93% vs. 96%). Likewise, conditional entrant enrollments – students with some but not all required immunizations – attending Butte County schools is higher than California schools overall (3.1% vs. 1.7%). According to the BRFS, 47.8% of Butte County respondents over the age of 65 have not had a flu shot in the past 12 months; and 29% had not received pneumococcal vaccine, which was also greater than the percentage statewide (23.2%). Likewise, 73.2% of Butte County respondents age 50 or older have not been vaccinated against shingles, which was slightly greater than the percentage of respondent's state and nationwide (68.9% and 71.4%, respectively).

Rates of STIs (chlamydia, gonorrhea, and syphilis) for both the county and the state have demonstrated a steadily increasing trend from 2013 to 2017. Especially concerning are the increasing rates of syphilis. In Butte County, rates increased from 0.9 cases per 100,000 residents in 2013 to 33.6 in 2017; and from 16.8 cases per 100,000 residents to 34.6 statewide during this time period. While rates of congenital syphilis showed an increasing but statistically unreliable trend in Butte County, the statewide rate increased from 11.7 to 58.2, indicating that the

statistically underpowered trend observed in Butte County is likely accurate. Also concerning, is that a slightly lower percentage (37.9%) of Butte County BRFS respondents reported ever having an HIV test than respondents statewide (40.8%).

Pertaining to preventative practices for excessive alcohol use, 17.0% of Butte County BRFS respondents reported being advised on harmful levels of drinking during a routine checkup with a healthcare provider, compared with 24.2% of respondents statewide; and 11.5% of Butte County respondents were advised to drink less compared with 12.5% of survey respondents statewide.

***Mental Health and Substance Use Disorders**: M*ental health is a leading health indicator for the HP-2020 objectives. Mental health and physical health are inextricably linked. Evidence has shown that mental health disorders—most often depression—are strongly associated with the risk, occurrence, management, progression, and outcome of serious chronic diseases and health conditions including diabetes, hypertension, stroke, heart disease, and canceriv.

Suicide and Depressive Disorders: Suicide is the tenth leading cause of death in the nation, and the national suicide rate increased by 19.5% between 2007 and 2016. Suicide rates tend to be higher in rural areas than in urban settings. Of significant concern, the suicide rate per capita in Butte County is elevated to nearly twice that of California overall (18.1 vs. 10.4 per 100,000 population); and likewise elevated above the HP-2020 objective (10.2). This is especially alarming when viewed in the context of Butte County's co-occurring elevated metrics for drug induced deaths and excessive alcohol use; as nationally drug induced and alcohol related deaths in combination with suicide, collectively referred to as deaths of despair, have resulted in decreasing life expectancy in the United States since 2015. Rates of depressive disorders, a strong risk factor for suicide, also appear to be elevated in Butte County. Twenty-seven percent of BRFS respondents in Butte County indicated having been diagnosed with a depressive disorder, compared to 17% statewide, and 20% nationwide. Focus groups also overwhelmingly felt mental health was a top community health priority in Butte County, with 69% of total focus group participants ranking mental health as a very important community health priority area. The finding that all of Butte County meets HRSA Mental Health Professional Shortage Area criteria highlights a disparity between the populations need for mental health services and the current capacity of the county's healthcare delivery system to meet this demand.

Opioid Use and Excessive Drinking: Substance use disorders are defined as both mental health disorders and chronic diseases. The American Society of Addiction Medicine defines addiction as "a primary, chronic disease of brain reward, motivation, memory, and related circuitry." The development of substance use disorders are often preceded by substance misuse (taking an opioid medication other than how it was prescribed) or escalating episodes of excessive

alcohol consumption before meeting criteria for alcohol use disorder. Across focus groups, 50% of the 88 total participants indicated substance misuse and substance use disorders to be a top community health concern.

The ongoing opioid epidemic continues to be the leading driver of drug-induced deaths nationally. In Butte County, the age adjusted drug induced death rate continues to be significantly elevated compared to the statewide rate (30.2 vs. 12.2), with Butte County holding the 5th highest rate out of California's 58 counties. In 2017, mortality attributed exclusively to opioids (e.g. no other class of substances detected) in Butte County was 7.6 per 100,000 population compared with a statewide rate of 5.23; and the rate of hospitalizations for opioid overdose were the highest of all California counties, with 40.3 hospitalizations due to opioids other than heroin per 100,000 population compared to 7.75 statewide; and a rate of 9.95 hospitalizations due to heroin compared to 1.78 statewide. Also, of significant concern is that according to the California Healthy Kids Survey (CHKS), 21% percent of Butte County 11th-grade students have used prescription drugs recreationally, compared with 16% of 11th grade students statewide.

Excessive alcohol consumption—which includes binge drinking (4 or more drinks for women and 5 or more drinks for men within about 2 hours); heavy drinking (8 or more drinks a week for women and 15 or more drinks a week for men); and any drinking by pregnant women or those under 21 years of age, is responsible for 88,000 deaths in the United States each year. These include 1 in 10 deaths among working age adults (age 20-64 years), and in 2010, the estimated economic cost to the United States of excessive drinking was $249 billion. Binge drinking accounts for over half of the deaths and three-fourths of the economic costs due to excessive drinking. The most recently available data from the CDPH Safe and Active Communities Branch demonstrates that in Butte County, rates of emergency department treatment, non-fatal hospital admissions, and deaths due to alcohol were all considerably higher than statewide rates (1011.1 vs. 763.8 per 100,000; 306.6 vs. 143.4; and 16.2 vs. 11.9, respectively). Likewise, 42.5% of adult CHIS respondents in Butte County reported binge drinking, relative to 34.7% statewide. This discrepancy was further supported by the results of the BRFS, with 22.1% of Butte County respondents reporting binge drinking compared with 17.6% of respondents statewide. A similarly concerning trend among adolescents was demonstrated by the CHKS, with 20% percent of Butte County 11th grade students reporting binge drinking, compared with 11% of 11th grade students statewide.

***Chronic Disease and Conditions**:* Accounting for 7 out of 10 deaths annually, chronic diseases and conditions such as heart disease, cancer, and diabetes are the leading causes of death and disability in the United States. They are also leading drivers of the nation's $3.3 trillion in annual health care costs, with 90% of healthcare dollars in the United States spent on treatment of people with chronic physical and mental health conditionsv. In Butte County, like the nation and the state, the leading causes of death include many of the same chronic conditions, such as heart disease and stroke, cancers, Alzheimer's disease, chronic lower respiratory disease, chronic liver disease, and diabetes. While the mortality rate was

only higher for Butte County than the statewide and national rates for some chronic diseases and conditions (cancer, Alzheimer's disease, chronic lower respiratory disease, and chronic liver disease), (See Table X1); all chronic conditions comprise a substantial portion of health care spending in Butte County. A 2015 study estimated that over 51% of the $1.4 Billion total annual healthcare expenditures in Butte County could be attributed to six chronic conditions (arthritis, asthma, cardiovascular disease, diabetes, cancer, and depression), while 42.% of total statewide healthcare expenditures could be attributed to these conditions (see Table X2). Forty-eight percent of total focus group participants in Butte County indicated chronic disease and conditions to be a significant community health concern, and 45.5% indicated overweight/obesity, a predictive factor for many chronic diseases, to likewise be a top health concern. While most chronic conditions are of significant concern in Butte County, some emerged with greater emphasis including: cancer, Alzheimer's disease, asthma, chronic lower respiratory disease, and chronic liver disease.

Cancer: The age-adjusted death rate for cancer was significantly higher in Butte County than the statewide rate, with 162.2 and 140.2 deaths per 100,000 population, respectively. The five-year incidence rate for cancer from 2011 – 2015 was also elevated relative to the state rate at 452.4 and 395.2 cases per 100,000 population, respectively. These trends generally held for most forms of cancer, including lung, female breast, and colorectal cancers. The BRFS also indicated higher rates of cancer, with 8.4% of Butte County respondents reporting having ever been diagnosed with cancer (other than skin cancer), compared with 5.9% of survey respondents statewide.

Alzheimer's Disease: The age-adjusted death rate for Alzheimer's disease was also significantly higher in Butte County than the statewide rate, with 51.1 and 34.2 deaths per 100,000 population, respectively.

Asthma: In Butte County 9.7% of Medicare beneficiaries have been diagnosed with asthma, which is higher than the percentage of Medicare beneficiaries diagnosed statewide (7.5%). Results of the CHIS also demonstrate that slightly more adults in Butte County have been diagnosed with asthma than adults statewide (15.0% vs. 14.5%); while 18.3% of Butte County BRFS respondents indicated having ever been diagnosed with asthma, relative to 14.1% of statewide respondents; and 11.8% of Butte County respondents reported currently having asthma relative to 7.9% of statewide respondents.

Chronic Lower Respiratory Disease: The age-adjusted death rate for chronic lower respiratory disease was significantly higher in Butte County than the statewide rate, with 45.8 and 32.1 deaths per 100,000 population, respectively. The BRFS also indicated higher rates of chronic obstructive pulmonary disease (COPD) – a type of chronic lower respiratory disease, with 7.1% of Butte County respondents reporting having ever been diagnosed with COPD, compared with 4.5% of survey respondents statewide.

Chronic Liver Disease: The age-adjusted death rate for chronic liver disease was significantly higher in Butte County than the statewide rate, with 18.4 and 12.2 deaths per 100,000 population, respectively.

Table X-2: Mortality Rates for Chronic Diseases and Conditions:

Age Adjusted Death Rate per 100,000	Butte County	California	HP-2020	Rank out of 58 CA
All Causes	765.3	608.5	a	46
All Cancers	162.2	140.2	161.4	49
• (Lung Cancer)	(37.7)	(28.9)	(45.5)	(49)
• (Female Breast Cancer)	(21.2)	(19.1)	(20.7)	(46)
• (Prostate Cancer)	(19.4)	(19.6)	(21.8)	(24)
• (Colorectal Cancer)	(15.7)	(12.8)	(14.5)	(54)
Coronary Heart Disease	85.8	89.1	103.4	28
Alzheimer's Disease	51.1	34.2	a	55
Chronic Lower Respiratory Disease	45.8	32.1	a	42
Cerebrovascular Disease (Stroke)	39.3	35.3	34.8	39
Diabetes	18.9	20.7	b	26
Chronic Liver Disease and Cirrhosis	18.4	12.2	8.2	45

Adapted from: California Health Status Profiles, 2018. Available at: https://www.cdph.ca.gov/Programs/CHSI/Pages/County-Health-Status-Profi.aspx#pasteds

Table X-3: Healthcare Costs with Six Chronic Conditions:

Healthcare Costs	Total Healthcare Costs		Total Cost of Six Chronic Conditions		Percent of Total Health Care Costs Due to Six Conditions	
Butte County	$1,372,360,000		$625,045,759		50.8%	
California	$232,390,177,528		$98,443,138,663		42.4%	
Percent of Total Healthcare Costs	Arthritis	Asthma	Cardio-vascular disease	Diabetes	Cancer	Depression
Butte County	7.78%	4.55%	19.99%	5.27%	7.95%	5.26%
California	6.16%	4.06%	16.13%	5.59%	6.01%	4.41%

Adapted from: Brown, P.M., et al. (2015). Economic Burden of Chronic Disease in California 2015. California Department of Public Health. Sacramento, California. Available at: http://healthpolicy.ucla.edu/publications/search/pages/detail.aspx?PubID=1600

Chronic Disease and Conditions | Other Notable Chronic Condition: Butte County had a slightly higher age adjusted death rate than the statewide rate for stroke (39.3 vs. 35.3 per 100,000 population). Likewise, a slightly higher percentage of Butte County BRFS respondents (3.3%) reported having ever had a stroke than statewide respondents (2.2%). Approximately one-third (32.2%) of Butte County respondents also reported having high blood pressure, which was slightly higher than for statewide respondents (28.4%). A 2016 UCLA Center for Health Policy Research study estimated the percent of adults in Butte County that are pre-diabetic (43%) was slightly lower than the statewide estimate (46%), and a lower percentage Butte County CHIS respondent reported being diagnosed with diabetes than statewide respondents (7.4% vs. 9.3%). This discrepancy was also found in BRFS results (7.0% vs. 10.5%); however, a slightly higher

percentage of CHIS respondents age 65 and over from Butte County were diagnosed with diabetes than the percent of respondents statewide (23.5% vs. 21.4%). Major risk factors for the development of chronic conditions and premature death include being overweight/obese and smoking tobacco products. While the percent of adult CHIS respondents that reported being overweight or obese was marginally lower in Butte County than statewide (60.3% vs. 61.5%), the percent of Butte County BRFS respondents that indicated having no physical activity in the past 30 days was higher than the percent of statewide respondents (28.5% vs. 20.0%); and significantly more Butte County respondents indicated being current smokers than statewide respondents (20.6% vs.11.3%).

***Adverse Childhood Experiences and Childhood Maltreatment**:* Adverse childhood experiences (ACEs) are traumatic events in forms of neglect, abuse, or household challenges that occur during childhood and can negatively influence an individual's overall health and wellbeing throughout their lifespan. Early childhood adversity has been associated with increased likelihood of risky behaviors, chronic disease, poor quality of life, and decreased life expectancyvi. Research suggest that there is a dose response curve for ACEs and poor health, that is the likelihood of adverse health outcomes increases with the number of ACEs experienced; with individuals having experienced four or more ACEs being at substantially greater risk than individuals experiencing three or fewer ACEsvii. A top priority of the Surgeon General of California's Office is addressing social determinants that influence early childhood development and health. Within the states Let's Get Healthy California campaign, the Healthy Beginnings objectives focus on maternal and infant health; as well as child and adolescent physical, mental, and social health – for which ACEs rates are key health indicators.

Butte County has notably higher childhood maltreatment rates than California overall, including neglect and abuse allegations (74.0 vs. 54.3 per 1,000 children), substantiations (9.9 vs. 7.7) and entries into protective care (6.5 vs. 3.1)viii. A 2014 Center for Youth Wellness report found that from 2008 -2013, 76.5% Butte County residents reported having one or more ACEs; which was the highest rate of all California counties and significantly higher than for California overall (61.7%). In addition, nearly twice the percentage of Butte County residents as California residents reported having four or more ACEs (30.3% vs. 15.9%)ix. Similarly, results of the 2019 BRFS demonstrated that 77% of Butte County respondents had one or more ACEs, which was considerably higher than the most recent data for statewide respondents (65.5%). Further, Butte County respondents had higher rates than statewide respondents across all ACEs categories, with the most frequent being: substance use by a household member (37.8% vs. 26.1%); parental separation or divorce (37.3% vs. 26.7%); emotional or verbal abuse (35.2% vs. 34.9%,); household member with mental illness (28.4% vs. 15.0%,); and witnessing domestic violence (19.3% vs. 17.5%).

Conclusion and Action Plan

Once the health needs were prioritized by the Orchard Hospital Administration team and Board of trustees, the final step in the CHNA process was to develop an implementation strategy. The purpose of the implementation strategy is to develop a clear set of goals to respond to the priorities identified. This strategy will include a written plan that addresses each of the community health needs identified through the CHNA, describe how the hospital plans to meet the health needs, and identify health needs the hospital does not intend to meet and why.

The following implementation strategy components within each priority were addressed:

1. Objectives/Strategy
2. How
3. Programs/Resources to Commit
4. Impact of Programs/Resources on Health Need
5. Accountable Parties
6. Partnerships/Collaboration

The detailed implementation strategy for each priority can be found in Appendix 6. In summary the following priorities were addressed through the implementation strategy:

- Access to Care
- Mental Health and Substance Use Disorders
- Chronic Disease and Conditions
    - Obesity
    - Diabetes

The implementation strategy detail for each priority is located in Appendix 6 and provides supporting tactics, programs/resources, accountable parties, and potential partnerships/collaboration.

Appendix: 1

Supporting Documents

2019 Behavior Risk Factor Survey

2019 Behavioral Risk Factor Survey

Butte County, CA

Butte County Public Health

Orchard Hospital — Growing Healthy Communities

Enloe Medical Center

Adventist Health Feather River

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Introduction

In 1990, *Healthy People 2000, National Health Promotion and Disease Prevention Objectives*, was released to the public. The document outlined the U.S. government's plan to improve the health of individuals, communities, and the nation. This plan was revised in 1999 (*Healthy People 2010,*) and, subsequently, in 2010 (*Healthy People 2020.*)

Healthy People 2020 documents 10-year health objectives organized into 4 over-arching goals and 42 Focus Areas (page 4.) These Focus Areas address factors such as behavior, biology, physical environment and social environment that interact to influence health. In addition to the Focus Areas, a smaller subset of 12 indicators called Leading Health Indicators (page 5) was developed. The LHIs reflect a life stage perspective, with the intent to draw attention to both individual and societal determinants that affect the public's health and contribute to health disparities from infancy through old age. This approach recognizes that specific risk factors and determinants of health vary across the life span. Health and disease result from the accumulation, over time, of the effects of risk factors and determinants. Therefore, intervening at specific points in the life course can help reduce risk factors and promote health.

How do behaviors fit into this framework? Behaviors are individual responses or reactions to internal stimuli and external conditions. It has been estimated that behavioral and environmental factors are responsible for approximately 70% of all premature deaths in the United States. Obtaining information surrounding behaviors that put one at risk for poor health is instrumental in developing policies and interventions.

This report explores the behaviors that put Butte County residents at risk for poor health. Leading Health Indicators are presented accompanied by their *Healthy People 2020* Objective/Focus Area.

Healthy People 2020 Goals & Focus Areas

Healthy People 2020 Goals

1. Attain high-quality, longer lives free of preventable disease, disability, injury, and premature death.
2. Achieve health equity, eliminate disparities, and improve the health of all groups.
3. Create social and physical environments that promote good health for all.
4. Promote quality of life, healthy development, and healthy behaviors across all life stages.

Healthy People 2020 Focus Areas

1. Access to Health Services
2. Adolescent Health
3. Arthritis, Osteoporosis, and Chronic Back Conditions
4. Blood Disorders and Blood Safety
5. Cancer
6. Chronic Kidney Disease
7. Dementias, Including Alzheimer's Disease
8. Diabetes
9. Disability and Health
10. Early and Middle Childhood
11. Educational and Community-Based Programs
12. Environmental Health
13. Family Planning
14. Food Safety
15. Genomics
16. Global Health
17. Health Communication & Health Information Technology
18. Health-Related Quality of Life & Well-Being
19. Healthcare-Associated Infections
20. Hearing and Other Sensory or Communication Disorders
21. Heart Disease and Stroke
22. HIV
23. Immunization and Infectious Diseases
24. Injury and Violence Prevention
25. Lesbian, Gay, Bisexual and Transgender Health
26. Maternal, Infant, and Child Health
27. Medical Product Safety
28. Mental Health and Mental Disorders
29. Nutrition and Weight Status
30. Occupational Safety and Health
31. Older Adults
32. Oral Health
33. Physical Activity
34. Preparedness
35. Public Health Infrastructure
36. Respiratory Diseases
37. Sexually Transmitted Diseases
38. Sleep Health
39. Social Determinants of Health
40. Substance Abuse
41. Tobacco Use
42. Vision

Healthy People 2020 Leading Health Indicators

1. Access to Health Services
2. Clinical Preventive Services
3. Environmental Quality
4. Injury and Violence
5. Maternal, Infant, and Child Health
6. Mental Health
7. Nutrition, Physical Activity, and Obesity
8. Oral Health
9. Reproductive and Sexual Health
10. Social Determinants
11. Substance Abuse
12. Tobacco

Methodology

The Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing, state-based telephone surveillance system supported by the Centers for Disease Control and Prevention (CDC.) Through a series of monthly telephone interviews, states uniformly collect data on the behaviors and conditions that place adults at risk for chronic diseases, injuries, and preventable infectious diseases that are the leading causes of illness and death in the United States. The annual California surveys follow the overall CDC telephone survey protocol for the BRFSS. California Behavioral Risk Factor Survey (BRFS) data is collected by the Public Health Survey Research program (PHSRP) of California State University, Sacramento.

In 2019, in order to obtain an estimate of the prevalence of these behaviors and conditions in Butte County, the Butte County Public Health Department partnered with Enloe Medical Center, Adventist Health Feather River Hospital and Orchard Hospital to retain the services of Issues & Answers Network, Inc. The Butte County Behavioral Risk Factor Survey also follows the CDC protocol for the BRFSS and uses the standardized core questionnaire and modules.

For the needs of the 2019 Butte County BRFSS, the interviews were administered via telephone (via landline and cell phone) to randomly selected adults from a sample of households in the County.

- ✓ The sample of landline telephone numbers was selected using a list-assisted, random-digit-dialed methodology with disproportionate stratification based on "listedness."
- ✓ The cell phone sample included the application of Cellular Working Identification Number Service, which identified inactive telephone numbers within the cellular RDD sample. In order to improve the efficiency of the sample further and reduce the number of out-of-scope calls, a zip code matching process was also used.

Moreover, in light of the 2018 November Campfire, additional steps were taken to ensure that the temporarily relocated residents of Paradise (95965) and Magalia (95954) were included and adequately represented in the survey process. This was achieved via a series of screening questions asked of respondents (both landline and cell phone) who said they did not live in Butte County. The questions were as follows:

S4.1 Do you now live or have you lived in Butte County, California?

1. Currently live in Butte
2. Previously lived in Butte (GO TO S4.2)
3. No – never lived in Butte (THANK AND TERMINATE)

S4.2 Did you move out of Butte County due to the recent fires?

1. Yes (GO TO S4.3)
2. No (THANK AND TERMINATE)

S4.3 Is this a permanent move or a temporary move?

1. Permanent (THANK AND TERMINATE)
2. Temporary

The collected BRFSS data were weighted to adjust for gender, age, and race using the 2010 Butte County Census population distributions.

Sample Results

All of the respondents who were included in the final sample were drawn from a random sample of Butte County residents. Among the calls that were attempted, there were 711 completed interviews, 184 refusals, 2,359 non-working or disconnected numbers, 6,357 no answers, 1,849 numbers that were not private residences, 2,348 numbers and/or respondents with undetermined eligibility, 61 households and/or respondents with physical or mental impairment, 66 eligible respondents selected but not interviewed, 176 households and/or eligible respondents with language barriers, 946 households with telecommunication barriers and special technological circumstances, 537 households on a do-not-call list, 498 households that were out-of-sample, 149 fax or modem lines, 5,038 answering machines, 68 pagers, 28 landline numbers in the cell phone sample, and 126 interviews that were terminated/partial completes. The American Association for Public Opinion Research (AAPOR) response rate was 18.41%. The refusal rate was 1.48%.

All of the interviews were completed between April 17 and June 16, 2017, with each completed interview lasting, on average, approximately 35 minutes.

Please note that, when available, comparisons to California and national results presented in this report are based on the 2017 California and U.S. Behavioral Risk Factor Surveys (the most recent surveys released to the public.)

In a few instances, for question topics due to be released at a later time (September 2017,) older state BRFSS data (years 2008-2016) were used for comparisons. These questions are marked with asterisks.

California BRFSS data is not available for the Intimate Partner Violence topic. National BRFSS data is not available for a handful of topics including Other Tobacco Use, Marijuana Use, and Intimate Partner Violence.

Analysis of Selected Risk Factors

Summary Table: At a Glance

Factor	Butte County	California
Perceived Health Status (fair/poor)	19.0%	17.6%*
Quality of Life: Poor physical health (14+ days)	16.0%	11.1%*
Quality of Life: Poor mental health (14+ days)	18.8%	10.6%*
Disability	20.9%	21.9%*
Health Care Access: No Health Care Coverage (age 18-64)	10.8%	12.7%*
Health Care Access: No Personal Health Care Provider	34.1%	24.5%*
Health Care Access: No Health Care Access Due to Cost	14.5%	11.8%*
Health Care Access: No Routine Checkup	30.5%	32.4%*
Chronic Health Conditions: Ever told had a heart attack	3.7%	3.1%*
Chronic Health Conditions: Ever told had angina or coronary artery disease	2.8%	2.8%*
Chronic Health Conditions: Ever told had a stroke	3.3%	2.2%*
Chronic Health Conditions: Ever told had asthma	18.3%	14.1%*
Chronic Health Conditions: Still have asthma	11.8%	7.9%*
Chronic Health Conditions: Ever told had COPD	7.1%	4.5%*
Chronic Health Conditions: Ever told you had some form of arthritis	24.1%	19.4%*
Chronic Health Conditions: Ever told had a depressive disorder	27.5%	17.3%*
Chronic Health Conditions: Ever told had kidney disease	3.0%	3.3%*
Chronic Health Conditions: Ever told had skin cancer	8.5%	5.9%*
Chronic Health Conditions: Ever told had any other types of cancer	8.4%	5.9%*
Cancer Survivorship: Survivors currently receiving cancer treatment	6.8%	12.9%**
Cancer Survivorship: Survivors who participated in clinical trial	2.1%	N/A**
Cancer Survivorship: Survivors who received a survivorship care plan	76.2%^^	47.6%**
Hypertension Awareness: Ever told had high blood pressure	32.2%	28.4%*
Cholesterol Awareness: Blood cholesterol not checked within last 5 years	10.8%	12.4%*
Cholesterol Awareness: Had blood cholesterol checked and told it was high	24.0%	30.8%*

**Note: Based on 2017 BRFSS of California Residents*
***Note: Based on 2009 BRFSS of California Residents*
^Items marked in red are below the statewide figures and may require the County's attention. Items marked in green indicate results above the statewide figures
^^Caution: Fewer than 30 respondents

Analysis of Selected Risk Factors – cont'd.

Summary Table: At a Glance

Factor	Butte County	California
Diabetes: Ever told had diabetes (excluding pregnancy-related)	7.0%	10.5%*
Tobacco Use: Current Smoker	20.6%	11.3%*
Other Tobacco Use: Have ever used chewing tobacco	28.1%	4.2%**
Other Tobacco Use: Current user of chewing tobacco	4.0%	0.6%**
Other Tobacco Use: Have ever used cigars/cigarillos	39.0%	15.2%**
Other Tobacco Use: Current user of cigars/cigarillos	4.9%	1.7%**
Other Tobacco Use: Have ever used tobacco pipe	14.8%	4.5%**
Other Tobacco Use: Current user of tobacco pipe	0.4%	0.2%**
Other Tobacco Use: Have ever used hookah water pipe	16.0%	6.3%**
Other Tobacco Use: Current user of hookah water pipe	0.0%	0.6%**
Marijuana Use: Smoked 1+ day within past 30 days	17.7%	10.5%***
Alcohol Consumption: Binge drinking	22.1%	17.6%*
Alcohol Consumption: Heavy drinking	4.2%	6.3%
Alcohol Screening & Brief Intervention: Did not discuss alcohol use with a health professional at last routine checkup	22.5%	22.1%****
Alcohol Screening & Brief Intervention: Advised about harmful drinking	17.0%	24.2%****
Alcohol Screening & Brief Intervention: Advised to reduce or quit drinking	11.5%	12.5%****
Fruit Consumption (<1 time/day)	41.9%	32.5%*
Vegetable Consumption (<1 time/day)	16.8%	21.4%*
Physical Activity: No activity during past month	28.5%	20.0%*
Seatbelt Use: Do not always use seatbelt	6.7%	2.2%*
Adult Immunization: No flu shot in past year (age 65+)	47.8%	40.7%*
Adult Immunization: Never had pneumococcal vaccination (age 65+)	29.0%	23.2%*
Adult Immunization: Never had shingles/zoster vaccination	73.2%	68.9%*
HIV/AIDS: Ever had an HIV test	37.9%	40.8%*

**Note: Based on 2017 BRFSS of California Residents*
***Note: Based on 2015 BRFSS of California Residents*
****Note: Based on 2016 BRFSS of California Residents*
*****Note: Based on 2014 BRFSS of California Residents*
^Items marked in red are below the statewide figures and may require the County's attention. Items marked in green indicate results above the statewide figures

Analysis of Selected Risk Factors – cont'd.

Summary Table: At a Glance

Factor	Butte County	California
Adverse Childhood Experience: Emotional/verbal abuse (more than once)	35.2%	34.9%*
Adverse Childhood Experience: Parental separation or divorce	37.3%	26.7%*
Adverse Childhood Experience: Substance abuse by household member	37.8%	26.1%*
Adverse Childhood Experience: Physical abuse (more than once)	21.0%	19.9%*
Adverse Childhood Experience: Witness to domestic violence (more than once)	19.3%	17.5%*
Adverse Childhood Experience: Household member with mental illness	28.4%	15.0%*
Adverse Childhood Experience: Sexual abuse (ever)	13.8%	11.4%*
Adverse Childhood Experience: Incarcerated household member	14.6%	6.6%*
Intimate Partner Violence: Threatened physical (past 12 months)	4.3%	N/A
Intimate Partner Violence: Completed physical (past 12 months)	3.8%	N/A
Intimate Partner Violence: Attempted control (past 12 months)	5.1%	N/A
Intimate Partner Violence: Unwanted sex (past 12 months)	0.6%	N/A

**Note: Based on combined 2008-2013 BRFSS of California Residents*
^Items marked in red are below the statewide figures and may require the County's attention. Items marked in green indicate results above the statewide figures

Perceived Health Status

Healthy People 2020 objective HRQOL/WB-1: Increase the proportion of adults who self-report good or better health

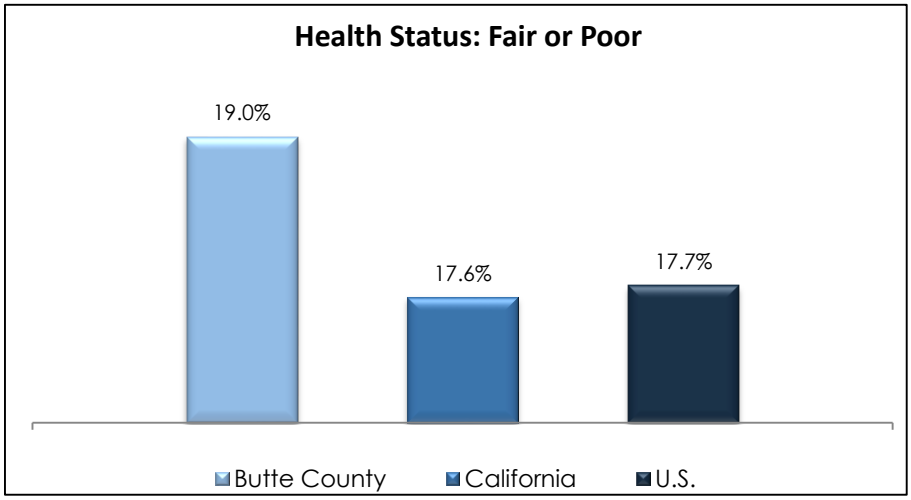
A primary goal of Healthy People 2020 is to help individuals improve their quality of life. General health status is a reliable self-rated assessment of one's perceived health, which may be influenced by all aspects of life, including behaviors, environmental factors, and community. Self-rated general health status is useful in determining unmet health needs, identifying disparities among subpopulations, and characterizing the burden of chronic diseases within a population. The prevalence of self-rated fair or poor health status has been found to be higher within older age groups, females, and minorities, and has also been associated with lower socioeconomic status in the presence or absence of disease.

At 19%, Butte County residents are slightly more likely than Californians and Americans as a whole to report fair or poor general health (17.6% and 17.7%, respectively.)

The self-reported rate of fair/poor health is highest among residents older than 45 years of age, with over one-fifth giving this response. Additionally, non-Hispanics (20.8%,) residents with less than a high school education (35.6%,) and those with less than $35,000 in an annual household income (roughly three in ten) are among the most likely to rate their health as fair or poor.

Percentage of respondents who said their health, in general, was fair or poor

Demographic Characteristics	General Health Fair or Poor
Total	19.0%
Age	
18-24	14.0%
25-34	12.3%
35-44	15.7%
45-54	20.4%
55-64	31.4%
65+	20.6%
Gender	
Male	19.7%
Female	18.4%
Race	
White	18.6%
Black**	17.2%
Hispanic	10.3%
Non-Hispanic	20.8%
Education	
< High School	35.6%
High School Grad	21.1%
Some College	19.3%
College Graduate	13.8%
Household Income	
<$20,000	32.0%
$20,000-$34,999	27.6%
$35,000-$$49,999**	10.8%
$50,000-$74,999	18.9%
$75,000 or more	10.1%



**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Quality of Life

Healthy People 2020 objective HRQOL/WB-1.1: Increase the proportion of adults who self-report good or better physical health

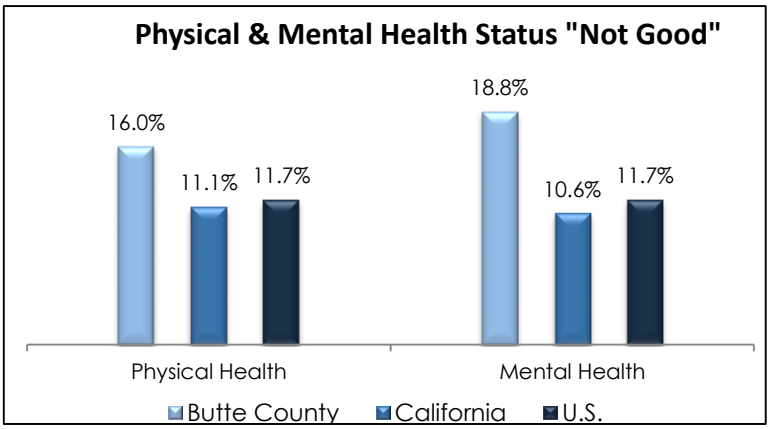
Healthy People 2020 objective HRQOL/WB-1.2: Increase the proportion of adults who self-report good or better mental health

Health-related quality of life reflects a personal sense of physical and mental health and the ability to react to factors in the physical and social environments. The key indicator used in this analysis is the number of days in the past month that residents experienced physical or mental health problems, and in particular, whether they had experienced problems for 14 or more days within that timeframe.

A total of 16% of Butte County residents report having 14 or more days of poor physical health, and 18.8% say the same about their mental health. Both quality of life metrics are notably above the state and U.S. figures.

Residents most likely to report poor physical health are those with less than high school education (40.6%,) those with income of under $35,000 per year (just under one-quarter), as well as those over the age of 55 (more than two in ten.)

In terms of poor mental health, its incidence is driven mostly by residents ages 25-54 (more than two in ten,) females (24.1%,) Black and Hispanic residents (22.2% and 25.1%, respectively,) those without a high school diploma (33.2%,) and respondents in the bottom income bracket (29.7%.)



Percentage of respondents with 14 or more days of poor physical or mental health

Demographic Characteristics	Physical Health Not Good	Mental Health Not Good
Total	16.0%	18.8%
Age		
18-24	3.8%	19.0%
25-34	18.5%	24.3%
35-44	14.0%	21.3%
45-54	15.3%	26.4%
55-64	25.9%	17.2%
65+	19.6%	8.3%
Gender		
Male	14.2%	13.4%
Female	17.7%	24.1%
Race		
White	14.9%	16.7%
Black**	17.2%	22.2%
Hispanic	18.9%	25.1%
Non-Hispanic	15.8%	18.1%
Education		
< High School	40.6%	33.2%
High School Grad	11.7%	16.7%
Some College	15.9%	19.7%
College Graduate	14.2%	16.1%
Household Income		
<$20,000	23.1%	29.7%
$20,000-$34,999	24.6%	11.8%
$35,000-$$49,999**	9.5%	11.9%
$50,000-$74,999	13.1%	10.3%
$75,000 or more	11.6%	14.3%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Disability

Healthy People 2020 objective DH-13: Increase the proportion of adults with disabilities aged 18 years and older who participate in leisure, social, religious or community activities

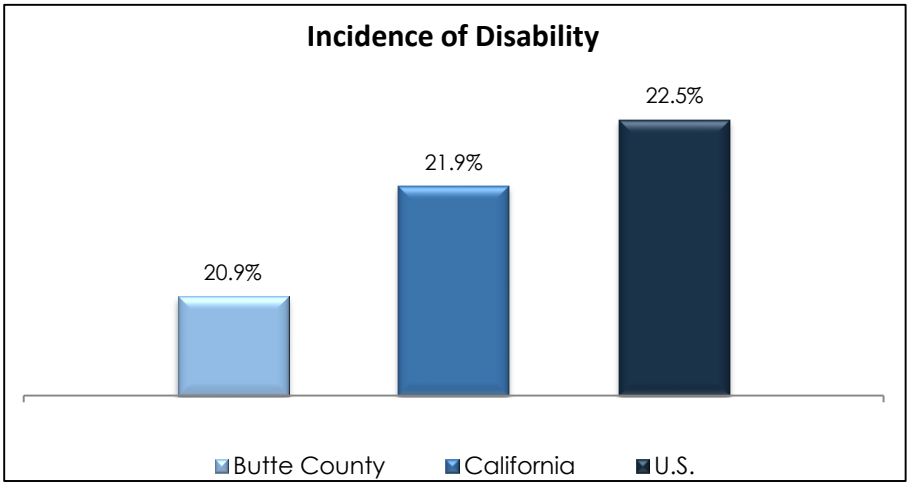
Healthy People 2020 objective DH-14: Increase the proportion of children and youth with disabilities who spend at least 80 percent of their time in regular education programs

Healthy People 2020 objective goal DH-16: Increase employment among people with disabilities

One of the Healthy People 2020 goals is to "promote the health and well-being of people with disabilities." There are many ways in which disability can be defined, ranging from experiencing difficulty in participating in certain activities (such as lifting and carrying objects, seeing, hearing, talking, walking or climbing stairs) to having more severe disabilities that require assistance in personal care needs (i.e. bathing) or routine care needs (i.e. housework). In this report, disability is defined as being limited in any activities because of physical, mental, or emotional problems.

Approximately one-fifth (20.9%) of the Butte County adult population lives with a disability, which is essentially consistent with the state- and nationwide results (21.9% and 22.5%, respectively.)

The prevalence of disability in Butte County is highest among African Americans (64.2%,) respondents in the lowest income bracket (36%,) and those with less than high school education (38.1%.) Moreover, residents over the age of 35 are more likely to report disability than their younger counterparts, with a peak among those age 55-64 (30.2%.)



Percentage of respondents limited in activities because of physical, mental or emotional problems

Demographic Characteristics	Disability
Total	20.9%
Age	
18-24	10.1%
25-34	19.1%
35-44	24.2%
45-54	21.2%
55-64	30.2%
65+	22.0%
Gender	
Male	22.7%
Female	19.8%
Race	
White	21.5%
Black**	64.2%
Hispanic	12.3%
Non-Hispanic	22.5%
Education	
< High School	38.1%
High School Grad	20.4%
Some College	19.2%
College Graduate	18.6%
Household Income	
<$20,000	36.0%
$20,000-$34,999	15.7%
$35,000-$$49,999**	18.9%
$50,000-$74,999	18.2%
$75,000 or more	14.6%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Health Care Access: No Health Care Coverage

Healthy People 2020 objective AHS-1.1: Increase the proportion of persons with medical insurance

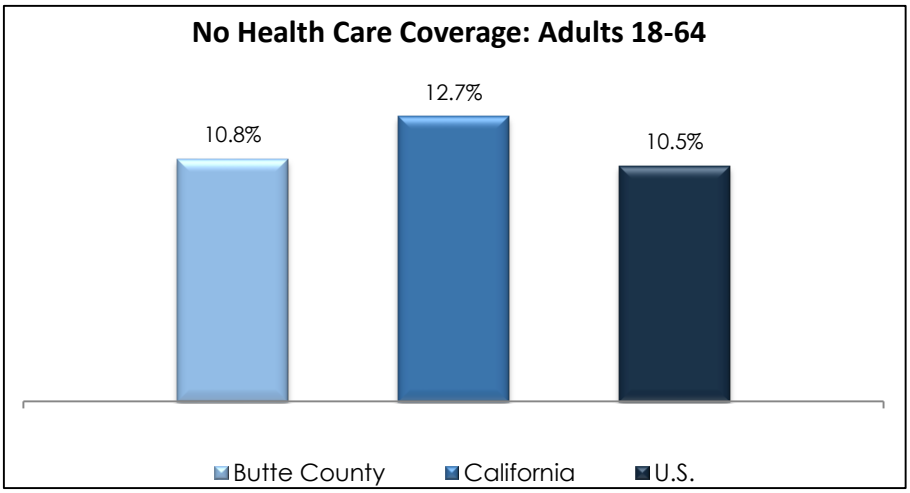
Health insurance coverage is an important determinant of access to health care. Uninsured individuals are substantially less likely to have a usual source of health care or a recent health care visit than their insured counterparts.[10] Utilization of preventive health care services, such as mammography, Pap tests, prostate exams, influenza vaccinations, and cholesterol tests, could reduce the prevalence and severity of diseases and chronic conditions in the United States. The Healthy People 2020 target for health care coverage is to have 100% insured by 2020.[11]

An estimated 10.8% of the Butte County residents between the ages of 18 and 64 have no health insurance coverage – a rate below the state figure (12.7%) and on par with the national score (10.5%.)

Access to health care is closely related to several socio-economic factors. Specifically, at 22.6%, the Hispanic segment of Butte County residents is substantially less likely to have coverage than their non-Hispanic counterparts. Male residents are somewhat more likely than females to have no coverage. Predictably, the likelihood to be insured is directly proportional to the income and educational attainment levels. Finally, age is closely associated with health care coverage, as younger individuals are more apt to report that they do not have health insurance coverage than those age 35+.

Percentage of respondents age 18-64 who have no health care insurance coverage

Demographic Characteristics	No Health Insurance
Total	10.8%
Age	
18-24	16.2%
25-34	15.5%
35-44	7.2%
45-54	8.6%
55-64	5.7%
Gender	
Male	13.6%
Female	8.2%
Race	
White	7.3%
Black**	9.4%
Hispanic	22.6%
Non-Hispanic	8.7%
Education	
< High School	18.4%
High School Grad	13.1%
Some College	12.7%
College Graduate	5.0%
Household Income	
<$20,000	18.6%
$20,000-$34,999	11.5%
$35,000-$$49,999**	15.6%
$50,000-$74,999	11.7%
$75,000 or more	1.4%



**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Health Care Access: Limited Health Care Coverage

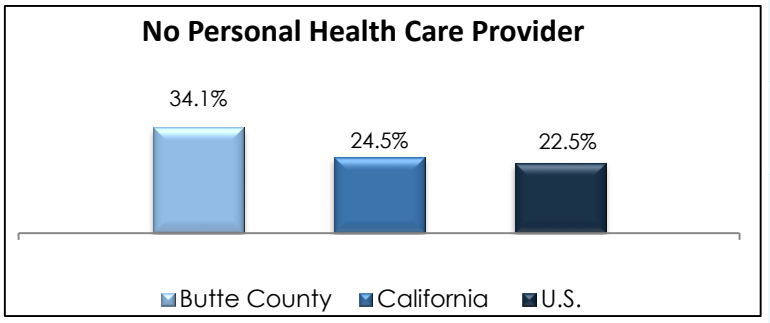
Healthy People 2020 objective AHS-3: Increase the proportion of persons with a usual primary care provider

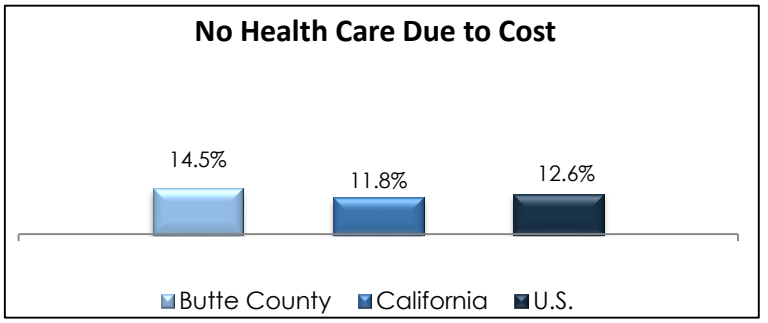
Healthy People 2020 objective AHS-6: Reduce the proportion of persons who are unable to obtain or delay in obtaining necessary medical care, dental care, or prescription medicines

Two additional indicators that address issues related to health care access include not having a personal doctor or health care provider and having had a time during the past 12 months when health care was needed but could not be obtained because of cost.

More than one-third (34.1%) of Butte County adults do not have a personal doctor or health care provider – a figure substantially above state- and nationwide rates (24.5% and 22.5%, respectively.) Moreover, 14.5% of Butte County residents could not see a doctor because of the cost.

As in the past, men are more likely than women to have no personal health care provider (38% vs. 30.2%.) Moreover, no access to a personal provider and cost barriers are cited more often among less educated and less affluent population segments. Hispanics are the most likely cohort to report having no personal health care provider. Finally, the likelihood of having a personal provider is lowest among those under the age of 35, and the likelihood of not being able to see a doctor due to cost is highest among those under the age of 24.





Percentage of respondents with no personal health care provider and percentage of respondents who reported an instance of not obtaining care due to cost

Demographic Characteristics	No Personal Health Care Provider	No Health Care Access Due to Cost
Total	34.1%	14.5%
Age		
18-24	51.7%	23.4%
25-34	52.9%	17.9%
35-44	33.0%	16.2%
45-54	32.6%	15.7%
55-64	17.9%	8.8%
65+	17.5%	6.5%
Gender		
Male	38.0%	15.0%
Female	30.2%	13.9%
Race		
White	31.9%	12.8%
Black**	34.3%	19.2%
Hispanic	46.2%	16.6%
Non-Hispanic	31.8%	14.3%
Education		
< High School	48.1%	28.9%
High School Grad	34.6%	12.0%
Some College	38.4%	18.0%
College Graduate	26.0%	9.4%
Household Income		
<$20,000	42.8%	18.4%
$20,000-$34,999	30.9%	26.9%
$35,000-$$49,999**	23.4%	7.6%
$50,000-$74,999	26.0%	14.8%
$75,000 or more	25.4%	7.6%

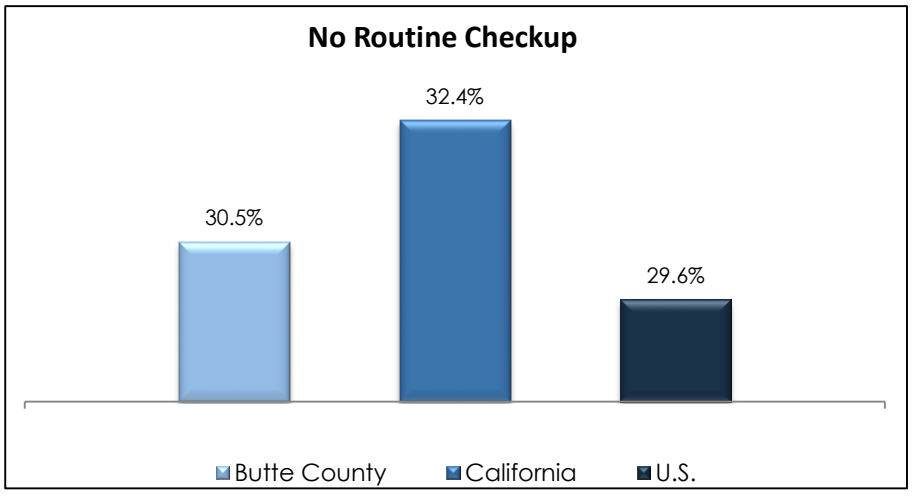
**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Health Care Access: No Routine Checkup

A yearly routine checkup with a health care professional provides an opportunity to raise awareness regarding adult preventive services, conduct individual risk assessments, promote informed decision-making, and potentially benefit from early detection.

Butte County residents are less likely than Californians overall to report not having a routine checkup within the past year (30.5% vs. 32.4%.) The figure observed in the County is consistent with the nationwide results (29.6%.)

A more in-depth analysis reveals that males are more likely to have had no checkup than females (35.3% vs. 25.9%)..Moreover, African Americans (54.3%) and Hispanic residents (55.3%) are more likely to report no checkup than their Caucasian counterparts (28.2%.) Finally, the likelihood of having an annual checkup increases proportionately to residents' age and income.



Percentage of respondents who had no routine checkup in the past year

Demographic Characteristics	No Routine Checkup
Total	30.5%
Age	
18-24	46.9%
25-34	48.1%
35-44	32.5%
45-54	26.2%
55-64	21.2%
65+	11.4%
Gender	
Male	35.3%
Female	25.9%
Race	
White	28.2%
Black**	54.3%
Hispanic	55.3%
Non-Hispanic	26.4%
Education	
< High School	37.5%
High School Grad	34.9%
Some College	30.8%
College Graduate	25.7%
Household Income	
<$20,000	40.3%
$20,000-$34,999	37.4%
$35,000-$$49,999**	35.4%
$50,000-$74,999	23.1%
$75,000 or more	20.0%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Chronic Health Conditions: Heart Attack

Healthy People 2020 objective HDS-1: Increase overall cardiovascular health in the U.S. population

Healthy People 2020 objective HDS-16: Increase the proportion of adults aged 20 years and older who are aware of the symptoms of and how to respond to a heart attack

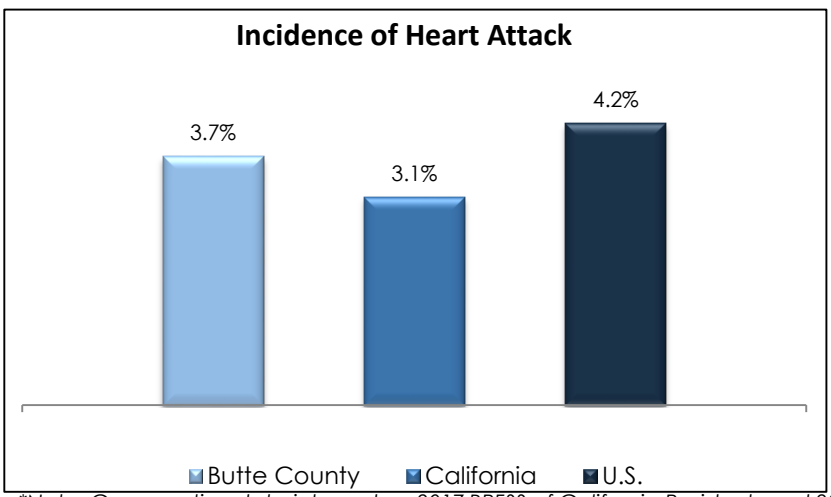
In 2015, an estimated 114,023 deaths were attributable to heart attacks in the United States. An estimated 720,000 heart attacks and 335,000 recurrent heart attacks occur yearly among U.S. adults. The cost of heart attacks was $12.1 billion in 2013, which includes health care services, medication, and lost productivity.[33] Many risk factors for heart attack are the same as those for coronary artery disease, including high blood pressure, high cholesterol, smoking, family history of heart disease, obesity, physical inactivity, diabetes, and excessive alcohol consumption.[26]

A total of 3.7% of Butte County residents have ever been told that they had a heart attack. This result is only marginally higher than the California figure (3.1%) and on par with the national result (4.2%.)

Unsurprisingly, the prevalence of heart attacks is highest among residents age 55+.

Percentage of respondents who were told by a doctor that they had a heart attack

Demographic Characteristics	Ever Told You Had Heart Attack
Total	3.7%
Age	
18-24	1.9%
25-34	-
35-44	1.5%
45-54	3.2%
55-64	6.4%
65+	7.4%
Gender	
Male	4.0%
Female	3.4%
Race	
White	3.9%
Black**	8.6%
Hispanic	1.0%
Non-Hispanic	4.2%
Education	
< High School	2.1%
High School Grad	3.7%
Some College	2.6%
College Graduate	5.1%
Household Income	
<$20,000	4.8%
$20,000-$34,999	2.9%
$35,000-$$49,999**	7.0%
$50,000-$74,999	6.4%
$75,000 or more	1.9%



**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Chronic Health Conditions: Heart Disease

Healthy People 2020 objective HDS-1: Increase overall cardiovascular health in the U.S. population

Healthy People 2020 objective HDS-2: Reduce coronary heart disease deaths

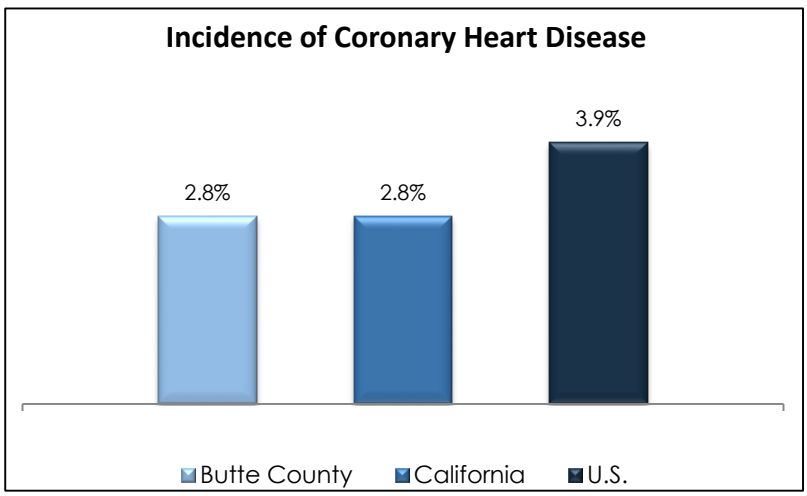
Heart disease and stroke are leading causes of death in the United States for both genders and across all ethnic groups. In 2017, in California, heart disease was the primary cause of death, claiming 62,797 lives.[12] Approximately 5.7 million people nationwide have heart failure, and about one-half of these individuals will die within five years of diagnosis. Cardiovascular disease costs the nation an estimated $31 billion annually.[13] Modifying cardiovascular disease risk factors offers the greatest potential for reducing death and disability.

Among Butte County adults, 2.8% have been told at some point that they had angina or coronary heart disease. This figure is on par with the current state data, and below the nationwide prevalence data.

Unsurprisingly, residents over the age of 65 report a significantly higher rate of heart disease than younger individuals.

Percentage of respondents who were told by a doctor that they had angina or coronary heart disease

Demographic Characteristics	Ever Told You Have Angina or Coronary Heart Disease
Total	2.8%
Age	
18-24	-
25-34	-
35-44	3.3%
45-54	-
55-64	2.5%
65+	10.0%
Gender	
Male	3.2%
Female	2.4%
Race	
White	2.9%
Black**	8.6%
Hispanic	0.5%
Non-Hispanic	3.2%
Education	
< High School	5.0%
High School Grad	3.2%
Some College	1.1%
College Graduate	3.7%
Household Income	
<$20,000	4.0%
$20,000-$34,999	-
$35,000-$$49,999**	8.8%
$50,000-$74,999	5.8%
$75,000 or more	1.1%



**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Chronic Health Conditions: Stroke

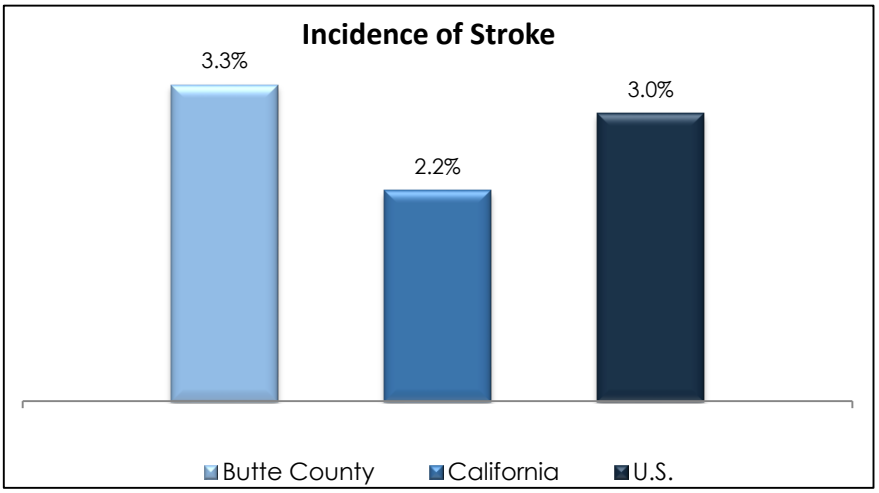
Healthy People 2020 objective HDS-3: Reduce stroke deaths

Healthy People 2020 objective HDS-17: Increase the proportion of adults aged 20 years and older who are aware of the symptoms and how to respond to a stroke

Stroke kills nearly 140,000 Americans each year – that's 1 of every 20 deaths. Stroke and Cardiovascular Heart Disease share many of the same risk factors. Although the health complications from stroke are severe, the risk of stroke can be greatly reduced by increasing physical activity, eating a balanced diet, avoiding drinking too much alcohol, and quitting smoking.[14]

The overall rate of stroke among Butte County adults is 3.3%. This figure is slightly above the state rate (2.2%,) but on par with the nationwide prevalence data (3.0%.)

Mirroring the patterns noted for other cardiovascular conditions, stroke is most common in the oldest age cohort (65+ years olds.)



Percentage of respondents who were told by a doctor that they had a stroke

Demographic Characteristics	Ever Told You Had a Stroke
Total	3.3%
Age	
18-24	-
25-34	-
35-44	3.3%
45-54	0.9%
55-64	3.0%
65+	11.6%
Gender	
Male	3.0%
Female	3.6%
Race	
White	3.7%
Black**	-
Hispanic	2.2%
Non-Hispanic	3.6%
Education	
< High School	3.1%
High School Grad	3.4%
Some College	3.3%
College Graduate	3.3%
Household Income	
<$20,000	5.7%
$20,000-$34,999	2.1%
$35,000-$$49,999**	5.2%
$50,000-$74,999	1.4%
$75,000 or more	2.2%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Chronic Health Conditions: Asthma

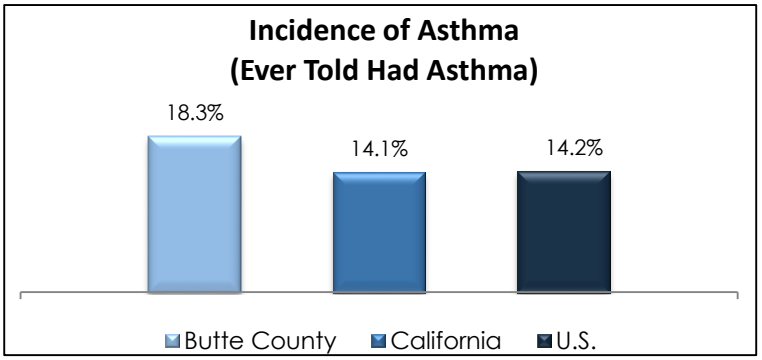
Healthy People 2020 objective RD-1: Reduce asthma deaths

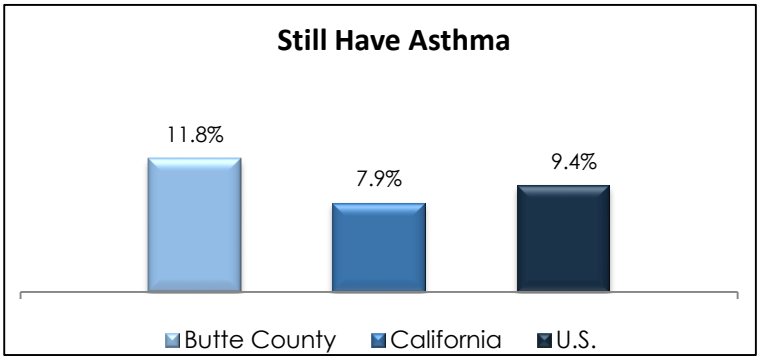
Healthy People 2020 objective RD-7: Increase the proportion of persons with current asthma who receive appropriate asthma care according to National Asthma Education and Prevention Program (NAEPP) guidelines

Asthma is a chronic inflammatory disorder of the lungs, and is characterized by wheezing, nighttime or early morning coughing, difficulty breathing, and chest tightness. Asthma attacks can be triggered by a variety of factors, such as pollution, tobacco smoke, dust mites, pets, mold, and/or respiratory infections. At present, over 25,000 Americans suffer from asthma. In 2016, the condition caused 188,968 hospitalizations, more than 1.8 million emergency department visits, and 9.8 million doctor visits.[15]

The incidence of self-reported asthma among Butte County adults is at 18.3%. This result is above the statewide and national rates (14.1% and 14.2%.) The prevalence of asthma peaks in the 25-34 age segment, as well as among females.

A total of 11.8% of Butte County residents currently have asthma – notably more than California and U.S.-wide figures (7.9% and 9.4%, respectively.) Residents most likely to still have asthma also include those ages 25-34, females, as well as those with lower income and education levels.





Percentage of respondents who have ever been told by a doctor that they had asthma, and percentage of respondents who still have asthma

Demographic Characteristics	Ever Told Have Asthma	Still Have Asthma
Total	18.3%	11.8%
Age		
18-24	17.5%	15.6%
25-34	31.7%	17.2%
35-44	19.5%	7.3%
45-54	18.2%	12.4%
55-64	14.6%	12.0%
65+	11.7%	6.8%
Gender		
Male	14.3%	10.5%
Female	22.2%	13.0%
Race		
White	17.1%	10.7%
Black**	16.0%	16.0%
Hispanic	22.5%	15.4%
Non-Hispanic	18.0%	11.4%
Education		
< High School	25.9%	12.1%
High School Grad	21.0%	17.0%
Some College	18.9%	11.4%
College Graduate	14.1%	8.2%
Household Income		
<$20,000	27.0%	19.9%
$20,000-$34,999	17.7%	15.9%
$35,000-$$49,999**	28.5%	13.6%
$50,000-$74,999	25.7%	13.2%
$75,000 or more	9.6%	7.3%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Chronic Health Conditions: COPD, Emphysema or Bronchitis

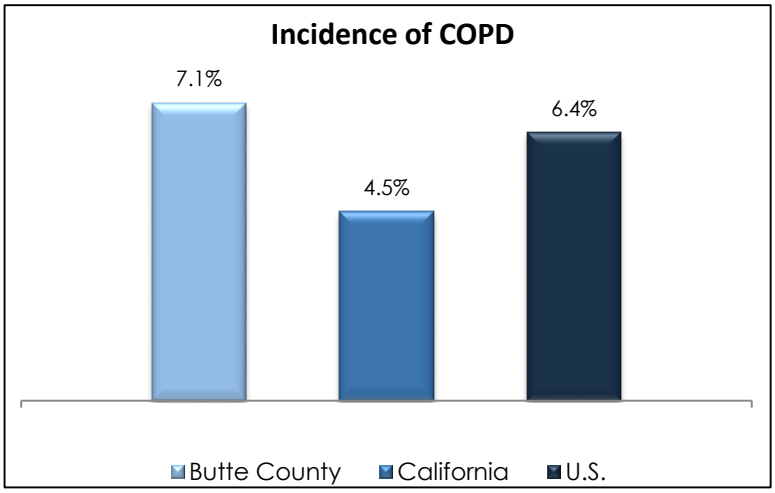
Healthy People 2020 objective RD-10: Reduce deaths from chronic obstructive pulmonary disease (COPD)

Healthy People 2020 objective RD-11: Reduce hospitalizations from chronic obstructive pulmonary disease (COPD)

People with chronic obstructive pulmonary disease (COPD) experience persistent breathing problems and low respiratory function. Three-quarters of COPD cases are linked to a history of smoking, with genetics and exposure to environmental irritants also contributing to the disease. A total of 16 million of Americans have been diagnosed with this condition, while 12 million more may have undiagnosed COPD. [26]

A total of 7.1% of Butte County residents has ever been told that they had COPD, emphysema, or chronic bronchitis. This figure is above the statewide data (4.5%), but only marginally higher than the national result (6.4%).

Like many other conditions, COPD is notably more prevalent among residents over the age of 55. It is also more frequent among non-Hispanic population of the County. Finally, residents with less than high school education, as well as those making under $50,000 per year, are more apt to report this diagnosis than their more educated and more affluent counterparts.



Percentage of respondents who were told by a doctor that they had COPD, emphysema or chronic bronchitis

Demographic Characteristics	Ever Told Had COPD, Emphysema or Chronic Bronchitis
Total	7.1%
Age	
18-24	-
25-34	4.2%
35-44	4.8%
45-54	4.6%
55-64	15.9%
65+	12.9%
Gender	
Male	6.4%
Female	7.9%
Race	
White	7.4%
Black**	17.2%
Hispanic	1.0%
Non-Hispanic	8.3%
Education	
< High School	13.7%
High School Grad	7.7%
Some College	7.8%
College Graduate	4.6%
Household Income	
<$20,000	13.3%
$20,000-$34,999	11.3%
$35,000-$$49,999**	12.2%
$50,000-$74,999	4.4%
$75,000 or more	4.2%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Chronic Health Conditions: Arthritis, Rheumatoid Arthritis, Gout, Lupus or Fibromyalgia

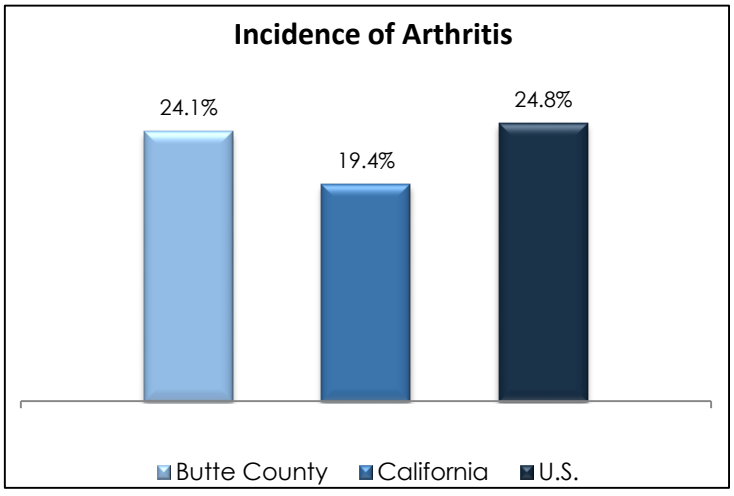
Healthy People 2020 objective AOCBC-1: Reduce the mean level of joint pain among adults with doctor-diagnosed arthritis

Healthy People 2020 objective AOCBC-7: Increase the proportion of adults with doctor-diagnosed arthritis who receive health care provider counseling

Over 54 million Americans have arthritis, a condition that can cause severe, chronic joint pain. Arthritis is a leading cause of disability, and over half of people living with this condition says it interferes with their daily activities.[26] Arthritis can take many forms such as rheumatoid arthritis (an autoimmune disease causing painful swelling,) gout (a form of inflammatory arthritis affecting one joint at a time) fibromyalgia (a condition causing abnormal pain perception processing)[39] or lupus (an autoimmune disease that can damage any part of the body.)[40]

Nearly one-quarter (24.1%) of Butte County residents have been diagnosed with some form of arthritis. This result is above the statewide figure (19.4%,) and on par with the national data (24.8%.)

The incidence of arthritis increases in proportion to residents' age. It is also more common among non-Hispanic respondents, and slightly more prevalent among females.



Percentage of respondents who were told by a doctor that they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia

Demographic Characteristics	Ever Told Had Arthritis, Rheumatoid Arthritis, Gout, Lupus or Fibromylagia
Total	24.1%
Age	
18-24	3.8%
25-34	3.3%
35-44	14.5%
45-54	21.8%
55-64	45.2%
65+	51.4%
Gender	
Male	21.1%
Female	27.0%
Race	
White	25.5%
Black**	37.3%
Hispanic	11.2%
Non-Hispanic	26.3%
Education	
< High School	25.5%
High School Grad	24.7%
Some College	23.1%
College Graduate	24.5%
Household Income	
<$20,000	31.9%
$20,000-$34,999	27.5%
$35,000-$$49,999**	26.8%
$50,000-$74,999	33.5%
$75,000 or more	23.9%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Chronic Health Conditions: Depressive Disorder

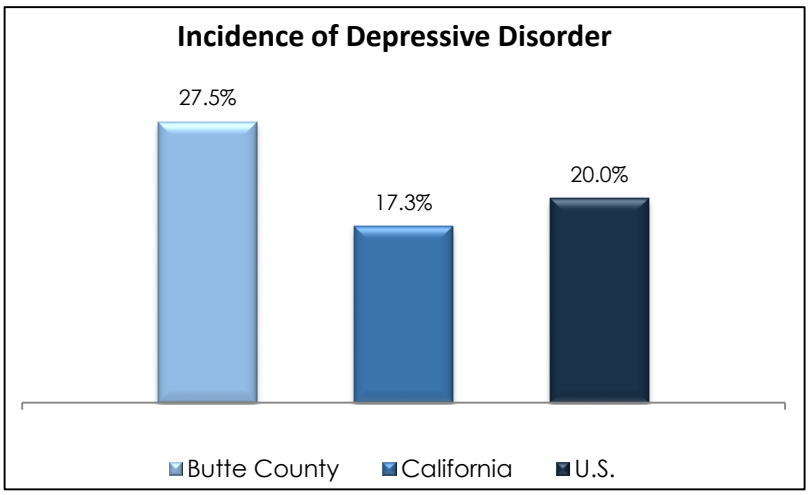
Healthy People 2020 objective MHMD-11: Increase depression screening by primary care workers

Healthy People 2020 objective MHMD-4: Reduce the proportion of persons who experience major depressive episodes (MDEs)

Depression is a common and treatable mental disorder characterized by changes in mood, and cognitive and physical symptoms over a period of time. It is the leading cause of disability in the U.S., associated with high societal costs and greater functional impairment than many other chronic diseases, including diabetes and arthritis.[41] The most commonly diagnosed form of depression is major depressive disorder. In 2015, approximately 16.1 million Americans had experienced at least one major depressive episode in the last year. [42]

Nearly three in ten residents of Butte County (27.5%) have ever been told that they had a depressive disorder (depression, major depression, dysthymia) or minor depression. This rate is considerably above the figure observed for California as a whole (17.3%,) as well as above the national data (20%.)

The likelihood of this diagnosis is inversely proportional to residents' age, with younger individuals being more likely to suffer from depression than their older counterparts. Moreover, females are more apt to be depressed than males. Finally, the lower income segments (and particularly those with less than $20,000 per year) are more likely to feel this way than their more affluent counterparts.



Percentage of respondents who were told by a doctor that they had a depressive disorder, or minor depression

Demographic Characteristics	Ever Told Had Depressive Disorder
Total	27.5%
Age	
18-24	30.2%
25-34	36.0%
35-44	35.3%
45-54	29.0%
55-64	27.1%
65+	13.2%
Gender	
Male	21.6%
Female	33.3%
Race	
White	27.0%
Black**	39.4%
Hispanic	35.7%
Non-Hispanic	26.7%
Education	
< High School	22.0%
High School Grad	29.1%
Some College	32.2%
College Graduate	22.9%
Household Income	
<$20,000	44.1%
$20,000-$34,999	25.4%
$35,000-$$49,999**	14.4%
$50,000-$74,999	19.4%
$75,000 or more	20.4%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Chronic Health Conditions: Kidney Disease

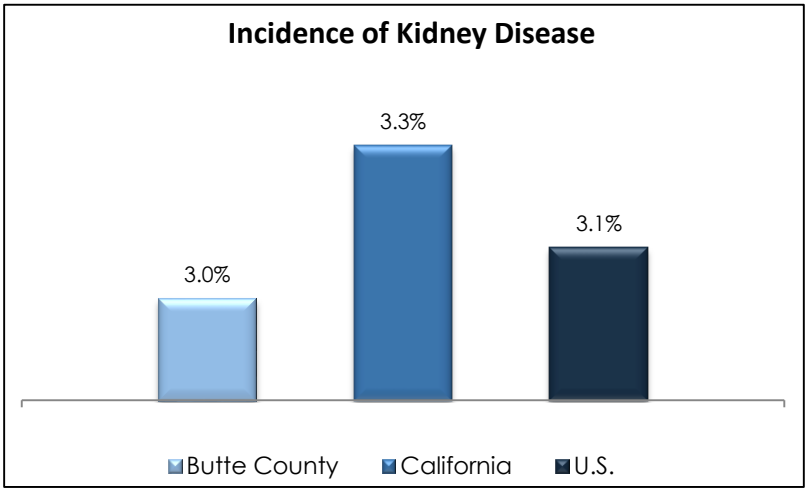
Healthy People 2020 objective CKD-1: Reduce the proportion of the U.S. population with chronic kidney disease

Healthy People 2020 objective CKD-7: Reduce the number of deaths among persons with chronic kidney disease

Chronic kidney disease (CKD) is a condition in which kidneys are damaged and cannot filter blood the way they should. In early stages, CKD may go undetected, and the only way to diagnose the condition is through specific blood and urine tests. Adults with diabetes, high blood pressure, heart disease, obesity, lupus, and a family history of CKD have a higher risk of developing the condition.[43] If untreated, the disease may progress to kidney failure – a condition currently affecting more than 661,000 Americans. Each year, kidney disease kills more people than breast and prostate cancer.[44] Eating more fruit and vegetables, staying physically active, and getting regular checkups are the best prevention methods.[43]

At 3%, the incidence of kidney disease in Butte County is on par with the statewide and nationwide rates (3.3% and 3.1%, respectively.)

Residents over the age of 65% are the highest risk of this condition.



Percentage of respondents who were told by a doctor that they had kidney disease

Demographic Characteristics	Ever Told Had Kidney Disease
Total	3.0%
Age	
18-24	-
25-34	-
35-44	-
45-54	3.0%
55-64	4.8%
65+	9.0%
Gender	
Male	3.1%
Female	3.0%
Race	
White	3.5%
Black**	-
Hispanic	-
Non-Hispanic	3.6%
Education	
< High School	2.7%
High School Grad	4.3%
Some College	2.9%
College Graduate	2.2%
Household Income	
<$20,000	2.8%
$20,000-$34,999	5.3%
$35,000-$$49,999**	3.6%
$50,000-$74,999	4.8%
$75,000 or more	3.8%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Chronic Health Conditions: Skin Cancer

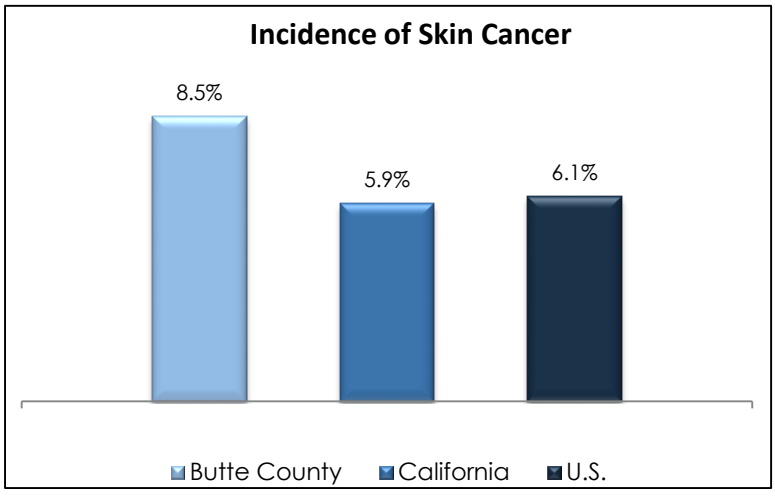
Healthy People 2020 objective C-8: Reduce the melanoma cancer death rate

Healthy People 2020 objective C-20: Increase the proportion of persons who participate in behaviors that reduce their exposure to harmful ultraviolet (UV) irradiation and avoid sunburn

In the U.S., more than 9,500 people are diagnosed with skin cancer every day. On an annual basis, that is more than all other cancers combined.[35] In 2016, the melanoma type of skin cancer was the 6th most common cancer as measured by new cases nationwide. In the same year, 9,535 melanoma cases were reported in California.[36] The annual cost of treating skin cancers in the U.S. is estimated at $8.1 billion.[35]

The overall rate of skin cancer among Butte County adults is 8.5%. This figure is above both the state rate (5.9%) and the national prevalence data (6.1%).

The incidence of skin cancer is directly proportional to residents' ages, with a peak in the 65+ age segment. White respondents are also notably more likely to report having skin cancer than their Hispanic counterparts.



Percentage of respondents who were told by a doctor that they had skin cancer

Demographic Characteristics	Ever Told You Had Skin Cancer
Total	8.5%
Age	
18-24	1.9%
25-34	1.5%
35-44	4.5%
45-54	5.1%
55-64	12.7%
65+	22.8%
Gender	
Male	7.5%
Female	9.5%
Race	
White	9.4%
Black**	14.6%
Hispanic	3.2%
Non-Hispanic	9.1%
Education	
< High School	5.3%
High School Grad	6.1%
Some College	9.6%
College Graduate	9.9%
Household Income	
<$20,000	6.3%
$20,000-$34,999	9.1%
$35,000-$$49,999**	17.5%
$50,000-$74,999	19.1%
$75,000 or more	7.4%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

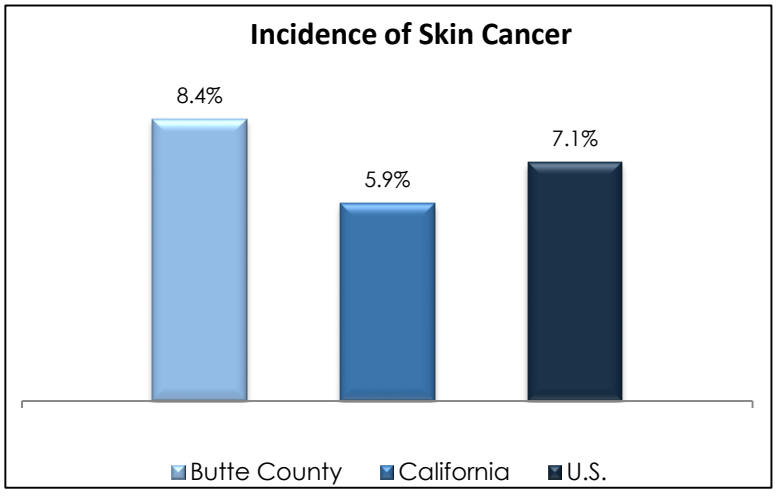
Chronic Health Conditions: Other Types of Cancer

Healthy People 2020 objective C-1: Reduce the overall cancer death rate

Cancer is the second-leading cause of death in the United States, behind heart disease. The most common cancers in the nation – breast, prostate, lungs and bronchus, and colorectal cancer – are responsible for the most deaths. Smoking is a factor in 32% of cancer deaths, and avoiding tobacco use is the best way to reduce that rate.[26] In 2017, in California, cancer was the cause of 59,516 deaths.[12] The cost of cancer care is expected to increase to nearly $158 billion by 2020.[37] The estimated cost of lost productivity from cancer mortality is $146.7 billion in 2020.[38]

The overall rate of cancer (other than skin cancer) among Butte County adults is 8.4%. This figure is higher than the state rate (5.9%) and somewhat above the national prevalence data (7.1%.)

Residents age 55+ are more likely than those younger to develop other types of cancer. Non-Hispanics are also slightly more likely to have been diagnosed with cancer than Hispanic respondents, and those in the bottom income and education brackets are somewhat more likely to have been told they had it than their more educated and more affluent counterparts.



Percentage of respondents who were told by a doctor that they had any other types of cancer

Demographic Characteristics	Ever Told Had Any Other Types of Cancer
Total	8.4%
Age	
18-24	3.5%
25-34	1.5%
35-44	8.4%
45-54	2.3%
55-64	11.9%
65+	20.4%
Gender	
Male	8.0%
Female	8.9%
Race	
White	8.3%
Black**	-
Hispanic	2.5%
Non-Hispanic	9.4%
Education	
< High School	20.4%
High School Grad	7.9%
Some College	7.2%
College Graduate	7.6%
Household Income	
<$20,000	11.0%
$20,000-$34,999	8.1%
$35,000-$$49,999**	9.1%
$50,000-$74,999	7.6%
$75,000 or more	9.3%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Cancer Survivorship: Treatment & Clinical Trial Participation

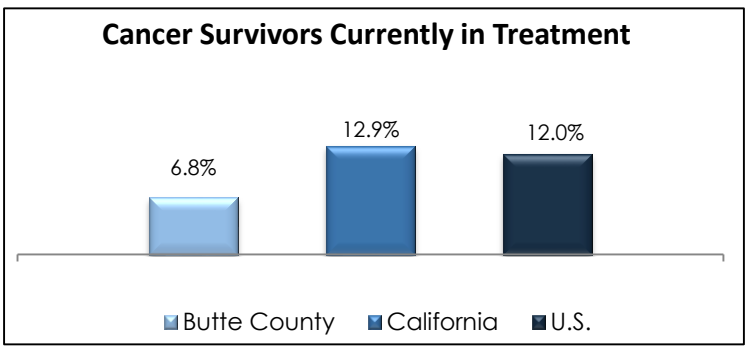
Healthy People 2020 objective C-1: Reduce the overall cancer death rate

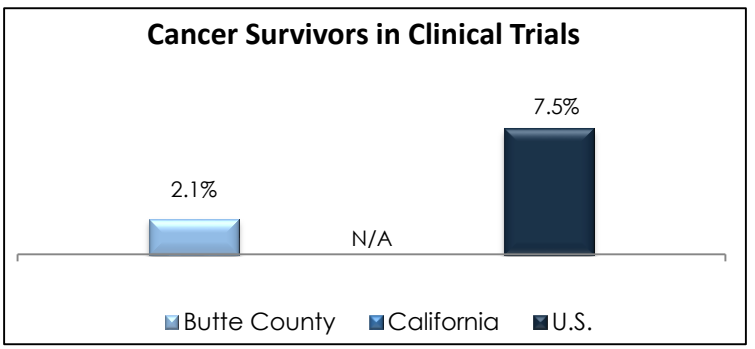
The term "cancer survivor" refers to any person with a history of cancer, from the time of the diagnosis through the remainder of their life. There are three phases of cancer survival: the time from diagnosis to the end of initial treatment, the transition from treatment to extended survival, and long-term survival.

Cancer treatments may include surgery, chemotherapy, radiation therapy, hormone therapy, immunotherapy, or stem cell/bone marrow transplant. Treatments may be used alone or in combination, depending on the kind and stage of cancer. Patients may also choose to join a clinical trial to help find out which treatments are safe and if they work well. In 2016, an estimated 15.5 million Americans survived cancer. Among them were 1.7 million Californians.[15]

A total of 6.8% of Butte County residents are cancer survivors who are currently in treatment. This is roughly half of the percentages estimated for the state and the U.S. as a whole (12.9% and 12.0%, respectively.)

Additionally, 2.1% of those who completed treatment participated in clinical trials. This is notably less than the 7.5% noted nationwide.





Percentage of respondents who are currently in treatment, and percentage of respondents who participated in clinical trial

Demographic Characteristics	Currently in Treatment	Participated in Clinical Trial
Total	6.8%	2.1%
Age		
18-24	-**	-**
25-34	-**	-**
35-44	-**	-**
45-54	-**	-**
55-64	12.1%**	-**
65+	8.4%	4.6%**
Gender		
Male**	10.6%	2.2%
Female	4.0%	2.0%
Race		
White	6.7%	2.4%%
Black**	-	-
Hispanic**	-	-
Non-Hispanic	7.5%	2.3%
Education		
< High School**	10.8%	-
High School Grad**	7.6%	2.0%
Some College**	5.4%	-
College Graduate**	6.6%	5.0%
Household Income		
<$20,000**	11.9%	2.5%
$20,000-$34,999**	16.4%	-
$35,000-$$49,999**	-	-
$50,000-$74,999**	4.6%	-
$75,000 or more**	5.5%	9.7%

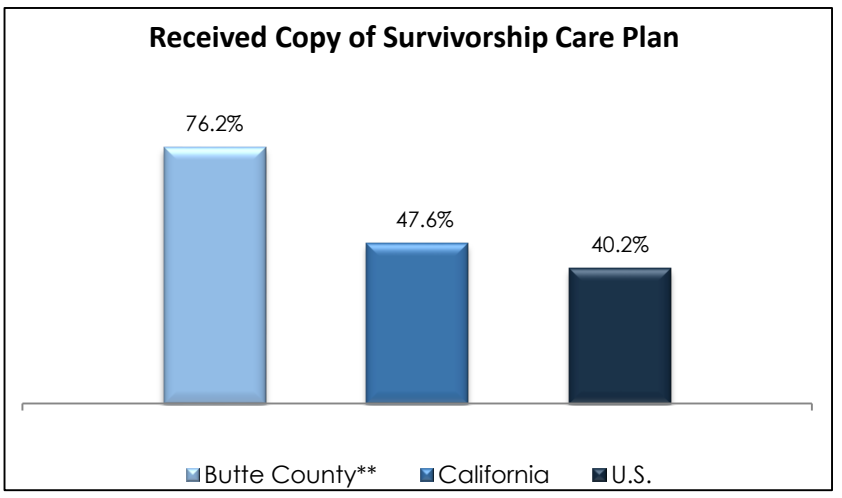
**Note: Comparative data is based on 2009 BRFSS of California Residents and 2009 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Cancer Survivorship: Survivorship Care Plan

Healthy People 2020 objective C-13: Increase the proportion of cancer survivors who are living 5 years or longer after diagnosis

A survivorship care plan is a record of the survivor's cancer and treatment history, as well as any checkups or follow-up tests needed in the future. It may also list ideas for staying healthy. It is recommended that survivorship care plans address the chronic effects of cancer (pain, fatigue, depression/anxiety), as well as monitoring for and preventing late effects (osteoporosis, heart disease, second malignancies.) They should also explicitly identify the providers responsible for each aspect of ongoing care and provide information on resources available for psychosocial issues that may arise as a result of the prior cancer diagnosis.[32]

More than three-quarters of Butte County cancer survivors received a copy of their survivorship care plan. This percentage is observably above the state- and nationwide figures (47.6% and 40.2%;) however, this result needs to be treated with caution due to a very small sample size (n=14.)



Percentage of respondents who received copy of survivorship care plan

Demographic Characteristics	Received copy of survivorship care plan
Total**	76.2%
Age	
18-24**	-
25-34**	100%
35-44**	-
45-54**	100%
55-64**	80.0%
65+**	67.1%
Gender	
Male**	54.4%
Female**	87.8%
Race	
White**	75.5%
Black**	100.0%
Hispanic**	100.0%
Non-Hispanic**	75.5%
Education	
< High School**	-
High School Grad**	100.0%
Some College**	86.1%
College Graduate**	83.5%
Household Income	
<$20,000**	100.0%
$20,000-$34,999**	71.5%
$35,000-$$49,999**	72.5%
$50,000-$74,999**	66.5%
$75,000 or more**	100.0%

**Note: Comparative data is based on 2009 BRFSS of California Residents and 2009 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Hypertension Awareness

Healthy People 2020 objective HD S-5: Reduce the proportion of adults with hypertension

High blood pressure, also known as hypertension, is a major and modifiable risk factor for heart disease and stroke. In 2015, there were 427,631 deaths in the United States with any mention of high blood pressure, 78,862 of which were primarily attributable to high blood pressure. As of 2017, nearly half of Americans (45.6%) were estimated to have high blood pressure,[33] but because it often has no sign or symptoms, only 54% of adults with the condition have it under control.[34] High blood pressure is influenced by factors such as smoking, obesity, physical inactivity, poor diet, and excessive alcohol use.[26]

Approximately one-third of Butte County residents have ever been told by a doctor that they had high blood pressure. This is above the state figure (28.4%) and on par with the nationwide result (32.3%).

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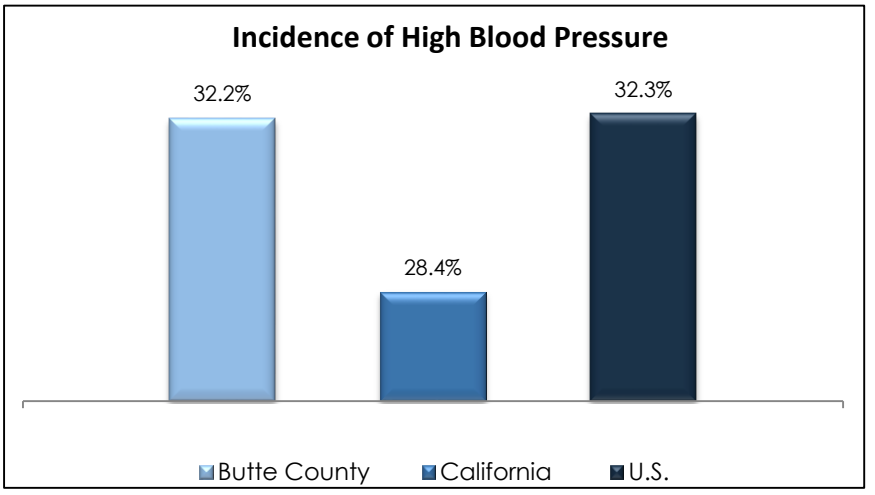
The incidence of high blood pressure increases proportionately to age and is most prevalent among African American residents.



Percentage of respondents who have ever been told by a doctor that they had high blood pressure

Demographic Characteristics	Ever Told Have High Blood Pressure
Total	32.2%
Age	
18-24	11.6%
25-34	14.8%
35-44	28.3%
45-54	32.2%
55-64	48.0%
65+	55.6%
Gender	
Male	30.6%
Female	33.8%
Race	
White	33.5%
Black**	46.9%
Hispanic	21.6%
Non-Hispanic	34.2%
Education	
< High School	32.7%
High School Grad	27.7%
Some College	31.8%
College Graduate	36.2%
Household Income	
<$20,000	38.0%
$20,000-$34,999	29.1%
$35,000-$$49,999**	34.8%
$50,000-$74,999	40.0%
$75,000 or more	36.8%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Cholesterol Awareness

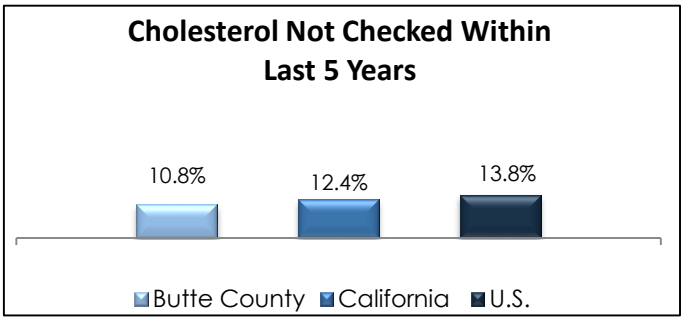
Healthy People 2020 objective HD S-6: Reduce the proportion of adults with who have had their blood cholesterol checked within the preceding 5 years

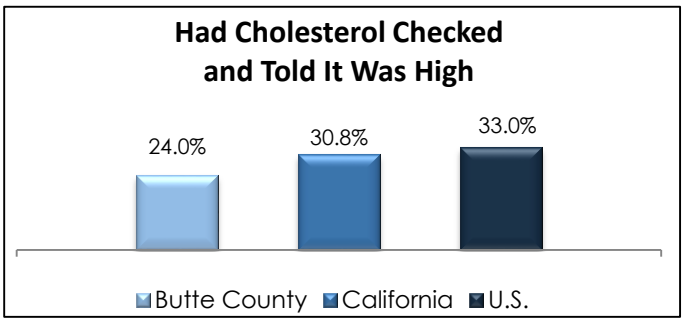
Healthy People 2020 objective HD S-7: Reduce the proportion of adults with high total blood cholesterol levels

High cholesterol is a major and modifiable risk factor for heart disease and stroke. The American Heart Association recommends adults aged 20+ have their cholesterol checked every 4-to-6 years. High cholesterol has no symptoms, but it can be detected with a simple blood test.[26] At present, an estimated 28.5 million Americans have high cholesterol levels.[33]

A total of 11% of Butte County residents have not had their blood cholesterol checked within the last 5 years. This result is below the figures noted for California as a whole (12.4%) and the U.S. (13.8%). Respondents most likely not to have their cholesterol checked include those with less than high school education and those with incomes below the $35,000 threshold.

Additionally, just under one-quarter (24%) had their blood cholesterol checked and have been told that it was high. Again, this is below the state- and nationwide figures (30.8% and 33%, respectively.) High cholesterol levels are most prevalent among non-Hispanics, and increase proportionately to residents' age.





Percentage of respondents who have had blood cholesterol checked within the last 5 years, and percentage of respondents told it was high

Demographic Characteristics	Cholesterol Not Checked Within Last 5 Years	Cholesterol Checked and Told It Was High
Total	10.8%	24.0%
Age		
18-24	10.2%	2.0%
25-34	25.9%	10.3%
35-44	11.1%	18.7%
45-54	4.2%	27.5%
55-64	10.0%	36.5%
65+	4.9%	42.2%
Gender		
Male	12.3%	24.5%
Female	9.1%	23.5%
Race		
White	10.5%	25.8%
Black**	8.6%	22.9%
Hispanic	13.8%	17.1%
Non-Hispanic	10.5%	25.0%
Education		
< High School	17.0%	24.9%
High School Grad	9.5%	22.3%
Some College	10.8%	19.0%
College Graduate	10.3%	29.7%
Household Income		
<$20,000	13.3%	26.2%
$20,000-$34,999	28.4%	26.5%
$35,000-$$49,999**	5.0%	35.3%
$50,000-$74,999	3.7%	29.3%
$75,000 or more	4.5%	27.6%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

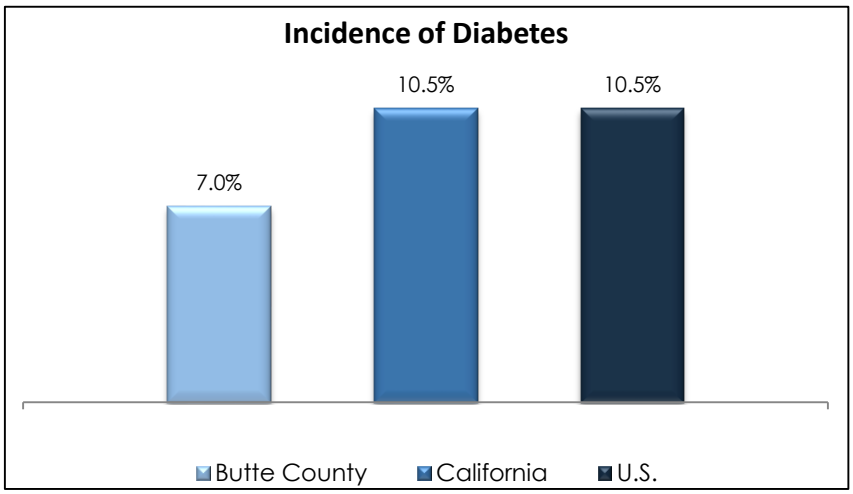
Diabetes

Healthy People 2020 objective D-1: Reduce the annual number of new cases of diagnosed diabetes in the population

Diabetes mellitus is a chronic disease characterized by high glucose levels, owing to insufficient production of insulin by the pancreas or to a reduction in the body's ability to use insulin. In the last 20 years, the number of adults diagnosed with diabetes has more than tripled as the US population has aged and become more overweight.[16] In California, diabetes was the seventh leading cause of death with 9,595 deaths in 2017.[17] Obesity, physical inactivity, being 45 years or older, and/or having a family history of diabetes are just a few of the known risk factors that are associated with the development of diabetes.[18]

At 7.0%, the incidence of diabetes among Butte County residents is considerably lower than the state- and nationwide rates (10.5% each.)

Incidence of diabetes increases substantially with the age of residents. It is also somewhat higher among individuals with less than high school education, and among those with lower income levels (up to $49,999 per year.)



Percentage of respondents who had ever been told by a doctor that they have diabetes (excluding gestational diabetes)

Demographic Characteristics	Ever Told You Have Diabetes
Total	7.0%
Age	
18-24	-
25-34	-
35-44	4.2%
45-54	7.1%
55-64	13.5%
65+	15.6%
Gender	
Male	6.9%
Female	7.1%
Race	
White	6.8%
Black**	13.2%
Hispanic	5.6%
Non-Hispanic	7.4%
Education	
< High School	14.2%
High School Grad	4.5%
Some College	6.6%
College Graduate	7.8%
Household Income	
<$20,000	7.3%
$20,000-$34,999	15.5%
$35,000-$$49,999**	11.9%
$50,000-$74,999	5.1%
$75,000 or more	4.6%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

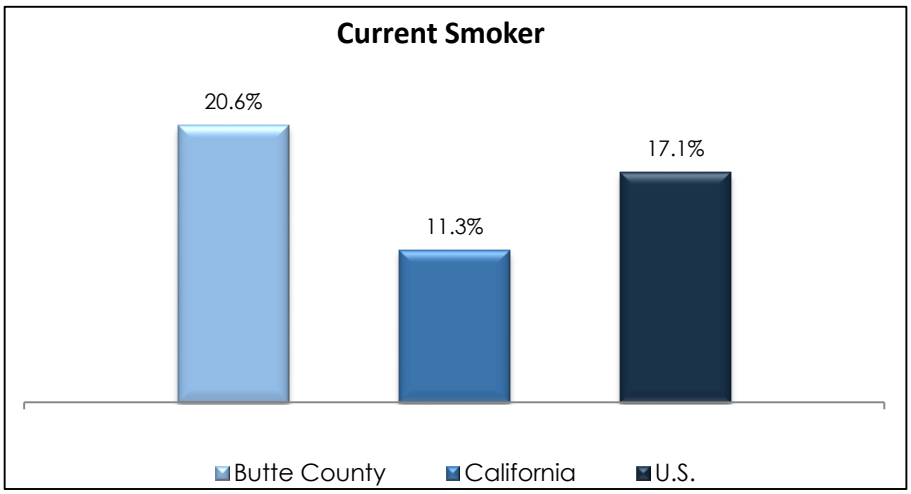
Tobacco Use

Healthy People 2020 objective TU-1: Reduce tobacco use by adults
Healthy People 2020 objective TU-14: Increase the proportion of smoke-free homes

Smoking contributes to the development of many kinds of chronic conditions, including cancers, respiratory diseases, diabetes, and cardiovascular diseases. It is "the leading cause of preventable death"[19] and "one of the biggest public health threats the world has ever faced, killing more than 8 million people a year."[20] It has been estimated that smoking costs the United States more than $170 billion in annual medical costs and another $156 billion in lost economic productivity,[21] as well as over 5 million years of potential life lost each year.[22] Current smoking status is defined as ever having smoked 100 cigarettes (five packs) and smoking cigarettes now, either every day or on some days.

Approximately one-fifth (20.6%) of Butte County residents are current smokers, based on the definition cited above. This figure is substantially above the state- and nationwide rates (11.3% and 17.1%).

Prevalence of smoking is least common among respondents under the age of 24 and over the age of 65, as well as college graduates. Females are also slightly less likely to be current smokers than males.



Percentage of respondents who are current smokers

Demographic Characteristics	Current Smoker
Total	20.6%
Age	
18-24	18.8%
25-34	25.9%
35-44	28.6%
45-54	22.7%
55-64	22.6%
65+	10.2%
Gender	
Male	23.1%
Female	18.2%
Race	
White	21.1%
Black**	37.3%
Hispanic	16.7%
Non-Hispanic	20.9%
Education	
< High School	30.6%
High School Grad	25.4%
Some College	23.6%
College Graduate	11.9%
Household Income	
<$20,000	28.1%
$20,000-$34,999	31.7%
$35,000-$$49,999**	5.3%
$50,000-$74,999	28.6%
$75,000 or more	8.7%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

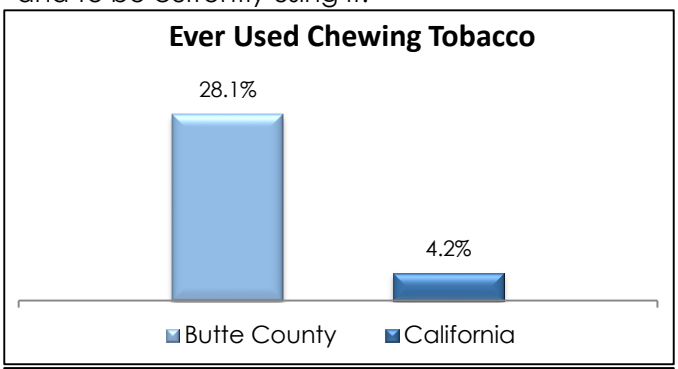
Other Tobacco Use: Chewing Tobacco

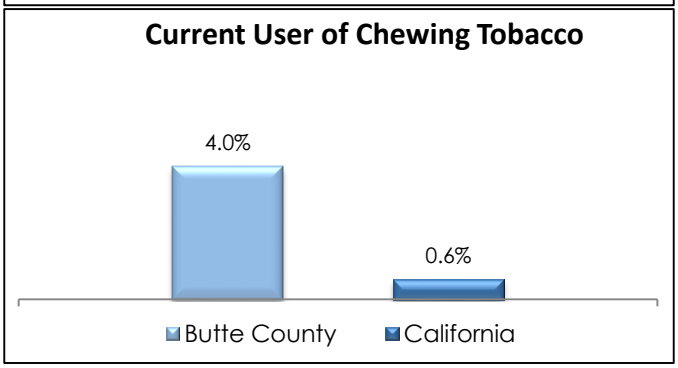
Healthy People 2020 objective TU-1.2: Reduce use of smokeless tobacco products by adults

Chewing tobacco and snuff are commonly used forms of tobacco in the United States in addition to cigarettes. Several oral health problems are associated with smokeless tobacco including receding gums, mouth sores and plaques, dental cavities and tooth abrasions.[22] Smokeless tobacco is a known cause of oral cancer and oral disease, and also may increase risk of pancreatic cancers, early delivery and stillbirth, heart disease and stroke.[22] Current user status is defined as having used chewing tobacco at least once during lifetime and using it on 1 or more day in the past 30 days.

Nearly three in ten residents of Butte County have ever used chewing tobacco, and a total of 4% are current users, as defined above. Both metrics are notably above statewide figures.

Males are notably more likely than females to have ever used chewing tobacco and to be current users. Likewise, residents in the top income bracket ($75+) are more likely than their less affluent counterparts to have ever tried it and to be currently using it.





Percentage of respondents who have ever used chewing tobacco, and percentage of respondents who are current users of chewing tobacco

Demographic Characteristics	Ever Used Chewing Tobacco	Current User of Chewing Tobacco
Total	28.1%	4.0%
Age		
18-24	18.2%	2.4%
25-34	35.0%	8.9%
35-44	42.0%	7.3%
45-54	42.7%	3.2%
55-64	26.9%	3.6%
65+	10.8%	0.8%
Gender		
Male	45.7%	7.1%
Female	10.8%	1.1%
Race		
White	30.7%	4.4%
Black**	41.8%	8.6%
Hispanic	25.0%	2.2%
Non-Hispanic	27.9%	4.4%
Education		
< High School	25.4%	9.7%
High School Grad	35.1%	5.5%
Some College	28.0%	2.0%
College Graduate	23.5%	3.8%
Household Income		
<$20,000	23.7%	3.6%
$20,000-$34,999	27.5%	1.5%
$35,000-$$49,999**	14.9%	4.1%
$50,000-$74,999	20.1%	2.8%
$75,000 or more	32.6%	6.5%

**Note: Comparative data is based on 2015 BRFSS of California Residents. National comparative data is not available in this category **Caution: Fewer than 30 respondents*

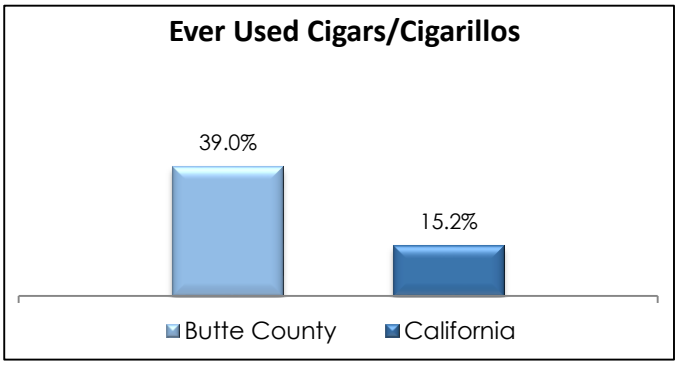
Other Tobacco Use: Cigars/Cigarillos

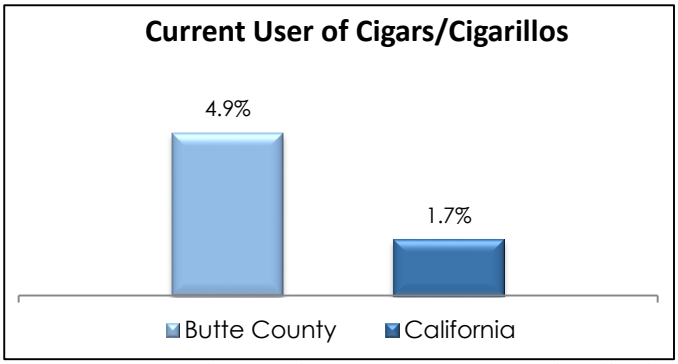
Healthy People 2020 objective TU-1.3: Reduce use of cigars, cigarillos, and little filtered cigars by adults

Healthy People 2020 objective TU-14: Increase the proportion of smoke-free homes

In the United States, cigarette consumption declined during 2000-2011. However, consumption of cigars more than doubled during the same period.[47] The three major types of cigars sold in the U.S. are large cigars, cigarillos and little cigars. All of them contain the same toxic and carcinogenic compounds found in cigarettes, and are associated with an increased risk for cancers of the lung, oesophagus, larynx, and oral cavity. They are also linked to gum disease and tooth loss, coronary heart disease, and lung diseases (such as emphysema and chronic bronchitis).[48] Current user status is defined as having used cigars/cigarillos at least once during lifetime and using them on 1 or more day in the past 30 days.

Approximately four in ten residents of Butte County have ever used cigars or cigarillos/little cigars, and a total of 4.9% are current users. Both metrics are notably above statewide figures. Males are more likely than females to have ever used and to be currently using cigars/cigarillos,





Percentage of respondents who have ever used cigars/cigarillos, and percentage of respondents who are current users of cigars/cigarillos

Demographic Characteristics	Ever Used Cigars/ Cigarillos	Current User of Cigars/ Cigarillos
Total	39.0%	4.9%
Age		
18-24	25.5%	5.9%
25-34	49.5%	8.1%
35-44	49.6%	8.2%
45-54	38.0%	3.3%
55-64	42.6%	4.5%
65+	34.1%	1.3%
Gender		
Male	54.2%	6.6%
Female	24.1%	3.3%
Race		
White	41.1%	4.5%
Black**	34.1%	-
Hispanic	39.2%	5.2%
Non-Hispanic	38.4%	4.9%
Education		
< High School	38.6%	9.7%
High School Grad	37.7%	6.7%
Some College	41.2%	4.5%
College Graduate	37.8%	3.0%
Household Income		
<$20,000	34.2%	6.7%
$20,000-$34,999	47.8%	5.2%
$35,000-$$49,999**	32.3%	2.1%
$50,000-$74,999	41.6%	10.8%
$75,000 or more	48.4%	0.6%

**Note: Comparative data is based on 2015 BRFSS of California Residents. National comparative data is not available in this category **Caution: Fewer than 30 respondents*

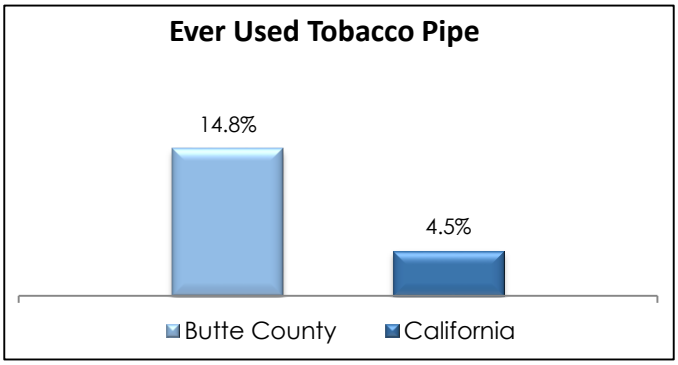
Other Tobacco Use: Tobacco Pipe

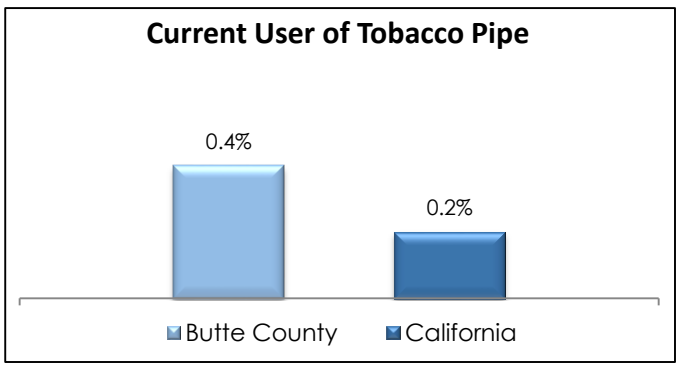
Healthy People 2020 objective TU-1: Reduce tobacco use by adults
Healthy People 2020 objective TU-14: Increase the proportion of smoke-free homes

Pipe smoking consists of loose leaf tobacco that is fire-cured and burned in a traditional pipe with a bowl and a mouthpiece. Although pipe smoking has dwindled over the years, the proportion of respondents who have ever used it varies by state and ranges from 3% to 12%.[6] Like cigarettes, pipe tobacco contains toxic chemicals that increase the risk for some cancers. Current user status is defined as having used tobacco pipe at least once during lifetime and using it on 1 or more day in the past 30 days.

A total of 14.8% of Butte County residents have ever used a tobacco pipe – a figure much above the rate observed for California. The current use of tobacco pipes is marginal, at 0.4%; this result is consistent with the statewide result (0.2%.)

Males and white/non-Hispanic residents are most likely to have ever used, and to be currently using, tobacco pipe.





Percentage of respondents who have ever used tobacco pipe, and percentage of respondents who are current users of tobacco pipe

Demographic Characteristics	Ever Used Tobacco Pipe	Current User of Tobacco Pipe
Total	14.8%	0.4%
Age		
18-24	3.5%	-
25-34	10.8%	-
35-44	23.8%	3.3%
45-54	12.7%	-
55-64	14.7%	-
65+	24.2%	-
Gender		
Male	24.1%	0.5%
Female	5.7%	0.4%
Race		
White	15.9%	0.5%
Black**	5.3%	-
Hispanic	7.6%	-
Non-Hispanic	16.0%	0.5%
Education		
< High School	20.8%	-
High School Grad	15.4%	-
Some College	15.4%	0.7%
College Graduate	12.6%	0.6%
Household Income		
<$20,000	18.7%	-
$20,000-$34,999	16.1%	-
$35,000-$$49,999**	12.0%	-
$50,000-$74,999	22.6%	-
$75,000 or more	21.1%	1.1%

**Note: Comparative data is based on 2015 BRFSS of California Residents. National comparative data is not available in this category **Caution: Fewer than 30 respondents*

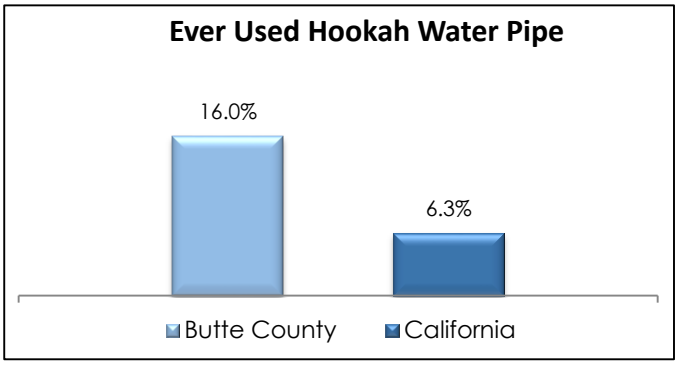
Other Tobacco Use: Hookah Water Pipe

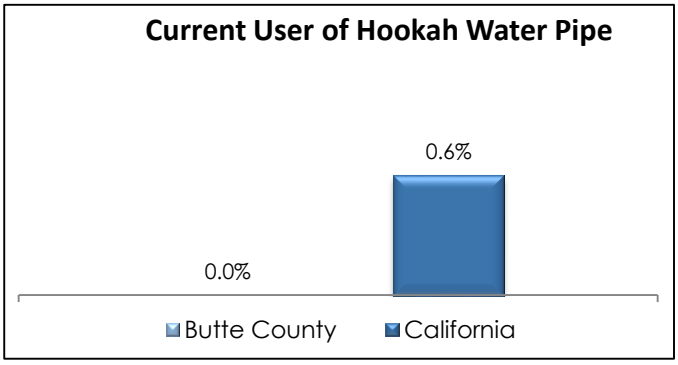
Healthy People 2020 objective TU-1: Reduce tobacco use by adults
Healthy People 2020 objective TU-14: Increase the proportion of smoke-free homes

Hookahs are water pipes that are used to smoke specially made tobacco that comes in different flavors. Although many users think it is less harmful, hookah smoking has many of the same risks as cigarette smoking, including oral cancer, lung cancer, stomach cancer, cancer of the oesophagus, and reduced lung function.[49] Current user status is defined as having used hookah at least once during lifetime and using it on 1 or more day in the past 30 days.

A total of 16.0% of Butte County residents have ever used a hookah pipe – a figure much above the rate observed for California (6.3%.) However, there are no current users of hookah in the County – a result fairly consistent with the state figure of only 0.6%.

Residents age 25-44 are most likely to have ever tried hookah, and males are more likely to have done so than females. Additionally, Hispanic residents and those with some college-level work completed report having tried it more often than their counterparts.





Percentage of respondents who have ever used hookah water pipe, and percentage of respondents who are current users of hookah water pipe

Demographic Characteristics	Ever Used Hookah Water Pipe	Current User of Hookah Water Pipe
Total	16.0%	-
Age		
18-24	17.0%	-
25-34	37.4%	-
35-44	21.0%	-
45-54	6.9%	-
55-64	11.4%	-
65+	5.8%	-
Gender		
Male	20.5%	-
Female	11.6%	-
Race		
White	15.0%	-
Black**	4.6%	-
Hispanic	28.6%	-
Non-Hispanic	13.7%	-
Education		
< High School	8.4%	-
High School Grad	13.7%	-
Some College	20.0%	-
College Graduate	15.3%	-
Household Income		
<$20,000	11.0%	-
$20,000-$34,999	23.7%	-
$35,000-$$49,999**	13.1%	-
$50,000-$74,999	21.2%	-
$75,000 or more	23.0%	-

**Note: Comparative data is based on 2015 BRFSS of California Residents. National comparative data is not available in this category **Caution: Fewer than 30 respondents*

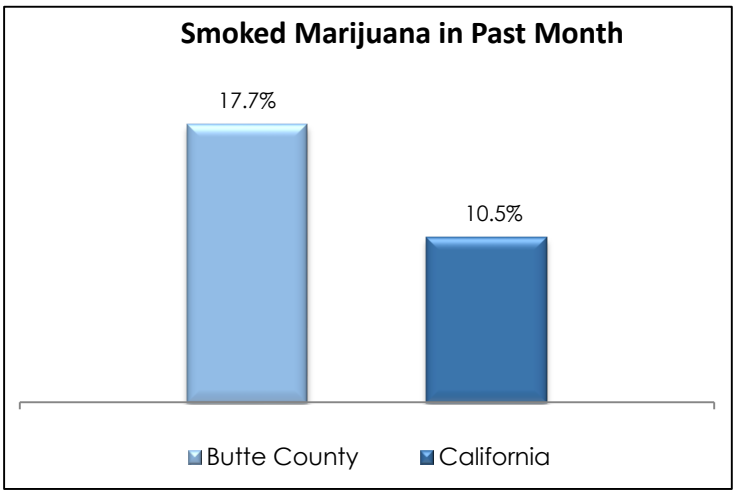
Marijuana Use

Healthy People 2020 objective SA-13: Reduce past-month use of illicit substances

While legalized in many states, marijuana is still considered an illicit substance in others. Its use is on the rise, with 37.6 million users in the U.S. in 2016.[50] Only from 2002 to 2014, the prevalence of past month marijuana use went up by 35% among persons age 12+, with the increases being greatest among adults age 55+.[51] Heavy or frequent marijuana use has a negative effect on attention, memory, and learning, and has been linked to depression and anxiety.[52] Smoked marijuana also includes many of the same substances found in tobacco smoke, which are harmful to the lungs and cardiovascular system, and could lead to increased risk of stroke and heart disease.[53]

A total of 17.7% of Butte County residents have smoked marijuana or hashish at least once within the past 30 days. This is notably above the figure noted for California as a state (10.5%.)

This result is driven mostly by respondents in the younger age categories (up to 44 years old,) males, and Caucasians. The likelihood to report having smoked marijuana in the past month is also inversely proportional to the education level.



Percentage of respondents who smoked marijuana/hashish 1+ day within past 30 days

Demographic Characteristics	Smoked Marijuana/Hashish 1+ Day Within Past 30 Days
Total	17.7%
Age	
18-24	22.6%
25-34	22.5%
35-44	24.6%
45-54	14.6%
55-64	17.0%
65+	8.1%
Gender	
Male	22.7%
Female	12.9%
Race	
White	18.5%
Black**	5.3%
Hispanic	15.9%
Non-Hispanic	17.8%
Education	
< High School	33.1%
High School Grad	27.4%
Some College	14.2%
College Graduate	10.7%
Household Income	
<$20,000	23.7%
$20,000-$34,999	15.1%
$35,000-$$49,999**	4.8%
$50,000-$74,999	21.1%
$75,000 or more	8.6%

*Note: Comparative data is based on 2016 BRFSS of California Residents. National comparative data is not available in this category **Caution: Fewer than 30 respondents

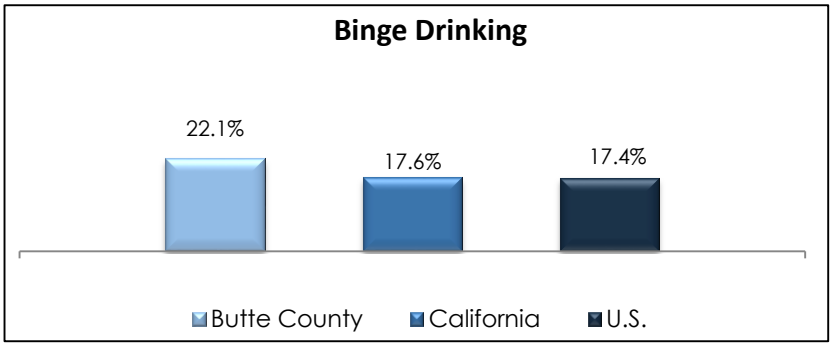
Alcohol Consumption

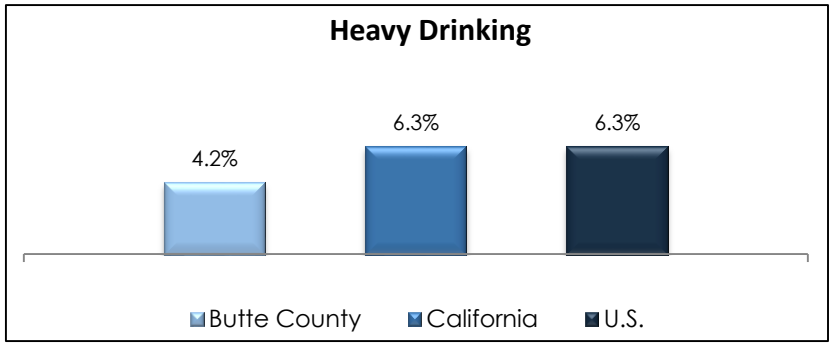
Healthy People 2020 objective SA-8.3: Reduce the proportion of persons engaging in binge drinking during the past 30 days – adults aged 18 years and older

Healthy People 2020 objective SA-15: Reduce the proportion of adults who drank excessively in the previous 30 days

Alcohol abuse has been associated with serious health problems such as cirrhosis of the liver, high blood pressure, stroke, and some types of cancer, and can increase the risk for motor vehicle accidents, injuries, violence, and suicide. In California, the percent of fatal motor vehicle crashes that involved any alcohol was 31% in 2017.[23] Binge drinking is defined as consuming five or more drinks per occasion (for men) or 4 or more drinks per occasion (for women) at least once in the past month, while heavy drinking is defined as consuming more than two alcoholic drinks per day (for men) or more than one drink per day (for women) in the past month.

At 4.2%, the rate of heavy drinking among Butte County residents is below state and nationwide levels (6.3% each.) At the same time, however, the rate of binge drinking (22.1%) exceeds the California and U.S. figures (17.6% and 17.4%, respectively). The highest rates of binge drinking are observed among respondents under the age of 54, as well as Caucasian males, and respondents without a college degree. Heavy drinking is driven by males.





**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Percentage of respondents reporting heavy drinking and percentage of respondents reporting binge drinking

Demographic Characteristics	Heavy Drinking	Binge Drinking
Total	4.2%	22.1%
Age		
18-24	5.3%	30.5%
25-34	1.5%	23.9%
35-44	3.1%	36.4%
45-54	2.3%	26.7%
55-64	6.4%	14.8%
65+	5.3%	5.5%
Gender		
Male	6.3%	31.2%
Female	2.1%	13.2%
Race		
White	4.6%	23.7%
Black**	-	5.3%
Hispanic	3.9%	21.3%
Non-Hispanic	4.2%	21.5%
Education		
< High School	0.9%	31.7%
High School Grad	5.6%	25.7%
Some College	4.4%	23.7%
College Graduate	3.6%	15.8%
Household Income		
<$20,000	5.7%	22.9%
$20,000-$34,999	1.0%	16.7%
$35,000-$$49,999**	5.3%	11.1%
$50,000-$74,999	3.1%	20.7%
$75,000 or more	4.0%	16.9%

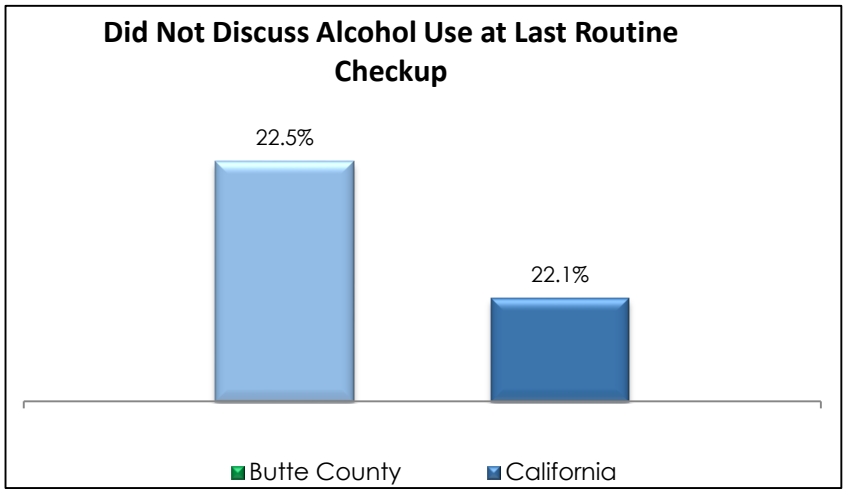
Alcohol Screening & Brief Intervention: Screened for Alcohol Consumption

Healthy People 2020 objective SA-8.3: Increase the proportion of persons who need alcohol abuse or dependence treatment and received specialty treatment for abuse or dependence in the past year

Risky alcohol use (heavy and binge drinking) contributes to a wide range of negative health and social consequences, including motor vehicle crashes, intimate partner violence, and fetal alcohol spectrum disorders. Over time, it can result in serious medical conditions, such as hypertension, gastritis, liver disease and various cancers. Alcohol Screening & Brief Intervention (ASBI) is a preventive service like hypertension or cholesterol screening that can occur as a part of a patient's wellness visit. ASBI involves a brief set of screening questions designed to identify patients' drinking patterns, a short conversation with those who are drinking too much, and referral to treatment, as appropriate.[56]

More than one-fifth (22.5%) of Butte County residents who had their routine checkup reports that they did not discuss alcohol use with their health care provider. This result is on par with California statistics (22.1%.)

Older respondents (65+ years of age), as well as those with lower levels of education (high school graduate or less) are most likely to say they were not screened for alcohol consumption.



*Note: Comparative data is based on 2014 BRFSS of California Residents. National comparative data is not available in this category **Caution: Fewer than 30 respondents

Percentage of respondents not screened for alcohol consumption at last routine checkup

Demographic Characteristics	Not Screened for Alcohol Consumption
Total	22.5%
Age	
18-24	19.8%
25-34	29.5%
35-44	10.1%
45-54	15.2%
55-64	18.9%
65+	36.8%
Gender	
Male	21.5%
Female	23.4%
Race	
White	21.2%
Black**	33.9%
Hispanic	17.9%
Non-Hispanic	23.0%
Education	
< High School**	29.9%
High School Grad	30.6%
Some College	16.7%
College Graduate	21.2%
Household Income	
<$20,000	22.2%
$20,000-$34,999	20.8%
$35,000-$$49,999**	26.0%
$50,000-$74,999**	25.3%
$75,000 or more	16.8%

Alcohol Screening & Brief Intervention: Given Advise on Harmful Levels of Drinking

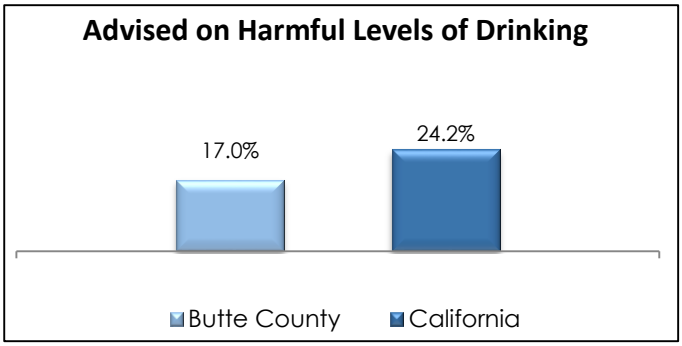
Healthy People 2020 objective SA-8.3: Increase the proportion of persons who need alcohol abuse or dependence treatment and received specialty treatment for abuse or dependence in the past year

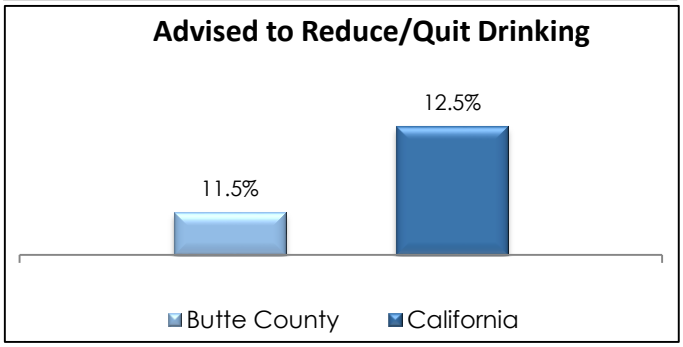
ASBI aims to increase a person's awareness of their alcohol use and motivate them to reduce risky drinking patterns and/or seek treatment. [57] *A review of studies shows a reduction in alcohol consumption from 13% to 34% among those who received brief intervention.*[58]

A total of 17.0% of Butte County residents say they were advised on harmful levels of drinking during their routine checkup, and 11.5% were advised to drink less. Both metrics are below the statewide results (24.2% and 12.5%, respectively.)

Older residents, i.e., those age 45+ are less likely to have discussed risky levels of drinking, as are females and those in the middle income categories ($20,000-$74,999.)

Among those asked about drinking, respondents most likely to receive advice on limiting alcohol consumption include individuals age 35-44, males, and those in the bottom and top income brackets (under $20,000 and over $75,000.)





Percentage of respondents who were offered advise on harmful levels of drinking, and percentage of respondents advised to drink less

Demographic Characteristics	Advised on Harmful Levels of Drinking	Advised to Reduce/Quit Drinking
Total	17.0%	11.5%
Age		
18-24	25.2%	10.9%
25-34	19.7%	14.0%
35-44	28.5%	18.9%
45-54	13.7%	10.9%
55-64	14.1%	6.2%
65+	7.8%	10.2%
Gender		
Male	24.4%	18.0%
Female	10.2%	5.3%
Race		
White	17.4%	10.9%
Black	31.7**	24.0%**
Hispanic	26.9%	12.7%**
Non-Hispanic	15.6%	11.5%
Education		
< High School	12.9%**	26.4%**
High School Grad	14.2%	6.4%
Some College	17.7%	9.5%
College Graduate	19.2%	14.0%
Household Income		
<$20,000	18.3%	19.5%
$20,000-$34,999	4.9%	3.8%**
$35,000-$$49,999	9.7%**	6.5%**
$50,000-$74,999	9.5%**	5.4%**
$75,000 or more	19.4%	16.6%

**Note: Comparative data is based on 2014 BRFSS of California Residents. National comparative data is not available in this category **Caution: Fewer than 30 respondents*

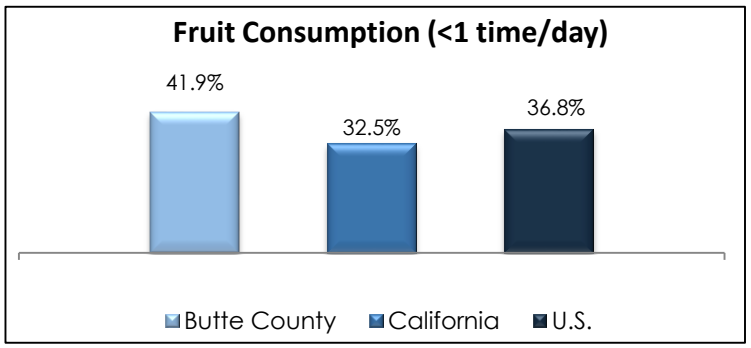
Fruit & Vegetable Consumption

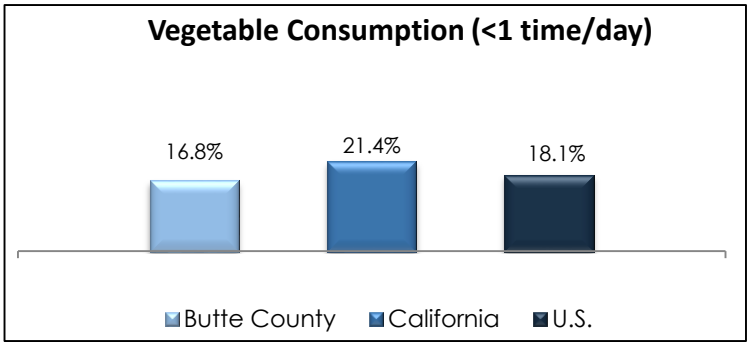
Healthy People 2020 objective NWS-14: Increase the contribution of fruits to the diets of the population aged 2 years and older

Healthy People 2020 objective NWS-15: Increase the variety and contribution of vegetables to the diets of the population aged 2 years and older

Eating a diet rich in fruits and vegetables can help reduce the risk of developing many chronic diseases, including heart disease, diabetes, some cancers and obesity.[24] Fruits and vegetables are also major contributors of a number of nutrients (such as potassium, dietary fiber, magnesium, as well as vitamins A, C, and K) that are currently underconsumed in the United States.[25] National findings indicate that, on average, adults consume 1.4 fruits per day and 1.9 vegetables per day.[26] Currently, only 12.2% of adults meet their daily fruit recommendation (2 cups daily), and only 9.3% meet the vegetable recommendation (2.5 cups).[27]

More than four in ten Butte County residents (41.9%) consume fruit less than 1 time per day, and 16.8% consume vegetables less than 1 time per day. Limited fruit consumption exceeds the figures reported in state- and nationwide BRFS studies. However, limited vegetable consumption is lower than what was reported in Michigan and the U.S. in general. The lowest fruit and vegetable consumption is reported by males, respondents with less than high school diploma, and those with incomes under $20,000.





Percentage of respondents who reported limited fruit and vegetable consumption

Demographic Characteristics	Fruits (<1 time/day)	Vegetables (<1 time /day)
Total	41.9%	16.8%
Age		
18-24	52.1%	19.1%
25-34	37.5%	21.7%
35-44	52.1%	11.1%
45-54	45.3%	12.4%
55-64	39.7%	20.4%
65+	29.6%	16.3%
Gender		
Male	48.5%	18.6%
Female	35.6%	15.1%
Race		
White	41.2%	16.4%
Black**	15.5%	8.6%
Hispanic	42.9%	18.1%
Non-Hispanic	42.2%	16.2%
Education		
< High School	61.3%	35.6%
High School Grad	42.6%	14.3%
Some College	45.0%	16.5%
College Graduate	34.0%	15.3%
Household Income		
<$20,000	53.7%	27.0%
$20,000-$34,999	36.7%	19.6%
$35,000-$$49,999**	26.9%	16.3%
$50,000-$74,999	37.6%	18.2%
$75,000 or more	46.6%	14.2%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

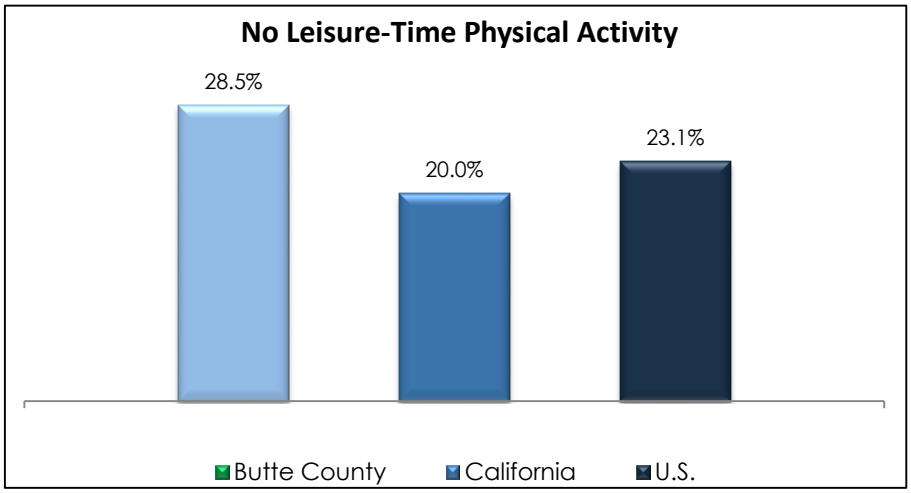
Physical Activity

Healthy People 2020 objective PA-1: Reduce the proportion of adults who engage in no leisure-time physical activity

Regular physical activity has been shown to reduce the risk of premature mortality and a number of chronic diseases, such as cancer, cardiovascular disease, and diabetes. Keeping physically active not only helps maintain a healthy body weight and normal muscle strength, bone mass, and joint function, but it can also relieve symptoms of anxiety and depression, and improve sleep.[28] The Healthy People target for no leisure-time physical activity is set at 32.6%.

The percentage of Butte County residents who report no leisure-time physical activity stands at 28.5%, which is above the state- and nationwide rates (20% and 23.1%, respectively). The prevalence of no leisure-time activity among Butte County adults is currently 4.1 points below the 2020 target of 32.6%, indicating that this Healthy People objective can be considered met.

Leisure-time physical activity is least prevalent among those age 25-34, as well as the oldest respondent segment (age 65+.) Moreover, the likelihood of engaging in physical activity increases in proportion to respondents' income, with those making less than $35,000 per year being most apt to report no activity.



Percentage of respondents who reported no leisure-time physical activity

Demographic Characteristics	No Physical Activity
Total	28.5%
Age	
18-24	26.3%
25-34	37.2%
35-44	20.5%
45-54	28.4%
55-64	28.2%
65+	30.9%
Gender	
Male	30.3%
Female	26.7%
Race	
White	27.9%
Black**	25.8%
Hispanic	31.8%
Non-Hispanic	27.6%
Education	
< High School	33.8%
High School Grad	28.6%
Some College	32.4%
College Graduate	23.5%
Household Income	
<$20,000	42.7%
$20,000-$34,999	44.5%
$35,000-$$49,999**	20.0%
$50,000-$74,999	19.9%
$75,000 or more	16.7%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

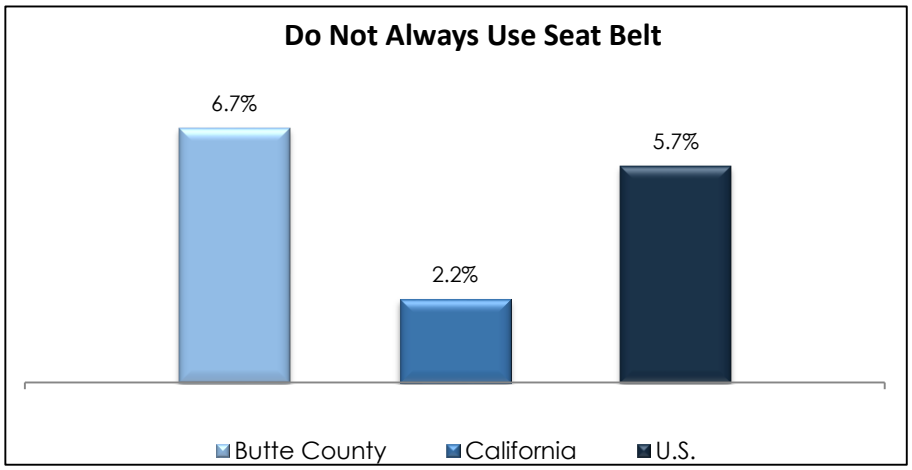
Seatbelt Use

Healthy People 2020 objective IVP-13: Reduce motor vehicle crash-related deaths
Healthy People 2020 objective IVP-15: Increase use of safety belts

In 2017, 3,602 people died in automobile accidents in California, with an additional 14,188 people sustaining serious injuries. Among the fatalities, 600 passengers were unrestrained.[23] Seatbelt use has been proven to save lives and prevent injuries. It has been estimated that, among drivers and front seat passengers, seat belts reduce the risk of death by 45%, and cut the risk of serious injury by 50%.[30] With 97.8% reporting consistent seatbelt use, California is the healthies state on this metric.

A total of 6.7% of Butte County residents do not always use a seatbelt when driving or riding in a car. This is substantially above the California-wide rate (2.2%) and somewhat below the nationwide figure (5.7%.)

The youngest respondents (18-24 years of age,) as well as males and those with less than a college degree are more likely than their counterparts to say they do not always wear a seatbelt.



Percentage of respondents who do not always use seatbelts when driving/riding in the car

Demographic Characteristics	Do Not Always Use Seatbelt
Total	6.7%
Age	
18-24	12.7%
25-34	3.3%
35-44	7.3%
45-54	2.1%
55-64	6.7%
65+	7.4%
Gender	
Male	8.6%
Female	4.8%
Race	
White	6.5%
Black**	-
Hispanic	11.2%
Non-Hispanic	5.7%
Education	
< High School	6.3%
High School Grad	9.6%
Some College	7.5%
College Graduate	3.7%
Household Income	
<$20,000	3.9%
$20,000-$34,999	6.2%
$35,000-$$49,999**	2.1%
$50,000-$74,999	10.4%
$75,000 or more	5.7%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Adult Immunization: Flu and Pneumonia Shots

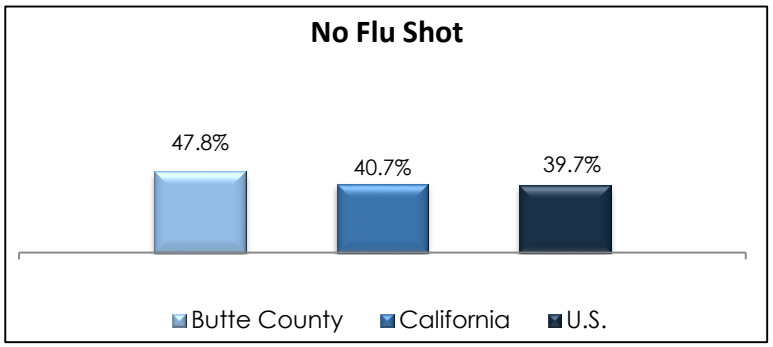
Healthy People 2020 objective IID-12.12: Increase the percentage of noninstitutionalized adults aged 18 years and older who are vaccinated annually against seasonal influenza

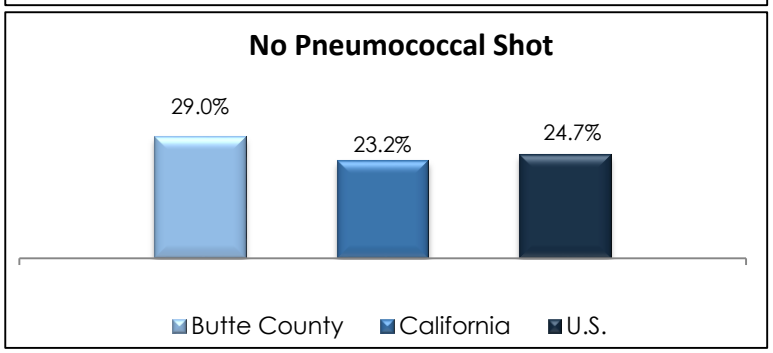
Healthy People 2020 objective IID-13.1: Increase the percentage of noninstitutionalized adults aged 65 years and older who are vaccinated against pneumococcal disease

Currently, the Advisory Committee on Immunization Practices recommends immunizing adults against 15 infectious diseases, including influenza and pneumonia. However, the adult coverage rates for these vaccines remain substantially below the target levels.[31] Influenza and pneumonia were the 8th leading cause of death in 2017 in California, attributing to over 6,300 deaths.[12] A Healthy People 2020 objective is to ensure that 70% of adults aged 18 years and older are vaccinated annually against influenza, and 90% of those aged 65+ have ever been vaccinated against pneumococcal disease.

Almost half (47.8%) of Butte County residents over the age of 65 have not had a flu shot in the past 12 months. Additionally, nearly three in ten Butte County residents (29%) have never been vaccinated against pneumonia.

Both results exceed the state and national figures.





Proportion of respondents age 65 years and older who have not had a flu shot in the past 12 months and who never had a pneumonia shot

Demographic Characteristics	No Flu Shot	Never Had Pneum. Shot
Total	47.8%	29.0%
Age		
65-74	52.0%	37.7%
75+	43.4%	20.0%
Gender		
Male	44.9%	31.7%
Female	50.4%	26.4%
Race		
White	47.9%	28.1%
Black**	46.3%	100.0%
Hispanic**	53.8%	30.7%
Non-Hispanic	47.1%	28.4%
Education		
< High School**	57.1%	40.4%
High School Grad**	41.7%	21.9%
Some College**	50.9%	31.5%
College Graduate	47.3%	28.9%
Household Income		
<$20,000**	39.9%	34.2%
$20,000-$34,999**	56.3%	18.8%
$35,000-$$49,999**	52.9%	23.2%
$50,000-$74,999**	53.8%	36.6%
$75,000 or more**	45.3%	27.5%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

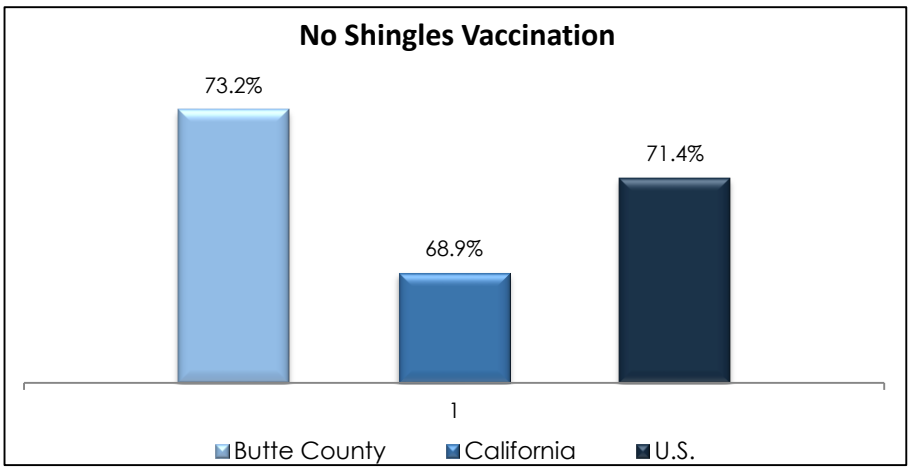
Adult Immunization: Shingles Vaccination

Healthy People 2020 objective IID-12.12: Increase the percentage of adults who are vaccinated against zoster (shingles)

A total of 1 out of every 3 people in the United States will develop shingles during their liftetime. Shingles is a painful rash that usually develops on one side of the body, often the face or torso. The rash consists of blisters that typically scab over in 7-10 days and clears up within 2-4 weeks. For 1 in 10 people, however, the nerve pain, can last for months or even years after the rash goes away. This long-lasting pain is called postherpetic neuralgia (PHN,) and is the most common complication of shingles. Other serious complications may lead to blindness, pneumonia, hearing problems, brain inflammation, or even death. The risk of getting shingles, PHN, and other complications increases with age. Therefore, it is recommended that people 50 or older get vaccinated. [64]

More than seven in ten Butte County residents (73.2%) age 50 or older have not been vaccinated against shingles. This result is above the state- and nationwide figures (68.9% and 71,4%, respectively.)

The likelihood of having been vaccinated increases with age and peaks in the 70+ category. It is also directly proportional to residents' level of education. Finally, those in lower income categories (under $35,000) are somewhat less likely than their more affluent counterparts to have been vaccinated against shingles.



Percentage of respondents age 50+ who have ever had the shingles or zoster vaccine

Demographic Characteristics	Never Had Shingles Vaccination
Total	73.2%
Age	
50-59	90.1%
60-69	76.9%
70+	50.0%
Gender	
Male	74.8%
Female	71.9%
Race	
White	71.0%
Black**	100.0%
Hispanic**	78.4%
Non-Hispanic	72.7%
Education	
< High School**	83.7%
High School Grad	77.2%
Some College	74.8%
College Graduate	68.3%
Household Income	
<$20,000	79.2%
$20,000-$34,999	70.9%
$35,000-$$49,999**	64.0%
$50,000-$74,999	64.7%
$75,000 or more	66.8%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

HIV/AIDS

Healthy People 2020 objective HIV-1: Reduce new HIV diagnoses

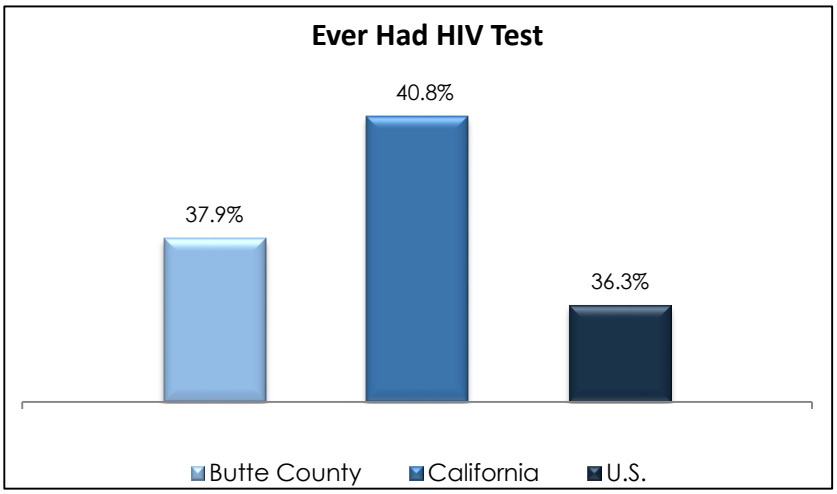
Healthy People 2020 objective HIV-14: Increase the proportion of adolescents and adults who have been tested for HIV in the past 12 months

Healthy People 2020 objective HIV-12: Reduce deaths from HIV infection

As of 2016, 132,405 people were living with diagnosed HIV infection in California.[32] Early awareness of the infection through HIV testing can prevent further spread of the disease, and an early start on antiretroviral therapy can increase the lifespan and quality of life among those who are living with HIV/AIDS.

A total of 37.9% of Butte County residents has ever been tested for HIV. This percentage is below the figure noted for California as a whole (40.8%,) but above the nationwide data (36.3%.)

A segment analysis reveals that the youngest and oldest respondents (age 18-24 and 65+) are least likely to indicate they have ever been tested. Additionally, those in the lowest income bracket (under $20,000) are most likely to report a prior HIV test, and females are slightly more likely to do so than males.



Percentage of respondents who have ever had an HIV test

Demographic Characteristics	Ever Tested for HIV
Total	37.9%
Age	
18-24	20.6%
25-34	49.2%
35-44	63.5%
45-54	46.4%
55-64	38.9%
65+	19.3%
Gender	
Male	34.0%
Female	41.8%
Race	
White	39.9%
Black**	52.6%
Hispanic	35.1%
Non-Hispanic	38.5%
Education	
< High School	42.5%
High School Grad	32.3%
Some College	40.1%
College Graduate	38.7%
Household Income	
<$20,000	43.6%
$20,000-$34,999	34.5%
$35,000-$$49,999**	30.4%
$50,000-$74,999	39.3%
$75,000 or more	26.0%

**Note: Comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

Adverse Childhood Experience: Emotional/Verbal and Physical Abuse

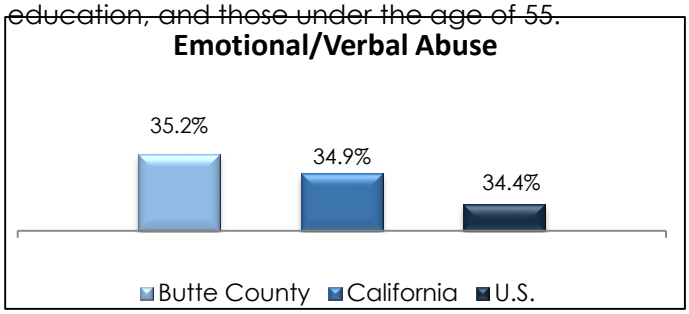
Healthy People 2020 objective EMC-2.2: Increase the proportion of parents who use positive communication with their child

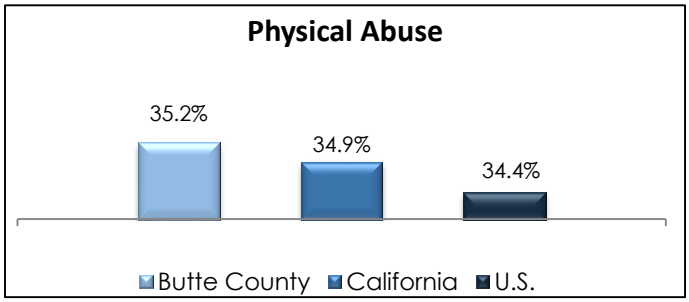
Healthy People 2020 objective IVP-38: Reduce nonfatal child mistreatment

Adverse Childhood Experiences (ACEs) is a term used to describe a range of traumatic experiences that may occur during a person's first 17 years of life, including child abuse, neglect, and other household dysfunctions. Over 60% of Californians report experiencing at least one ACE before age 18. Approximately one in four Californians reports having three or more ACEs.[61] At 35%, the most common ACE among California adults is emotional (or verbal) abuse.[62]

More than one-third (35.2%) of Butte County residents report having been emotionally and/or verbally abused by adults in their home before they were 18. This figure is on par with the statewide and nationwide data (34.9% and 34.4%, respectively.) Residents most likely to report emotional abuse are non-Hispanic and younger than 65+.

Additionally, just over one-fifth (21%) recalls physical abuse in their childhood – a result marginally above the California-wide rate, and higher than the national figure. This is attributable mostly to white residents with less than high school education, and those under the age of 55.





**Note: Comparative data is based on combined 2008-2013 BRFSS of California Residents and combined 2011-2014 BRFSS for 23 States (not all states include ACE questions) **Caution: Fewer than 30 respondents*

Percentage of respondents who were emotionally/verbally abused more than once, and percentage of respondents who were physically hurt by adults more than once (before age 18)

Demographic Characteristics	Emotional Abuse	Physical Abuse
Total	35.2%	21.0%
Age		
18-24	41.3%	27.0%
25-34	51.9%	22.9%
35-44	30.4%	22.2%
45-54	34.3%	23.2%
55-64	32.1%	19.5%
65+	23.2%	12.7%
Gender		
Male	34.4%	22.4%
Female	36.0%	19.7%
Race		
White	33.0%	17.5%
Black**	43.3%	15.8%
Hispanic	31.4%	25.6%
Non-Hispanic	36.2%	20.8%
Education		
< High School	44.1%	32.5%
High School Grad	34.7%	22.8%
Some College	36.3%	22.4%
College Graduate	32.8%	15.9%
Household Income		
<$20,000	39.5%	26.2%
$20,000-$34,999	25.1%	19.3%
$35,000-$$49,999**	30.8%	6.2%
$50,000-$74,999	45.8%	28.7%
$75,000 or more	33.6%	13.3%

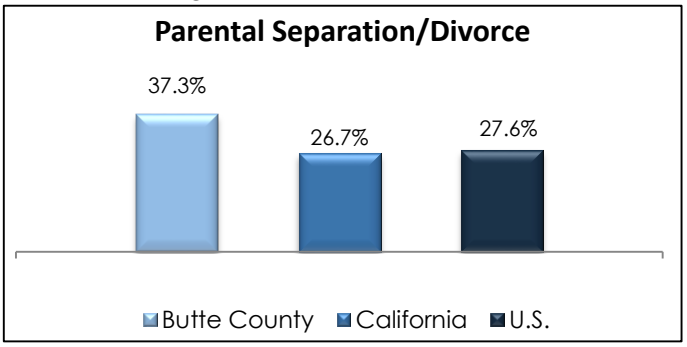
Adverse Childhood Experience: Separation/ Divorce and Incarcerated Household Member

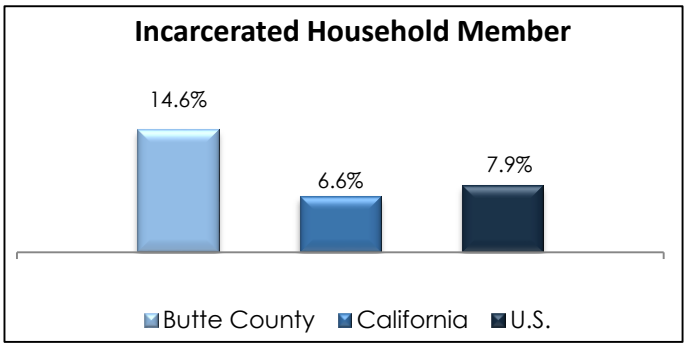
ACEs affect every community in California. Butte County is among California's counties with the highest number of ACEs; 77% of residents have 1 or more adverse childhood experiences. However, even in counties with the lowest prevalence of ACEs, 1 out of every 2 residents, or 50%, has at least one adverse experience in childhood. Parental separation or divorce is the second most prevalent ACE after emotional/verbal abuse, reported by 27% of adults.[62]

Almost four in ten Butte County residents (37.3%) have experienced parental separation or divorce before the age of 18. This is reported notably less often by residents age 65+, and those with at least some college education.

A total of 14.6% was growing up with a household member who served time in a prison, jail, or other corrections facility. This response is given mostly by residents under the age of 44, Hispanics, and those in lower education and income brackets.

Both ACEs are observably above the state- and nationwide figures.





Percentage of respondents whose parents separated/divorced, and percentage of respondents who lived with anyone who served time in prison/jail (before age 18)

Demographic Characteristics	Parental Separation/ Divorce	Incarcerated Household Member
Total	37.3%	14.6%
Age		
18-24	38.0%	23.0%
25-34	51.6%	31.9%
35-44	39.1%	18.4%
45-54	44.6%	7.4%
55-64	34.6%	6.6%
65+	21.2%	3.7%
Gender		
Male	35.7%	14.0%
Female	39.0%	15.1%
Race		
White	37.2%	13.3%
Black**	56.3%	13.9%
Hispanic	42.3%	26.6%
Non-Hispanic	36.6%	12.5%
Education		
< High School	54.0%	18.5%
High School Grad	41.1%	20.0%
Some College	39.9%	16.4%
College Graduate	28.6%	7.7%
Household Income		
<$20,000	39.8%	14.1%
$20,000-$34,999	40.3%	23.8%
$35,000-$$49,999**	27.7%	9.5%
$50,000-$74,999	37.7%	10.9%
$75,000 or more	29.3%	9.0%

**Note: Comparative data is based on combined 2008-2013 BRFSS of California Residents and combined 2011-2014 BRFSS for 23 states (not all states include ACE questions) **Caution: Fewer than 30 respondents*

Adverse Childhood Experience: Sexual Abuse and Witness to Domestic Violence

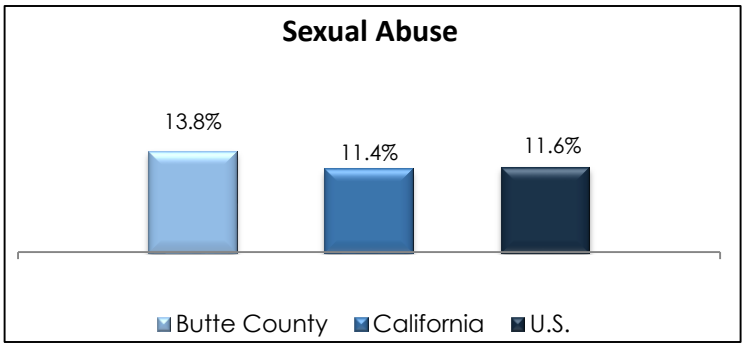
Healthy People 2020 objective IVP-40: Reduce sexual violence

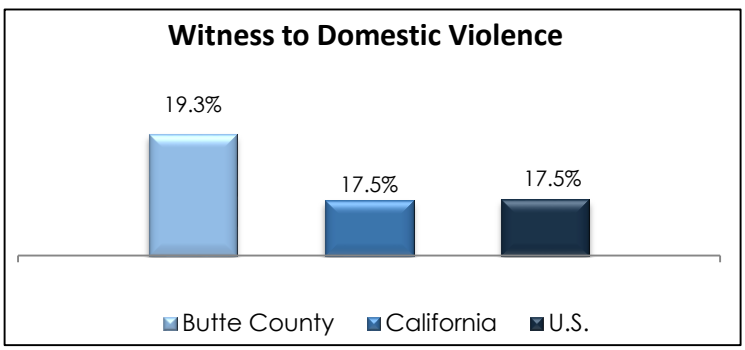
Healthy People 2020 objective IVP-42: Reduce children's exposure to violence

There is a strong relationship between exposure to ACEs and subsequent negative health behaviors and conditions later as adults, including smoking, unintended pregnancies, alcoholism, illicit drug use, binge drinking, depression, suicide attempts, COPD, asthma, obesity, stroke, heart disease, cancer, diabetes, kidney disease, and liver disease. [61, 62]

A total of 13.8% of Butte County residents have ever experienced sexual abuse as a child – a figure slightly above the state- and nationwide statistics (11.4% and 11.6%, respectively.) Females are notably more likely than males to report this ACE.

Witnessing domestic violence before the age of 18 is reported by nearly a fifth of residents (19.3%) – a result higher than the nationwide and California prevalence data (17.5% each.) The rates of this ACE are higher among residents with incomes of under $20,000, and are decreasing with respondents' age.





**Note: Comparative data is based on combined 2008-2013 BRFSS of California Residents and combined 2011-2014 BRFSS for 23 states (not all states include ACE questions) **Caution: Fewer than 30 respondents*

Percentage of respondents who reported having ever experienced sexual abuse, and percentage of respondents who witnessed domestic violence more than once (before age 18)

Demographic Characteristics	Sexual Abuse	Witness to Domestic Violence
Total	13.8%	19.3%
Age		
18-24	13.2%	30.6%
25-34	19.1%	25.8%
35-44	8.4%	19.7%
45-54	15.3%	16.6%
55-64	16.1%	16.0%
65+	11.3%	9.4%
Gender		
Male	7.5%	20.1%
Female	20.0%	18.6%
Race		
White	12.4%	15.8%
Black**	24.3%	38.8%
Hispanic	17.1%	19.1%
Non-Hispanic	13.4%	19.9%
Education		
< High School	13.6%	31.2%
High School Grad	17.0%	13.4%
Some College	13.1%	26.4%
College Graduate	12.1%	14.4%
Household Income		
<$20,000	16.6%	25.1%
$20,000-$34,999	14.9%	18.8%
$35,000-$$49,999**	9.6%	10.2%
$50,000-$74,999	20.0%	11.8%
$75,000 or more	8.7%	16.5%

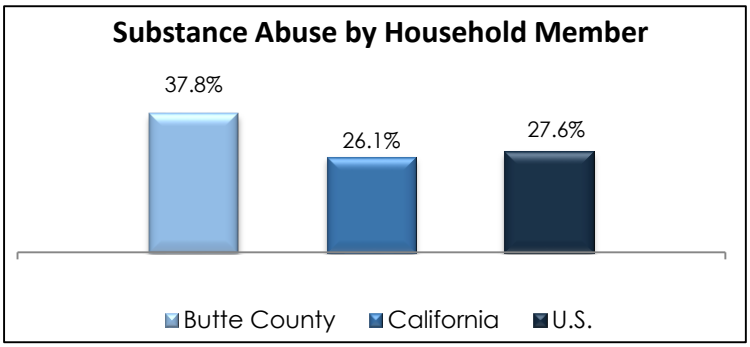
Adverse Childhood Experience: Substance Abuse and Household Member with Mental Illness

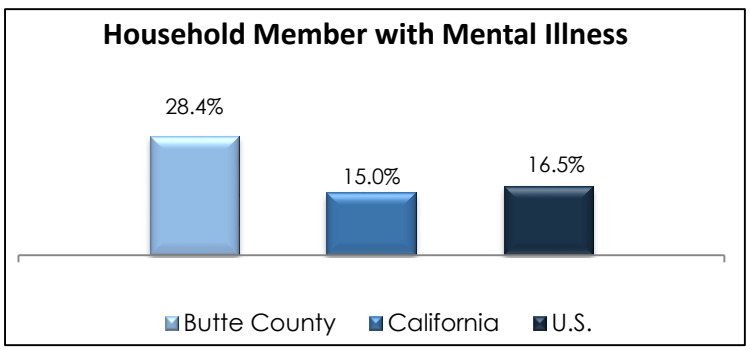
Substance abuse by a household member is the third most frequently reported ACE in California, as cited by 26% of adults. [61]

Nearly four in ten Butte County residents (37.8%) lived with a household member who had a substance abuse problem before they were 18 years old. This figure is attributable mostly to respondents who have high school education or less, and is least common among the oldest residents (65+.)

Close to three in ten (28.4%) lived with a household member who was depressed, mentally ill, or suicidal. The incidence of this adverse experience is lowest in the 65+ age category, and among males. It is also slightly more prevalent among those who completed high school or less.

Both ACEs are above the state- and nationwide levels.





**Note: Comparative data is based on combined 2008-2013 BRFSS of California Residents and combined 2011-2014 BRFSS for 23 states (not all states include ACE questions) **Caution: Fewer than 30 respondents*

Percentage of respondents who lived with anyone who was a problem drinker/alcoholic/drug user, and percentage of respondents who lived with anyone who was mentally ill (before age 18)

Demographic Characteristics	Substance Abuse	Household Member with Mental Illness
Total	37.8%	28.4%
Age		
18-24	38.7%	39.3%
25-34	53.3%	50.1%
35-44	45.9%	24.9%
45-54	40.4%	30.3%
55-64	31.2%	20.7%
65+	23.3%	9.5%
Gender		
Male	36.3%	21.9%
Female	39.2%	34.8%
Race		
White	36.7%	26.8%
Black**	42.8%	38.0%
Hispanic	36.9%	31.8%
Non-Hispanic	37.7%	27.9%
Education		
< High School	65.4%	35.1%
High School Grad	44.0%	33.7%
Some College	35.8%	27.5%
College Graduate	29.2%	23.9%
Household Income		
<$20,000	38.3%	31.9%
$20,000-$34,999	42.0%	31.9%
$35,000-$$49,999**	26.9%	19.9%
$50,000-$74,999	32.1%	27.7%
$75,000 or more	32.9%	22.0%

Intimate Partner Violence: Threatened and Completed Physical Violence

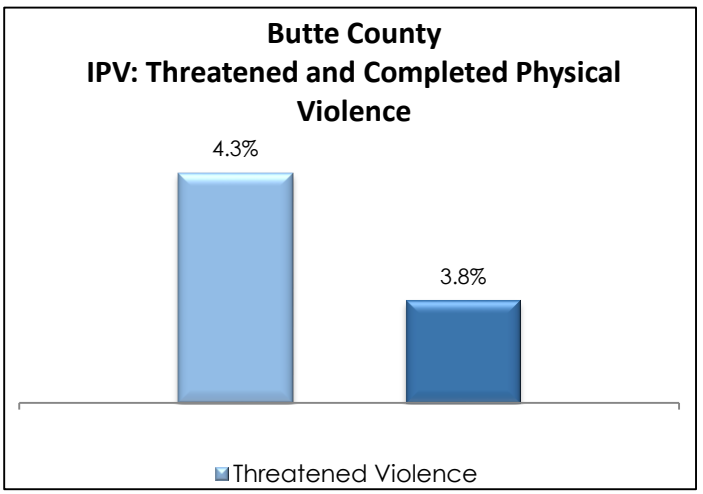
Healthy People 2020 objective IPV-39.1: Reduce physical violence by current or former intimate partners

Healthy People 2020 objective IPV-39.3: Reduce psychological abuse by current or former intimate partners

Intimate Partner Violence (IPV) is violence that occurs in a close relationship, including current or former spouses and dating partners. It includes physical violence, sexual violence, stalking, and psychological aggression. Data from CDC's National Intimate Partner and Sexual Violence Survey (NISVS) indicate that about 1 in 4 women and 1 in 10 men have experienced sexual violence, physical violence, and/or stalking by an intimate partner during their lifetime. Additionally, over 43 million women and 38 million men experienced psychological aggression by an intimate partner. [32]

Within the past year, 4.3% of Butte County residents have been frightened for the safety of themselves, their family or friends because of the threats of their partner (or a former partner.) This result was driven by women and respondents who were high school graduates or less.

The completed physical violence rate is lower, with 3.8% reporting that their partner pushed, hit, slapped, kicked, choked, or physically hurt them in any way within the past 12 months. Again, the likelihood of being physically assaulted is higher among residents with lower educational attainment (high school graduate or less.)



Proportion of respondents frightened for safety of self/family/friends because of partner's threats, and proportion of respondents assaulted by partner (past 12 months)

Demographic Characteristics	Threatened Violence	Completed Violence
Total	4.3%	3.8%
Age		
18-24	6.8%	11.6%
25-34	-	-
35-44**	12.8%	6.4%
45-54	5.9%	4.0%
55-64	2.2%	1.1%
65+	-	-
Gender		
Male	1.0%	2.9%
Female	7.0%	4.5%
Race		
White	3.6%	3.0%
Black**	-	-
Hispanic**	16.2%	9.7%
Non-Hispanic	2.5%	3.0%
Education		
< High School**	14.7%	15.1%
High School Grad	6.6%	9.5%
Some College	0.9%	-
College Graduate	4.1%	0.6%
Household Income		
<$20,000	4.2%	2.7%
$20,000-$34,999**	4.6%	4.6%
$35,000-$$49,999**	-	-
$50,000-$74,999**	2.1%	-
$75,000 or more**	2.3%	2.3%

**Note: No comparative BRFSS data (California or national) is available for this category **Caution: Fewer than 30 respondents*

Intimate Partner Violence: Attempted Control and Unwanted Sex

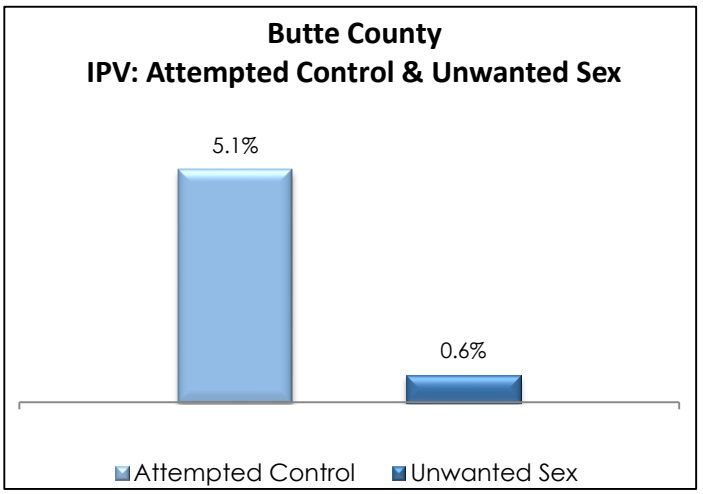
Healthy People 2020 objective IPV-39.2: Reduce sexual violence by current or former intimate partners

Healthy People 2020 objective IPV-39.3: Reduce psychological abuse by current or former intimate partners

Intimate Partner Violence (IPV) has been shown to have serious health consequences for both women and men, including poor general health, depressive symptoms, substance abuse, and elevated rates of chronic diseases.[60]

A total of 5.1% of Butte County residents has/had a partner (or former partner) who tried to control most or all of their daily activities. This appears to be more prevalent among respondents who are high school graduates or less.

Only 0.6% of residents report having been forced into unwanted sexual activity within the past year after they told their partner (or former partner) that they did not want it.



Proportion of respondents whose partner tried to control their daily activities, and proportion of respondents sexually assaulted by partner (past 12 months)

Demographic Characteristics	Attempted Control	Unwanted Sex
Total	5.1%	0.6%
Age		
18-24	11.6%	-
25-34	3.7%	-
35-44**	10.0%	3.5%
45-54	4.0%	-
55-64	2.2%	-
65+	0.6%	0.5%
Gender		
Male	4.4%	-
Female	5.8%	1.1%
Race		
White	4.6%	0.7%
Black**	-	-
Hispanic**	13.4%	3.7%
Non-Hispanic	4.0%	0.1%
Education		
< High School**	5.8%	-
High School Grad	12.7%	-
Some College	1.8%	0.3%
College Graduate	1.5%	1.5%
Household Income		
<$20,000	5.0%	0.5%
$20,000-$34,999**	2.9%	-
$35,000-$$49,999**	-	-
$50,000-$74,999**	-	-
$75,000 or more**	1.3%	-

**Note: No comparative BRFSS data (California or national) is available for this category **Caution: Fewer than 30 respondents*

Demographics

The following is a comparison of the demographic characteristics of the Butte County BRFSS respondents to those of the state and national BRFSS participants.

Demographic Characteristics	Butte County	California	U.S.
Age			
18-24	18.4%	12.6%	12.6%
25-34	15.2%	19.0%	17.0%
35-44	13.3%	17.3%	16.1%
45-54	16.5%	17.0%	16.4%
55-64	16.5%	15.8%	16.9%
65+	19.3%	18.3%	21.0%
Gender			
Male	49.5%	49.2%	48.7%
Female	50.5%	50.8%	51.3%
Race			
White	72.7%	40.7%	72.3%
Black	1.2%	5.4%	6.3%
Hispanic	13.8%	35.1%	8.3%
American Indian or Alaskan Native	4.3%	0.6%	1.0%
Asian	2.2%	15.3%	2.3%
Native Hawaiian or Other Pacific Islander	0.2%	0.2%	0.0%
Other race	1.2%	1.2%	0.0%
Multiracial, non-Hispanic	3.5%	1.5%	1.3%
Education			
< High School	7.0%	17.7%	11.5%
High School Grad	25.7%	21.9%	28.8%
Some Post High School / Some College	33.9%	31.8%	31.8%
College Graduate	33.2%	28.7%	26.0%

**Note: The comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories)*

***"Refused" and "Don't Know" responses not shown / percentages may not add up to 100%*

Demographics – cont'd.

Demographic Characteristics	Butte County	California	U.S.
Household Income			
<$15,000	14.3%	14.9%	9.1%
$15,000-$24,999	9.9%	13.2%	16.5%
$25,000-$34,999	6.0%	9.3%	10.5%
$35,000-$49,999	5.4%	10.8%	14.2%
$50,000 or more	25.2%	51.8%	49.0%
Employment Status			
Employed	44.9%	47.3%	49.2%
Self-employed	8.7%	10.4%	8.9%
No work < year	1.8%	3.3%	2.7%
No work > year	2.6%	2.8%	2.5%
Homemaker	3.8%	7.9%	5.6%
Student	8.6%	6.5%	5.4%
Retired	18.1%	16.2%	18.8%
Unable to work	10.2%	5.6%	6.5%
Marital Status			
Married	39.2%	49.5%	51.4%
Divorced	14.7%	9.2%	11.5%
Widowed	8.4%	5.8%	6.9%
Separated	1.2%	3.1%	2.2%
Never married	31.8%	26.0%	23.8%
Partnered	3.9%	6.4%	4.7%

**Note: The comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories)*

***"Refused" and "Don't Know" responses not shown / percentages may not add up to 100%*

Demographics – cont'd.

Demographic Characteristics	Butte County	California	U.S.
Number of Children Under 18 Years of Age in Household			
5+ children	1.2%	0.9%	1.0%
4 children	1.1%	1.9%	2.0%
3 children	3.7%	6.4%	5.5%
2 children	9.9%	13.7%	12.5%
1 child	12.8%	16.5%	14.5%
None	57.1%	60.6%	64.4%
Home Ownership			
Own	50.2%	57.0%	69.4%
Rent	37.0%	37.8%	24.7%
Other	10.5%	5.3%	5.9%
Veteran Status			
Served on Active Duty in the US Armed Forces	10.7%	8.2%	11.4%
Never served on Active Duty in the US Armed Forces	89.3%	91.8%	88.6%
Internet Use			
Used Internet in Past 30 Days	87.9%	85.1%	85.0%
Did Not Use Internet in Past 30 Days	11.6%	14.9%	15.0%

**Note: The comparative data is based on 2017 BRFSS of California Residents and 2017 Nationwide BRFSS (States, DC and Territories)*

***"Refused" and "Don't Know" responses not shown / percentages may not add up to 100%*

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Appendix: 2

Community Engagement

Focus Group Summary, Morrison Inc.

COMMUNITY ENGAGEMENT- FOCUS GROUPS

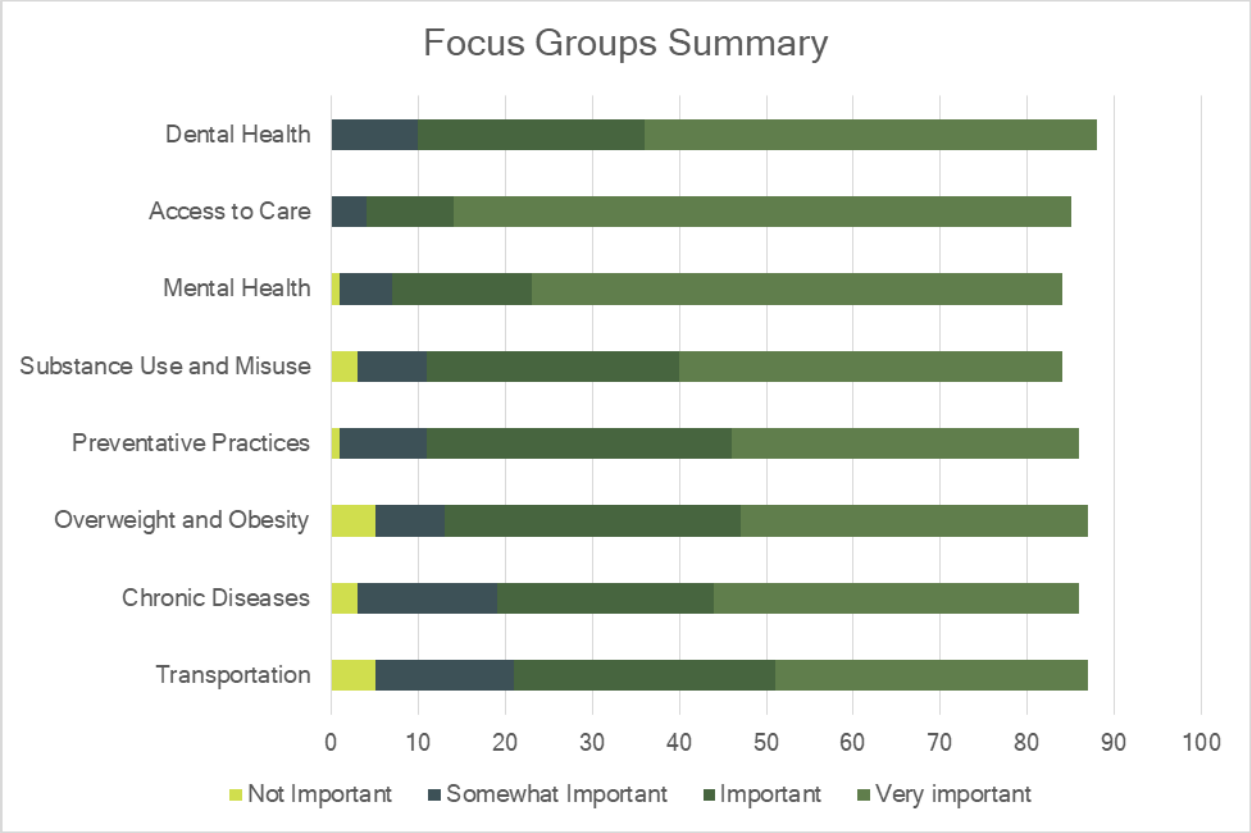
In an effort to gather valuable insights from community members to inform the Community Health Needs Assessment, Butte County Public Health contracted the firm Morrision and Company (Chico, California) to facilitate numerous community focus groups.

Representatives from Enloe Medical Center, Adventist Health Feather River, Orchard Hospital, and BCPH organized each focus group, collaborating with existing Butte County community organizations on several occasions to host focus groups in coordination with previously scheduled events or meetings. This leveraged the established relationships these groups have with the individuals they serve, facilitating active participation by community members. Focus groups were also held at various times throughout the day to best accommodate the schedules of participants. The focus groups ranged in size, with an average of 10 attendees per group.

In total, 12 focus groups reaching 114 participants were conducted, with participants representing a broad spectrum of the community. Participation was received from seniors, college students, individuals receiving mental health services, individuals participating in programs at both the African American Family and Cultural Center and the Hmong Cultural Center, high-school students, physicians, general community members, veterans, and individuals experiencing homelessness. Of those 114 participants, 88 completed a written survey utilized in data collection as displayed for the purposes of this reporting section. A series of questions were designed with input from representatives from Enloe Medical Center, Adventist Health Feather River, Orchard Hospital, and Butte County Public Health, as well as the Morrison facilitator. Participants were asked questions as a group and encouraged to share their own personal experiences or anecdotal experiences observed from friends and family in accessing health care and living healthy lives.

Featured below is a summarized collection of responses received across all focus groups that reference the existing successes and signs of health in Butte County communities, as well as issues that need to be addressed within those communities. These responses are oriented toward themes covered within the groups such as: dental health, access to healthcare, mental health, substance us and misuse, preventative practices, overweight and obesity, chronic diseases, and transportation. Quotations provided are from focus group members regarding the topics mentioned above.

FOCUS GROUPS SUMMARY



Total number of participants: 88

Ranked most important across all the focus groups:

1. Access to care – 81%
    - 71 out of 88 participants
2. Mental health – 69%
    - 61 out of 88 participants
3. Dental health – 59%
    - 52 out of 88 participants

DENTAL CARE

Identified Successes

Noted successes in Butte County communities included an annual free dental clinic offered by local providers, the availability of low cost services from various providers, a mobile dental unit, events and services specifically for veterans, classes available for dental education, and interventional programs for children. The theme supporting much of the participants' feedback when discussing success appears to be programs available over a wide variety of locations, wherein positive intervention might be implemented like dental education, referrals to practitioners, providing detailed information about how to access dental care, or providing on-scene, low-cost/no-cost dental care in a nontraditional location.

"THERE IS A FLOURIDE VARNISH PROGRAM, THEY PROVIDE PARENTAL AND CHILD TRAINING, AND DENTAL EDUCATION." -MEMBER OF THE BCPH CAMP FIRE RECOVERY GROUP

Issues to Address

Issues focused on by groups were largely a lack of available dental providers, and a lack of providers that accepted specific forms of coverage, whether that be Medi-Cal or certain types of private insurance. Parents either being uninformed about proper dental care for children or neglectful of their children's dental care needs was mentioned as an issue, as well as a lack of providers for young children under three with dental issues. Participants stated that some coverages incentivized pulling teeth rather than preventative dentals care, and often these extractions must be performed outside Butte County. It was mentioned that issues often need to be extreme in order to be prioritized to receive care from some programs. Areas for improvement mentioned by participants included expanded access to dental care through school clinics, availability for evening or weekend appointments, and more flexibility overall from providers, and a consideration that dental care might be considered healthcare.

"DENTAL CARE IS SUCH A CHALLENGE IN BUTTE COUNTY THAT I HAVE HAD TO SCHEDULE TEETH TO BE PULLED BEFORE PERFORMING UNRELATED SURGERIES, DUE TO THE RISK OF INFECTION FROM UNTREATED DENTAL ISSUES." -LOCAL MEDICAL PROVIDER

ACCESS TO CARE

Identified Successes

Programs and organizations providing a variety of medical screenings for residents who lacked coverage or income to pay for services were named as successful supports. Organizations providing case management services who were able to assist clients in completing applications for medical coverage, and refer clients and other community members to medical providers and specialty services were also discussed as successes. Programs, organizations, and providers that provided counseling and therapy for people who had experienced trauma and secondary trauma, as well as organizations that had pursued training to become trauma informed in their approach, were mentioned as successful. Multiple local hospice programs were mentioned as successful, as well as one emergency room and a rural health provider in a smaller community within the county. Programs providing community members with healthy food through subsidy or reduced cost, along with nutritional education, were cited as successes. Generally, the programs, organizations, and providers mentioned as successful by focus group participants appear to be focused on bridging gaps in coverage, getting important information revolving around care to community members, and focused on serving vulnerable and underrepresented groups in the community.

Issues to Address

When discussing access to care, participants mentioned that their insurances coverage often acted as a barrier to receiving the care that was most appropriate for their situation. It was brought up that certain providers being unwilling to take Medi-Cal patients limited availability of providers for a large subset of the populations. Ongoing issues regarding contract negotiations between major medical providers and major insurance providers in the area were cited as possibly having a huge impact on availability of care if an agreement could not be worked out. Some participants felt the eligibility window of five years after ending active duty for Veteran's Affairs insurance was too restrictive. Participants stated that some payment systems often incentivized treatment being withheld until the late state or high acuity levels of health issues, and that often symptoms were addressed rather than root causes when care was sought. Some participants felt that eligibility for Medi-Cal or other, low-cost insurance programs was too restrictive based on income levels. It was expressed that there was a significant equity gap between community members with good, private insurance coverage, and individuals who were on Medi-Cal.

"THERE'S A LOT OF TRIAL AND ERROR TO FIND A PROVIDER TO RECEIVE NEEDED SERVICES…YOU NEED TO INVEST A LOT OF PERSONAL TIME AND MONEY." - PARTICIPANT FROM THE IVERSEN CENTER

A lack of access to every type of medical provider, and especially to mental health providers was a key issue mentioned in discussions of access to care; community members were having to wait too long for appointments, and that waiting period was only extended when referred to specialists. The process of connecting to the appropriate care provider was considered very costly and time intensive by some participants. The lack of an

easily available resource to ascertain which providers were accepting new patients, which insurance providers accepted, and other common questions was noted as an obstacle for access to care. It was mentioned by multiple groups that there was not enough accessibility to providers on evenings and weekends, and that there was a lack of transparency in the process of providing care. Issues with reimbursements to doctors were brought up, with added detail that a restructuring of fee systems may often result in higher costs for patients. Lack of reliability in the local public transportation network, and the lack of on-demand services catered specifically for seniors were considered obstacles in physically traveling to locations to receive care.

MENTAL HEALTH

Identified Successes

Regarding mental health, organizations that focused on services for veterans, students, those pursuing treatment for substance use and misuse, and groups focusing on secondary trauma were all praised as being successful in assisting members of the community support mental health issues. A key development discussed was the expansion of telehealth services for providers to be available long-distance; this was cited as a success, and continued expansion could help alleviate the deficit in available mental health professionals in Butte County. Local churches and cultural centers for different ethnic communities were also cited as successful in engaging community members in ways that helped them with mental health issues. Community members cite success for a wide range of locales; from informal groups at cultural meeting spaces to clinical, government programs, an underlying theme of indiscriminate appreciation for mental health providers and spaces to process mental health issues was present throughout group discussions.

> "I FEEL LIKE BEING DIAGNOSED AS A 51-50 IS THE ONLY WAY TO GET ADMITTED." - PARTICIPANT FROM THE JESUS CENTER

Issues to Address

A shortage of psychiatrists and counselors, often leading to long wait times for appointments, were a significant obstacle in receiving mental health care; there was a significant concern mentioned by participants that the additional trauma experienced in the community due to the Camp Fire would place even more strain on local mental health care providers. The process to receive care was considered long; a lack of clear resources for finding a counselor or therapist that provided services for the milder end of the spectrum of mental health issues was mentioned as an obstacle to receiving mental health care. A lack of providers willing to accept Medi-Cal, and the lack of affordable mental health services even for those with substantial private insurance plans was cited as a major issue by participants. A lack of programs focusing on service to vulnerable communities like recent immigrants and refugees was mentioned as an issue around mental health care. A lack of aftercare for patients that had received intensive psychiatric services was mentioned as a barrier to mental health care. A lack of knowledge or availability regarding quality services and programs for community members was a dominant them in discussing issues of mental health care for the groups. Some community members felt

"WE HAVE A FRAGMENTED MENTAL HEALTH & SOCIAL SERVICES DELIVERY SYSTEM." - MEMBER OF THE BCPH CAMP FIRE RECOVERY GROUP

that providers might be too reliant on medication as a form of mental health care. At least one participant felt that there was a prevalence of misdiagnosis of mental health issues that created issues for patients. Some participants felt that being placed on a 51/50 hold was the only way to quickly access mental health care

The stigma of being open about struggles with one's mental health was a common topic as an obstacle to mental health care in groups as well; participants felt that mental health issues were still viewed as weakness by a large portion of the community. A lack of demographic representativeness amongst providers was cited as an obstacle for some populations to connect with mental health providers. Some participants felt that some providers did not show respect for patients. Some participants stated that the idea that mental health care might be done as a preventative measure rather than a treatment of acute symptoms was still foreign to much of the community. Participants cited the fear of punishment should mental health services be accessed as a significant source of stigma within the community, particularly the fear that one might lose the ability to own firearms should they seek mental health care.

SUBSTANCE USE AND ABUSE

Identified Successes

"PHARMACY DRUG TAKEBACK PROGRAMS FOR UNUSED OR EXPIRED DRUGS ARE HELPFUL." -PARTICIPANT FROM THE CALIFORNIA HEALTH COLLECTIVE

Participants discussed outpatient treatment programs, residential treatment programs, twelve step organizations, programs that offered education and early intervention, and harm reduction programs, as well as the local Drug Court when asked about successful programs to prevent or treat drug, alcohol, and tobacco usage. Multiple harm reduction measures were mentioned; Nalaxone training, needle exchange, and pharmacy medicine collection bins. The noticeable trend in discussion about helpful programs was toward positive intervention meeting people struggling with substances in places that were familiar and comfortable for them, taking proactive measures for high risk populations to make them aware of treatment structures, and the fact that there are people available looking to address addiction with community members struggling with substance use, abuse, or addiction.

Issues to Address

Issues mentioned by participants that tied in to obstacles with treating and avoiding substance use and misuse included loneliness, the cycle of addiction, stigma for those struggling with addiction, a lack of education around addiction for community members, and an overemphasis on individual responsibility for finding appropriate treatment. The view of vaping as a healthy alternative to smoking rather than another harmful addiction was cited as an obstacle to healthy relationships to substances. Stigma around addiction and fear of being honest with healthcare professionals due to possible punishment was also mentioned. Members of the community using substances to self-medicate was mentioned, and a lack or dual-diagnosis programs available was also a concern for participants. Participants felt substances that might be abused were easy to access, and that drugs being marketed as glamorous were both issues that contributed to substance use and misuse. With the legalization of marijuana in California, the issue was raised that many parents grow marijuana in their home, and are either not educated or are willfully endangering their children due to constant exposure to marijuana when growing large amounts in confined spaces. Some participants did not feel that school officials were easy to connect regarding substance use and abuse issues for youth enrolled at school.

> "THE ADDICTION TREATMENT SYSTEM IS BROKEN; LACK OF FOCUS ON REUNIFICATION; THERE ARE BROKEN FAMILIES, BROKEN HOUSEHOLDS." - PARTICIPANT FROM THE IVERSEN CENTER

PREVENTATIVE PRACTICES – SCREENING, VACCINATIONS, INJURY PREVENTION

Identified Successes

Successful preventative outlets for preventative practices mentioned included low-cost/no-cost immunization and inoculation clinics, and other free health clinics provided by local and statewide healthcare providers. Outreach and education provided through social media was mentioned, along with classes available through educational providers, healthcare providers, churches, and other faith-based organizations. Businesses and organizations that provide exercise classes and resources for exercise, particularly to vulnerable groups, were cited. Early intervention programs that provided information, screening, and healthcare for infants and toddlers were considered a success by participants. Again, the focus for participants appears to be low-cost or no-cost providers for intervention and education, many of whom are not located in traditional healthcare locations. Culturally specific services, particularly for underrepresented groups, were mentioned.

Issues to Address

Cost of preventative practices was cited repeatedly as an issue. The impact of anti-vaccination discourse was cited as having an effect on community members' willing to be vaccinated and vaccinate their children. Lack of screening and education for adult asthma was brought up by a group. At least one participant felt there was too much information available on screenings and vaccinations, which caused a paralysis; they

would prefer a clear, efficient path to their preventative practices. A lack of information for community members was also mentioned multiple times. Distrust of scientific information and of government institutions was cited as an obstacle to preventative practices, as well as cultural barriers, including a reliance on traditional forms of medicine that may lack the same base of evidence as the preventative practices mentioned in the title of this subsection. Fear of discovering that they have some other health problem was a dissuading influence on community members seeking preventative care according to some participants. Residual effects of vaccinations were also mentioned as a dissuading influence by participants.

> "[BASED ON VOLUME OF AVAILABLE INFORMATION] IT'S DIFFICULT TO UNDERSTAND AND MAKE AN INFORMED DECISION, SO INDIVIDUALS CHOOSE TO WAIT UNTIL SOMETHING BAD HAPPENS, RATHER THAN [SEEK OUT] PREVENTATIVE CARE." - PARTICIPANT FROM THE CALIFORNIA HEALTH COLLECTIVE

OVERWEIGHT AND OBESITY

Identified Successes

Community Successes in addressing being overweight or obese included education from a variety of sources and programs connecting the public with medical professionals in nontraditional locations. Many of the successes cited were opportunities to exercise for no cost outdoors, access to public areas of recreation for people of all ages, and communities that centered on forming a consistent social group to participate in those activities together. Likewise, community groups that provided healthy, communal meals on a regular basis were mentioned as a success. Government programs and food pantries that provided access to nutritious food for those that lacked resources to purchase or access such foods were also cited.

> "MENTAL HEALTH ISSUES AND MEDICATION CAN IMPACT YOUR LEVEL OF PHYSICAL ACTIVITY." - PARTICIPANT FROM THE IVERSEN CENTER

Issues to Address

Prevalence and convenience of fast food was an issue brought up by participants. Current technology contributing to less physical activity by giving people many sedentary entertainment options at all times was mentioned in multiple groups. A lack of free time to pursue exercise was brought up repeatedly, as well as individual laziness and a lack of motivation to be healthy for some members of the community. A lack of healthy options for students at school, and open campuses that give the option of traveling to fast food restaurants to students were both brought up as issues contributing to children and youth being obese and overweight. A lack of public recreation programs and centers, whose programs are cited as a positive but were not considered to be widely enough available by participants. Private gyms and fitness clubs are not

affordable to many members of the community was a repeated sentiment in focus groups; the public pools are only available during the summer months rather than year-round, which could be a recreational outlet for families more often if that capability were changed. Budget cuts to physical education programs at schools were mentioned as contributing factors to being overweight or obese, as well as a lack of open access to school weight rooms, with preferences being given to school sports teams. Participants mentioned that Chico's bike paths are unsafe and should be made safer. Participants stated that Oroville was not very walkable, due to concerns over safety, and specifically the relatively large amount of dogs off the leash. It was expressed that many community members struggled to afford fresh, healthy food. It was mentioned multiple times that mental health issues made it difficult to pursue regular physical activity. At least one participant brought up that being physically active might be seen as a sign of privilege, and some community members might be afraid that their benefits would be stripped if they were seen to be exercising in public.

CHRONIC DISEASE - ASTHMA, DIABETES, HEART DISEASE, STROKE, LIVER DISEASE, ETC.

Identified Successes

Community organizations, recovery-based communities, and existing medical providers, especially government programs, were mentioned as successful in helping people prevent or care for chronic diseases. New technology like fitness bands were also mentioned.

Issues to Address

Lack of support for specific conditions, like epilepsy, Parkinson's, and Multiple Sclerosis, was mentioned as an issue. It was mentioned that resource classes for people with diabetes were poorly attended due to a bad location and a lack of availability. There is a lack of specialists in smaller communities, and a lack of pediatric specialists in the county according to participants. Long wait times were cited again as an issue for receiving care. Difficulties with the system for obtaining prescriptions if there are complications like a lost prescription. Side effects from multiple medications, and community members' concerns that side effects were causing more issues in their daily lives than the actual conditions they were treating were considered obstacles for chronic diseases. A lack of understanding about underlying causes for community members who have chronic diseases, and how factors like lifestyle choices may contribute was expressed as a concern by groups. The effect of the toxic air and water from local wildfires, especially the camp fire, and the resultant uptick in people with chronic conditions and the symptoms those with chronic disease will struggle with were mentioned as a concern by participants. Some participants felt that providers sometimes "pre-diagnose" based on race or ethnicity. Participants at the Hmong Cultural Center stated that a lack of family history knowledge regarding genetic possibilities for chronic health conditions is an issue specifically for Hmong community members.

TRANSPORTATION

Identified Successes

Programs offered to assist special populations with transport were cited as successful in getting people access to necessary transportation. Programs that provide bus passes at low cost or no cost were cited, with the B-Line local bus system being mentioned as a positive success, especially some of the newer routes. Calling the Butte County information line as a way to access transport was an example of success in increasing access to crucial, specialized transportation like getting a ride to medical appointments. The availability of services like Uber and Lyft were mentioned as a method that has increased on-demand access to transportation. Cabs, and cab driver's generosity were cited as successes in transportation access, as well as certain cultural organizations that provided a more expansive definition of essential transport, like rides to the grocery store, when contacted ahead of time to set up an appointment. Buses provided by local medical providers were mentioned as a key success for necessary transport to and from medical services, as well as emergency flightcare. The amount of bike paths and the accessibility they provide, particularly in Chico, was mentioned as a strength for providing transportation access.

Issues to Address

"[RIDESHARING APPLICATIONS] REQUIRE TECHNOLOGY AND A DEBIT OR CREDIT CARD."
- PARTICIPANT FROM THE IVERSEN CENTER

Participants listed a variety of issues for transportation in Butte County. One participant stated there are not enough paratransit services available in the county. Bus services to Paradise and Magalia are limited according to participants. The feeling that transport that specifically caters to elderly community members is not widely available enough was expressed multiple times in groups. The B Line bus system does not run on Sundays, and is not always frequent enough, resulting in long wait times and significant time devoted to travel even for small errands, and at least one participant felt the bus stops are too infrequent and far apart from one another. It was mentioned that there was a lack of trust in newer ridesharing applications, and that people seek a more low-cost, reliable way to get to a pharmacy or a grocery store on an individual basis. Participants mentioned that cars are expensive to own and maintain. Ridesharing applications require a certain level of technology that is not universally accessible, as well as a debit or credit card, which were issues of accessibility for participants. There were not enough accessible alternatives for people unable to obtain driver's license due to being differently abled according to participants. Driver's education programs are not widely available enough at public schools, and private programs can be costly, which affects the ability of young people to become properly licensed drivers.

Appendix: 3

Press Release

BUTTE COUNTY HEALTH NEEDS SURVEY

Your voice matters in improving the health and well-being of our community.

Calls Coming

Answer Your Phone!

Results impact decisions that affect your health.

Supported by Enloe Medical Center, Adventist Health, Orchard Hospital and Butte County Public Health. Visit ***www.enloe.org/chna*** for more information.

ENLOE MEDICAL CENTER

AdventistHealth

Orchard HOSPITAL

Butte County PUBLIC HEALTH

Appendix: 4

Form 990 Scheduled H Reference Chart

Form 990 (Schedule H) Reference Chart

Form 990 Question No.	Description	Reference Page in CHNA Document
	Fiscal Year End	June 30th
	State	CA
1	During the tax year or any prior tax year, did the hospital facility conduct a community health needs assessment (Needs Assessment)? If "No," skip to line 8. If "Yes," indicate what the Needs Assessment describes (check all that apply):	Yes
A	A definition of the community served by the hospital facility	Pg 2
B	Demographics of the community	Pg 5
C	Existing health care facilities and resources within the community that are available to respond to the health needs of the community	Appendix 5
D	How data was obtained	Pg 2
E	The health needs of the community	Pg 12
F	Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups	Pg 12
G	The process for identifying and prioritizing community health needs and services to meet the community health needs	Pg 12 and Appendix 4
H	The process for consulting with persons representing the community's interests	Appendix 1 and 2
I	Information gaps that limit the hospital facility's ability to assess all of the community's health needs	Pg 4
J	Other (describe in Part VI)	Appendix 3: Survey
2	Indicate the tax year the hospital facility last conducted a Needs Assessment: 2013	2016
3	In conducting the most recent Needs Assessment, did the hospital facility take into account input from persons who represent the community served by the hospital facility? If "Yes," describe in Part VI how the hospital facility took into account input from persons who represent the community, and identify the persons the hospital facility consulted	Yes

Form 990 (Schedule H) Reference Chart (continued)

Form 990 Question No.	Description	Reference Page in CHNA Document
4	Was the hospital facility's Needs Assessment conducted with one or more other hospital facilities? If "Yes," list the other hospital facilities in Part VI.	Yes (See Part VI)
5	Did the hospital facility make its Needs Assessment widely available to the public? If "Yes," indicate how the Needs Assessment was made widely available (check all that apply):	Yes
A	Hospital facility's website	Yes
B	Available upon request from the hospital facility	Yes
C	Other (describe in Part VI)	See Part VI
6	If the hospital facility addressed needs identified in its most recently conducted needs Assessment, indicate how (check all that apply):	Yes
A	Adoption of an implementation strategy to address the health needs of the hospital facility's community	Appendix 6
B	Execution of the implementation strategy	Appendix 6
C	Participation in the development of a community-wide community benefit plan	Appendix 6
D	Participation in the execution of a community-wide community benefit plan	Appendix 6
E	Inclusion of a community benefit section in operational plans	Appendix 6
F	Adoption of a budget for provision of services that address the needs identified in the Needs Assessment	N/A
G	Prioritization of health needs in its community	Appendix 6
H	Prioritization of services that the hospital facility will undertake to meet health needs in its community	Appendix 6
I	Other (describe in Part VI)	N/A
7	Did the hospital facility address all of the needs identified in its most recently conducted Needs Assessment? If "No," explain in Part VI which needs it has not addressed and the reasons why it has not addressed such needs	Yes

Other: Part VI

#4 – Was the hospital facility's Needs Assessment conducted with one or more other hospital facilities? If "Yes," list the other hospital facilities in Part VI.

Orchard Hospital worked collaboratively with the following hospitals and public health entity to complete the data gathering process for the Community Health Needs Assessment:

- Enloe Medical Center
- Feather River Hospital Adventist Health
- Butte County Department of Public Health

#5C – Did the hospital facility make its Needs Assessment widely available to the public? Other (describe in Part VI).

1. Notification to the public that the Orchard Hospital Community Health Needs Assessment was available for review and was placed in the local newspaper with the website link to access the report.
2. Notification to all of our employees has been made through a facility-wide mass email. Email included a link to the report on our website and an attachment (PDF) of the report.
3. Notification to our employees was also placed on our intranet along with a PDF of the report.

Appendix: 5

Implementation Plan 2019

Table of Contents:

Priority: Access to Health Care

Objective/Strategy

Improving access to healthcare is a major focus for Orchard Hospital, and lack of providers in Butte County was a dominant theme reflected across all focus groups. Improving access to healthcare is not just a matter of *affordability*, but also *availability* in our primary and secondary service areas. Orchard Hospital will continue to enhance our current service lines and expand specialty services in order to reduce the need to leave the area for healthcare.

How:

Improving access to healthcare services helps to ensure that patients have a medical home (a provider or facility where one regularly receives care). Patients with a medical home exhibit better health outcomes, fewer disparities, and lower costs. Orchard Hospital will:

- Increase access to healthcare by expanding care and services in Butte County
  - Medical Specialty Center-Oroville
  - Expand Services offered at the Oroville Clinic
- Offer transportation
  - Senior Life Solutions
  - FEMA Site
- Increase number of providers at the Medical Specialty Centers
  - Hire more providers with new specialty service lines
  - Recruit providers that speak a second language
  - Increase number of primary care providers (PCP)
  - Guiding patients to establish a PCP
- Timeliness of service:
  - Availability of appointments and care for illness or injury when needed
  - Time spent waiting in doctors' offices and emergency departments (EDs)
- Add Tele Psychiatry:
  - Offering emergency department and acute care patients access to mental health consultations via online conferencing and consultation
- Emergency department pediatric care:
  - Partnership with the University of California - Davis allows us to expand the pediatric care program to our community
- Long-term care
  - Skilled nursing facility
    - Keep patients close to home
  - Increase resident capacity
- Free influenza vaccination clinics
  - Collaborating with local health department

Priority: Access to Health Care

Programs/Resources to Commit

- Increase the number of providers
- Transportation- Uber, Lyft, Gridley Feather Flyer and taxi
- Medicare Seminars- long term care
- Increased Skilled Nursing Facility to 82 beds

Impact of Programs/Resources on Health Need

- Orchard Hospital Community Financial Assistance
- Butte County B-Line
- Gridley Feather Flyer
- Preventive Service
- Medicare Seminar

Accountable Parties

- Administrator of the Medical Specialty Center
- Director of Physician Recruitment, Marketing and Community Outreach
- Education/Infection Prevention
- Social Services
- Utilization Review and Discharge Planning
- Director of Senior Life Solutions
- Administration - Hovlid Community Care Center – DP/SNF

Partnerships/Collaboration

- Orchard Hospital will work with the City of Gridley, CSU Chico (dietary intern), Butte County Social Services (intern), Rural Health Nursing student, Gridley Feather Flyer Program, Butte County Department of Public Health, community outreach programs/service clubs and other local hospitals.

Priority: Mental Health and Substance Use Disorders

Objective/Strategy

Metal illness and substance abuse including alcohol, tobacco, illicit drugs, and opioids, continue to rise toward the top of the health needs for Butte County residents. Orchard Hospital will continue to promote smoking cessation among young people and adults within our community to decrease the percentage of those who smoke or use smokeless tobacco. We will also continue to provide our community with a pain management provider, manage prescription pain medications, and provide mental health referrals.

How

Upgrade website to include marketing of programs and services available throughout our community related to mental health, substance use, and the use of tobacco. Communicate services offered at Orchard Hospital through existing and new community marketing campaigns. Orchard Hospital employees will be encouraged to participate.

Implement best-practices for managing prescription pain medications

- Continue to offer Pain Management Provider
- Provide Continuing Medical Education (CME) for Butte County prescribing providers regarding prescription opioid misuse and abuse.
- Continue to offer Mental Health Services:
    - Senior Life Solution
    - Family Licensed Therapist
    - Emergency Room offers Tele-Med Psychiatry

Programs/Resources to Commit

Orchard Hospital is currently collaborating with the Butte County Department of Public Health and Butte County Drug Abuse Task Force to continue to implement the smoking cessation program. Work with the Local School Districts and the local Parks and Recreation Departments to roll- out programs to the youth. Promotion of this program will continue to be communicated to patients through staff and physicians. Work with our current human resource department and healthcare insurance to offer incentives to our employees for participating in smoking cessation. Orchard Hospital will also provide Accessible Intervention and Respiratory Education (AIRE program) for those that have lung disease.

Community Resources:

Substance Use and Misuse

- Alcoholics Anonymous
- Butte County Public Health Department
- Chico Rescue Mission
- Narcotics Anonymous
- No Butts
- Skyway House
- Smoke Free North State
- Tobacco Use Prevention Education
- Vet Center

Mental Health

- Orchard Hospital Senior Health Solutions
- African American Family & Cultural Center
- Butte County Behavioral Health
- Chico Veteran Center
- Hmong Cultural Center

Impact of Programs/Resources on Health Need

- Decline in percentage of those who smoke or use smokeless tobacco
- Additional education to front line staff.

Accountable Parties

- Administrator of the Medical Specialty Center
- Director of Physician Recruitment, Marketing and Community Outreach
- Education/Infection Prevention
- Social Services
- Utilization Review and Discharge Planning
- Director of Senior Life Solutions
- Administration - Hovlid Community Care Center – DP/SNF

Partnerships/Collaboration

Orchard Hospital will work with Butte County Department of Public Health and Partner with the Rural County Opioid Group.

Priority: Chronic Diseases: Obesity

Objective/Strategy

Enhance care for Childhood Obesity. Orchard Hospital will provide a weight loss management program at the Medical Specialty Center Oroville. Orchard Hospital will continue to offer educational information and to increase the outreach for the Health Ambassador Program.

How

- Weight Loss Management Program
    - Healthcare Provider will counsel Patient and refer patient to clinic Registered Dietician
- Orchard Hospital employees will be encouraged to participate.
- Communicate service offered through local Service Clubs, Schools, Churches, and at Orchard Hospital through existing and new community marketing.
- Utilize the website and social media outlets to include marketing of programs and services available throughout our community for childhood obesity.
- Health Ambassador Program
    - Gridley High School Nursing Pathway Students will be instructed on how to educate elementary students and junior high students on nutrition and fitness (play 60).
    - Orchard Hospital will be able to reach children ages 9-18 in our service area.
    - Educate on how to make healthy snacks and 60 min fitness activity.

Programs/Resources to Commit

Collaborate with local schools and partner with school nurses and the Center for Nutrition & Activity Promotion. Offer nutritional and fitness program to local schools utilizing the play 60 activities and help children and young adults learn how to move for 60 minutes.

Impact of Programs/Resources on Health Need

- See a marked improvement in the management of individual weight and nutrition. This will be proven by increased activity among children/teens as well as weight loss.

Accountable Parties

- Administrator of the Medical Specialty Center
- Marketing and Community Outreach
- Education/Infection Prevention
- Social Services
- Nutritional Services Utilization Review and Discharge Planning
- Director of Senior Life Solutions
- Administration

Partnerships/Collaboration

Butte County Public Health, Orchard Hospital Nutritional Services, Medical Specialty Center clinic, Partnership with CSU Chico for Dietary Intern, CSU Chico for Social Services Intern and Rural Health Nursing students, Local Service Clubs, and the Local School Districts.

Priority: Chronic Diseases: Diabetes

Objective/Strategy

Enhance care for Diabetes. Orchard Hospital will provide diabetes education to patients identified by providers at the Medical Specialty Center. A provider will refer a patient to diabetic counseling with the registered dietician as needed.

How

Upgrade website to include marketing of programs and services available throughout our community for diabetes. Patients will be referred when newly diagnosed with diabetes and receive lifestyle/self-care information.

Programs/Resources to Commit

Orchard Hospital Dietitian and or Provider (MD or FNP) will meet with the patient and provide a diabetic counseling session.

Impact of Programs/Resources on Health Need

- See a marked improvement in the management of diabetes. This will be evidenced by lower blood sugar levels and weight loss when applicable.

Accountable Parties

- Administrator of the Medical Specialty Center
- Marketing and Community Outreach
- Education/Infection Prevention
- Social Services
- Registered Dietician in Nutritional Services
- Utilization Review and Discharge Planning
- Administration

Partnerships/Collaboration

Initially, this process will be in-house (utilizing the services of our Nutritional Services Department and the Medical Specialty Center Clinic). We will collaborate and partner with Butte County Public Health, other Hospitals, CSU Chico for Dietary Intern, Social Services Intern, and Rural Health Nursing students.

Appendix: 6

Public Comment

Public Comment

In compliance with IRS regulations 501(r) for charitable hospitals, a hospital Community Health Needs Assessment (CHNA) and Implementation Strategy are to be made widely available to the public and public comment is to be solicited. The previous Community Health Needs Assessment, and annual implementation strategies were made widely available to the public on the website www.OrchardHospital.com . To date, no comments have been received.

Appendix: 7

Works Cited

Works Cited:

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[iii] https://www.healthypeople.gov/2020/leading-health-indicators/2020-lhi-topics/Clinical-Preventive-Services

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[v] https://www.cdc.gov/chronicdisease/about/index.htm

[vi] Centers for Disease Control and Prevention (April 2, 2019). About the CDC-Kaiser ACE Study |Violence Prevention|Injury Center|CDC. Retrieved from https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/about.html

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[viii] Rodriguez, D., et al. (2016). Prevalence of adverse childhood experiences by county, California Behavioral Risk Factor Surveillance System 2008 - 2013. Public Health Institute, Survey Research Group