Feather River Hospital

2016 Community Health Needs Assessment

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Executive Summary

Feather River Hospital

Collaborating to achieve whole-person health in our communities

Feather River Hospital invites you to partner with us to help improve the health and wellbeing of our community. Whole-person health—optimal wellbeing in mind, body and spirit—reflects our heritage and guides our future. Feather River Hospital is part of Adventist Health, a faith-based, nonprofit health system serving more than 75 communities in California, Hawaii, Oregon and Washington. Community has always been at the center of Adventist Health's mission—to share God's love by providing physical, mental and spiritual healing.

The Community Health Needs Assessment is one way we put our faith-based mission into action. Every three years, we conduct this assessment with our community. The process involves input and representation from all: community organizations, providers, educators, businesses, parents, and the often marginalized—low-income, minority, elderly and other underserved populations.

We use the Community Health Needs Assessment to achieve these goals:

- Learn about the community's most pressing health needs
- Understand the health behaviors, risk factors and social determinants that impact our community's health
- Identify community resources and prioritize needs
- Collaborate with community partners to develop collective strategies

Partnering with our communities for better health

While conducting the Community Health Needs Assessment we solicited feedback and input from a broad range of stakeholders. Contributors to the process included these partners:

- Butte County Department of Public Health
- Together We Can! Healthy Living in Butte County Collaborative (led by the Butte County Department of Public Health)
- Hospital Collaborative (Enloe Medical Center, Feather River Hospital, Orchard Hospital Oroville Hospital)

Data Sources

The assessment drew from publically available secondary data sources, as well as from nationally recognized data sources. We collected data on key health indicators, morbidity, mortality, and various social determinants of health from the Census, Centers for Disease Control and Prevention, Community Commons, County Health Rankings and various other state and federal databases. As part of the Together We Can! Collaborative led by the Butte County Department of Public Health, Feather River Hospital capitalized heavily on the data available from work done in cooperation with a long list of health care, social service, and community action agencies to establish an overall perspective of community health needs. This includes data assembled by the Butte County Department of Public Health epidemiologist to identify key indicators, results from the 2014 Together WE Can! Community survey which Feather River Hospital participated in authoring, distributing and collecting, and the results of guided discussion based workgroups after data collection from the survey. Feather River Hospital continues to participate on taskforces established to drive action plans created by these sessions. The Hospital Collaborative (all participants in the Together We Can! Collaborative) held focus groups in 2016 to validate data and ensure a broad representation of the community. Questions focused on awareness of current efforts to impact health by the Together WE Can! collaborative the local hospitals conducting the focus groups and about access to, and use of, health care services; the vision of a healthy community; and top community health needs and barriers to accessing resources.

Prioritization process

Prioritization of the needs of our community came from the cooperation of our Hospital Collaborative group. Because of our participation in the Together We Can! collaborative and the diverse list of members, we already had good broad community input and data including important insight on our medically underserved, low income and other minority segments of our populations about what major concerns in our community rise to the top. From that list we evaluated the severity and magnitude of top issues and the opportunity for partnership, existing resources, and mission alignment to then vote on our top three areas of focus. Feather River Hospital took this recommendation and presented it to their Governing Board for approval as well.

Top priorities identified in partnership with our communities

One of our top priority areas in our community has been identified as Chronic Disease. The high rates of Heart Disease, Diabetes, Obesity, and COPD and the comorbidity rates are unacceptably high. Aiming our efforts at reducing the numbers of lifestyle-created Chronic Disease impacts not only the current good but future good of our community members.

Secondly, we see that access to Health Care and health resources continues to be an obstacle for our community as the issue is not always unavailable services, but sometimes lack of awareness of services available. This issue does not pertain only to those considered to be low-income or medically underserved, as we face issues of having an insufficient number of providers in our community taking new patients.

Thirdly, we have identified Substance Abuse as an increasing issue in our community. It is an issue that is not solely about stopping use of harmful substances or breaking addiction, but encompasses prevention, education to patient and provider, and strengthening partnerships among community agencies.

Feather River Hospital Health Top Priority Health Needs For 2016-2019

Prioritized Need	Health Indicator
Chronic Disease	Adult/Youth Obesity, Diabetes Rates
Access To Care	Preventable Hospital Stays, Uninsured Rates
Substance Abuse	Drug induced Death Rates, Adult/Adolescent Tobacco/Nicotine Use

Making a difference: Results from our 2013 CHNA/CHP

Adventist Health wants to ensure that our efforts are making the necessary changes in the communities we serve. In 2013 we conducted a CHNA and the identified needs were:

A Decrease in Obesity, Diabetes and Heart Disease Rates

- A Strides for Diabetes run/walk event to create awareness about diabetes prevention had 160 participants and raised $2,000 in 2015 for scholarships for diabetes management classes and community education.
- Created a Livingwell Committee focused on promoting a culture of wellness at FRH for employees and their families.
- Hosted a restructured Community Health & Wellness Fair which offered a free health screening at each booth. Health screenings included: oral cancer screenings, blood pressure screenings, vision screenings, hearing screenings, blood sugar screenings, balance assessments, and BMI testing

Access to Care

- Added specialty services to Corning Health Center including Dental, Podiatry, and Orthopedics.
- Used the *Partners in Health* magazine to communicate new providers, services and technologies available in the community. Services featured in 2015 included medical imaging (specifically new 3-D Mammography services), physical therapy services, midwifery services (creating awareness that they do more than just deliver babies), orthopedic devices hospice services (including bereavement support group for anyone who has lost a loved one not just from hospice), home health services, and smoking cessation services. The 20 - page magazine is published 3 times a year and over 25,000 copies of *Partners in Health* go out with each issue.
- Built suites for Dental and Ophthalmology services to begin in 2016 and added Cardiology and Pulmonology services at the Canyon View Clinic, a rural health clinic.

- Opened our Chico Specialty Health and Diagnostics Center offering various specialty services, X-Ray, Mammography, Ultrasound, DexaScan, and Laboratory Testing services. This office is located on the road that connects Paradise to Chico, allowing Paradise residents that may work in Chico to access services connected to their care in Paradise. This improves the continuum of care available along with increasing access to these services to the population of Chico.
- Provided 3,756 rides with a handicapped accessible shuttle van to our community. This program is run by Feather River Hospital using our own vehicle and staff.

Smoking Cessation

- In 2015 we saw an increase in Smoking Cessation interest with each session of our Freedom from Smoking class being completely full with a standby list. We also saw several employees or employee spouses participate. In the Fall of 2015, FRH began to offer the classes completely free to all participants. In December of 2015, Feather River Hospital created a new position titled COPD Educator. This person in this role is a Respiratory Therapist and also a Registered Smoking Cessation Educator. The responsibility of the COPD Educator is to meet with inpatients in the hospital and discuss their Chronic Obstructive Pulmonary Disease with them including promoting smoking cessation in appropriate cases.

Our Mission

To share God's love by providing physical, mental and spiritual healing.

Our Support

The Feather River Hospital (FRH) Governing Board supports the organization's efforts to meet the needs of the community.

The Community Benefits Committee gives direction to the community benefits provided by FRH. The staff participates in the evaluation of community needs and issues, planning of interventions, and evaluation of results.

Our Governing Board

The Governing Board of Feather River Hospital consists of Adventist Health corporate leaders, leadership from the Seventh-day Adventist Church, as well as local community leaders including physicians and other community members. The Governing Board is involved in the planning process of the hospital. Our community is at the heart of our strategic plan.

Community Benefits Staff

The Marketing Department at Feather River Hospital is responsible for CHNA and community benefit efforts led by Courtney Rasmussen, Marketing Coordinator and overseen by Maureen Wisener, AVP - Communications. Financial reporting is managed by Debbie Christian, Sr. Accountant at Feather River Hospital.

CHNA Key Community Contributors

- Together We Can Butte County Collaborative
- Butte County Department of Public Health
- Center for Healthy Communities at California State University-Chico

Community Health Survey Collaboration

Feather River Hospital worked with the following individuals and organizations to obtain community information to contribute to its CHNA:

-Lyndi Little | Orchard Hospital
-Deanna Reed | Enloe Medical Center
-Shanna Roelofson | Oroville Hospital
-Gene Azparren| Butte County Department of Public Health
-Sandy Henley | Butte County Department of Public Health

Our Hospital and Services

Feather River Hospital is a 100 bed, not-for-profit, faith-based facility, offering a full range of inpatient, outpatient and emergency services. Operating in the Paradise, CA for more than 60 years, FRH employs more than 1,300 community members, has a medical staff of 180 physicians, and more than 600 volunteers. FRH is known for providing compassionate quality medical care, with employees who are dedicated to living out the hospital's mission of showing the love of Christ through whole-person care comprised of physical, mental and spiritual healing.

FRH is part of Adventist Health, a faith-based, nonprofit integrated health delivery system serving communities in California, Hawaii, Oregon and Washington. Adventist Health's workforce of 32,700 includes more than 23,400 employees; 5,000 medical staff physicians; and 4,300 volunteers. Founded on Seventh-day Adventist health values, Adventist Health provides compassionate care in 19 hospitals, more than 260 clinics (hospital-based, rural health and physician clinics), 15 home care agencies, seven hospice agencies and four joint-venture retirement centers.

Key services for FRH include 24-hour emergency services, community health education, imaging, intensive care, home health, obstetrics, rehabilitation, rural health clinic, sleep center and surgical services. Specifically, we offer:

- Feather River Health Center (provider-based rural health clinic)
- Behavioral Health
- Birth Day Place
- Cardiology
  - Cardiac Cath Lab
  - Diagnostic Services
  - Cardiac Rehabilitation Program
  - Cardiologists
- Community Wellness
- Diabetes Education
- Dental Services
- ENT Services
- Emergency Department – 24/7 Physician on Duty
- Gastroenterology
- Healthy Mothers
- Hospice Care
  - In-patient Hospice House
- Home Care Services
  - Home Health Care
  - Home Medical Supplies
- Imaging and Diagnostics
  - MRI
  - CT Scan
  - X-ray
  - Nuclear Medicine
  - Digital Mammography
  - Ultrasound
- Laboratory
- Lifeline – Medical Alert Service
- Neurology
- Nutritional Services
- Meals on Wheels
- Oncology
  - Medical
  - Radiation
- Orthopedics
- Ophthalmology
- Pediatrics
- Pharmacy (In and Outpatient)
- Pediatrics
- Pediatric Dental
- Primary Care
- Pulmonary Care
- Rehabilitation Services
  - Physical therapy
  - Speech Therapy
  - Occupational therapy
- Sleep Lab
- Surgical Services
- Women's Health
  - Obstetrics
  - Gynecology
  - Women's Imaging

Service Area

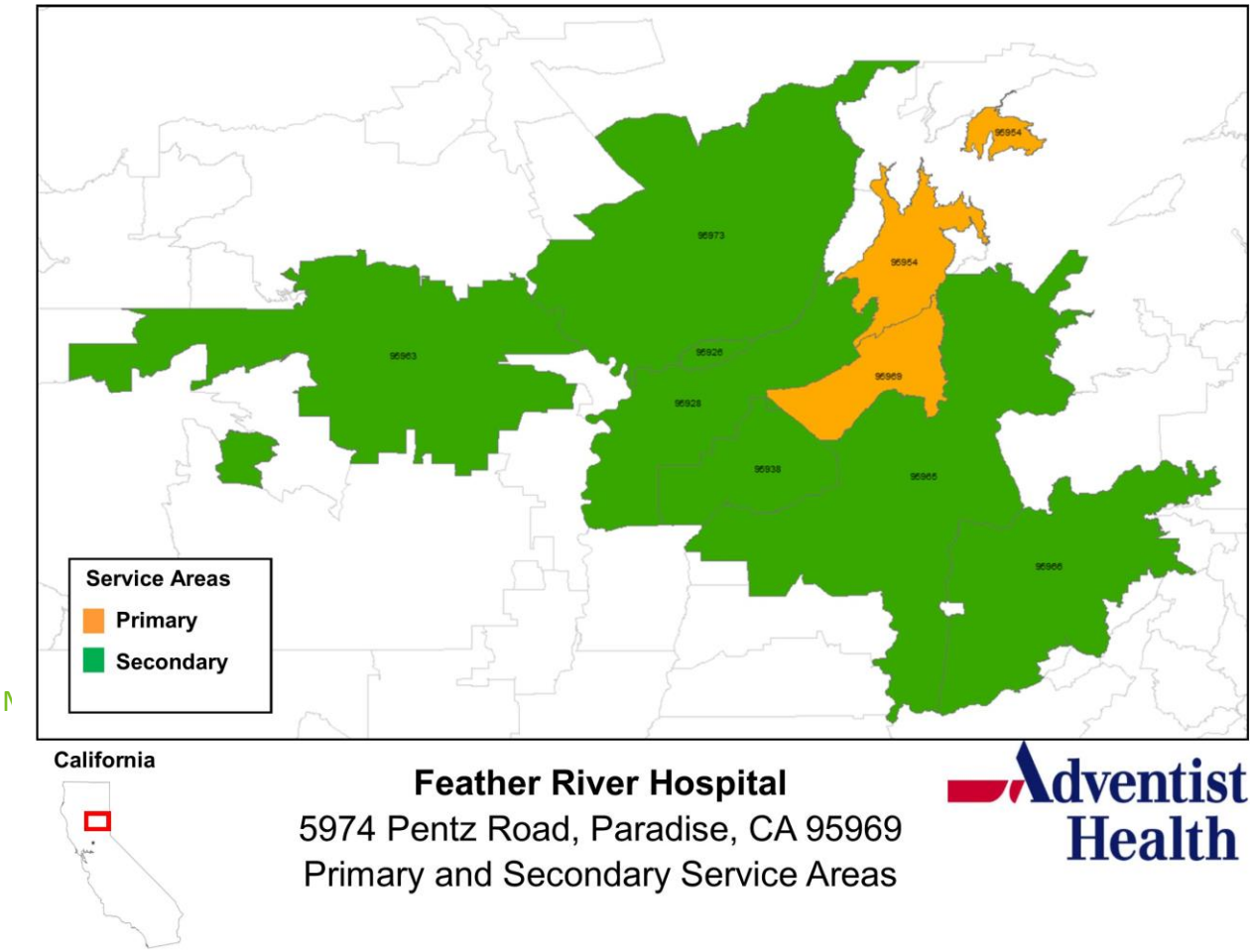
Counties: Butte County
Major Towns: Paradise & Magalia
Secondary Towns/Cities: Chico, Corning Oroville, Durham, Yankee Hill, Concow, Orland

Our location: Paradise is an incorporated town in Butte County, in the northwest foothills of California's Central Valley, in the Sierra. The town is considered part of the Chico Metropolitan Area. The population was estimated at 26,476 as of 2015 up from 26,218 at the 2010 census. Paradise is 10 miles (16 km) east of Chico and 85 miles (137 km) north of Sacramento

Geography: The town of Paradise is spread out on a wide ridge which rises between deep canyons on either side. These canyons are formed by the west branch of the Feather River to the east, and Butte Creek to the west. The Paradise area extends northwards from Paradise to include the unincorporated town of Magalia and smaller communities such as Stirling City to the far north.

Transportation: There are not many options for transportation within Paradise other than driving an automobile. The Paradise/Magalia area is served by the "B Line" Butte County Transit. Butte Community College also runs bus service for students. The Paradise Memorial Trail is a paved pedestrian and bicycle path which runs through town on the path of the former railroad tracks leading up the ridge. However, aside from points along this path, the very hilly terrain of the town, coupled with the large spacing of commercial areas and large land area make Paradise difficult to navigate on foot or on a bicycle, in addition to the lack of sidewalks.

Service Area Map



2016 CHNA Process

The Community Health Needs Assessment is Feather River Hospital's principal tool for understanding the emerging or unmet needs of its community. In 2013 Feather River Hospital joined with the other hospitals in Butte County to survey input on the health needs and formed a Hospital Collaborative for the CHNA process including Feather River Hospital, Enloe Medical Center, Oroville Hospital (did not participate in 2013 process but now is part of the collaborative), Orchard Hospital and the Butte County Department of Public Health. The goal of this collaboration is not only to help assess community health needs but to help better address these health needs.

In 2016 the Hospital CHNA Collaborative met and decided on a course of collaborative assessment that would include updating indicator data in the County wide CHA, utilizing the County wide CHA as the backbone of the Hospitals 2016 CHNA community perspective, conducting focus groups to maintain current community input reflected the County Wide CHA, and that the community had the opportunity to voice input in additional concerns or shift in priority of the identified priority areas. Due to the timeline of the County Wide CHA and involvement of the hospitals, it was felt another survey so close to the last survey would not be of significant influencing value. Due to the close proximity of the hospitals and the overlap in markets it was decided that this data used was statistically significant and representative of each hospitals defined "community" as well as Butte County's. To maintain the relevance of the data, Butte County's Epidemiologist went through the entire report of the CHA and updated the data to be current as of 2016.

The "Together We Can Butte County" Health Collaborative

In 2014 hundreds of local agencies and the community including Feather River Hospital members formed a partnership called Together We Can! Healthy Living in Butte County. The partnership's work produced a written countywide Community Health Assessment (CHA) which describes the county's health status, defines areas for improvement and identifies assets that can be mobilized to improve health for everyone in Butte County. The CHA utilizes both primary and secondary data; primary data was collected from community members and stakeholders, while secondary health data was gathered from numerous existing sources. Data is not only provided on a countywide level, but in some instances is also stratified specific to local communities, age groups, cultures, and other indicators. This data includes data from a community survey.

Community Health Focus Groups

Because a valuable CHNA warrants the input from a broad spectrum of community groups, participation in focus groups was solicited by each organization participating in the Hospital Collaborative to ensure the existing validity of the "Together We Can Butte County" CHA. To solicit feedback, hospitals made their focus groups known by a press release and subsequent newspaper article, local tv news coverage, social media posts (such as Facebook and Twitter), flyers and direct invitations to key community members. During these focus groups each organization discussed and evaluated awareness of the "Together We Can Butte County" CHA, discussed and evaluated awareness of the CHNA and CHP for the organization facilitating the group (Feather River Hospital addressed its particular CHNA with its group), and discussed the groups input on health priorities in the community and possible ways to address these needs. Each hospital shared the results but each hospital is responsible for identifying their priority needs. . The focus groups were comprised of community members at large and also key leaders in the

community such as local government officials, religious and community service organizations representatives and medical professionals. A summary of the focus group findings was put together by the Center for Healthy Communities at California State University-Chico.

Priority Areas

Prioritization of the needs of our community came from the cooperation of our Hospital Collaborative group. Because of our participation in the Together We Can! collaborative and the diverse list of members, we already had good broad community input and data, including important insight from our medically underserved, low income and other minority segments of our populations about what major concerns in our community rise to the top. From that list we evaluated the severity and magnitude of top issues and the opportunity for partnership, existing resources, and mission alignment to then vote on our top three areas of focus. Feather River Hospital took this recommendation and presented it to their Governing Board for approval as well.

The following are the priority areas the Feather River Hospital has identified for its 2016 CHNA :

1. Chronic Disease which includes but is not limited to:
    - Obesity
    - Heart disease
    - Diabetes
    - Drug/ Alcohol Use
    - Mental Health

2. Access to Healthcare which includes but is not limited to:
    - Number of primary care physicians available (taking new patients)
    - Costs/Insurance
    - Transportation
    - Knowledge of Services Available

3. Substance Abuse which includes but is not limited to:
    - Alcohol Consumption/Binge Drinking
    - Tobacco Use in Teens and Adults
    - Nicotine Use (ecigs/vaping)
    - Opioid Dependency/Abuse

Key Indicators that Contribute to Identified Priority Areas

There were a lot of influential data that pointed us to our priority areas. There were some key findings that stood out in the data. Some of them include:

Key Findings and/or Health Disparities Related to Chronic Disease:

- The top chronic conditions among Centers for Medicare and Medicaid Services (CMS) beneficiaries in Butte County were hypertension (e.g. high blood pressure) and hyperlipidemia (e.g. high cholesterol and triglycerides) followed by diabetes, arthritis, and ischemic heart disease.

- The age-adjusted rate for all cancers in Butte County was notably higher than for the state of California overall (485.6 vs. 432.0 per 100,000 population).

- A higher percentage of the population in Butte County (4.9%) is living with heart disease than in California overall (3.4%).

- Consistent with statewide and national trends, Butte County residents age 65 and older were much more likely to be diagnosed as diabetic.

- A higher percentage of adults in Butte County (20.5%) have been diagnosed with asthma than in California overall (14.1%).

- Visits to Butte County emergency departments for asthma related symptoms were much more likely to be paid for by Medi-Cal than by any other payment source; and a considerably higher percentage of asthma related emergency department visits in Butte County were paid for by Medi-Cal (54.9%) than in California overall (37.1%), indicating that socio-economic factors are associated with asthma in Butte County.

- Obesity was indicated as a top health concern facing Butte County by 22.3% of survey respondents, while 5.3% indicated chronic diseases to be a top health concern.

Key Findings and/or Health Disparities Related to Substance Abuse and Addictive Disorders:

- The Age Adjusted Death Rate (AADR) for drug induced deaths in Butte County was roughly 3 times greater than the AADR for California overall, with Butte County ranking 3rd out of California's 58 counties for the most drug induced deaths.

- Adults age 18 and over in Butte County (35.3%) reported binge drinking at a higher rate than adults in California overall (31.1%).

- Emergency department treatment and release rates for conditions related to both alcohol and drug abuse were considerably higher for Butte County than for California overall (alcohol: 1038.8 vs. 714.0 per 100,000 population; drug abuse: 873.3 vs. 516.3 per 100,000 population).

- Tobacco use among adults in Butte County (18.7%) is higher than for California overall (13.2%), as well as the Healthy People 2020 objective (< 12.0%).

• A much higher percentage of Medi-Cal beneficiaries in Butte County (42.0%) were identified as current smokers than Medi-Cal beneficiaries in California overall (19.0%), which mirrored and may be related to the percentage of Medi-Cal emergency room asthma visits.

• A countywide community health survey indicated that alcohol and drug abuse was a top health concern facing Butte County (44.8% of survey respondents). African American / Black respondents (49.0%) cited alcohol and drug abuse as a top health concern more than any other race/ethnicity.

• Alcohol was the most frequently used substance reported by survey respondents, with over half using at least some alcohol, and almost one in twenty reporting daily use.

• Cigarettes were used on a daily basis more frequently by survey respondents (8.6%) than any other substance, including other forms of nicotine containing substances (e.g. electronic cigarettes, cigars and cigarillos). Alcohol was the second most frequently used substance on a daily basis (4.5%), followed by marijuana (2.7%).

Key Findings and*/or Health Disparities Related to Healthcare Access:*

• Fifty-five percent of survey respondents reported they most often went to a private doctor's office for health care services. Twenty-seven percent went to clinics and health centers, and 8.5% went to the county's hospitals.

• Twenty-eight percent of survey respondents that accessed healthcare outside of their home city reported that there were no providers for the services they needed in their home city, 9.1% reported there were no doctors in their city who accepted Medi-Cal or Medicaid, and 8.2% reported their insurance only covered providers in another area.

• Most survey respondents (70.9%) reported paying for health care services through private or employer sponsored insurance. A considerable number paid by Medicare (15.1%), Covered California (8.2%), or used Medicare supplemental insurance (5.7%).

• Sixty-three percent of survey respondents who indicated a need for mental health services reported being able to obtain them in Butte County, 29.0% reported not being able to get the services they needed in Butte County, and 17.0% reported only being able to get some of the services they needed.

Key Findings and/or Health Disparities Related to Socio-Economic Conditions.

• The median household income for Butte County ($40,960) is considerably lower than for California overall ($58,328), as well as nationally ($51,371).

• The rate of unemployment was higher in Butte County (11.5%) than in California overall (9.0%).

- A higher percentage of American Indian/Alaska Native residents (19.0%) were unemployed compared to other racial/ethnic groups in Butte County, with Hispanic/Latinos (16.7%) having the second highest percentage of unemployment. Both American Indian/Alaska Natives and Hispanic/Latinos had higher rates of unemployment in Butte County than in California overall.

- In Butte County, 20.6% of residents were living below the federal poverty level. Groups that exhibited higher rates of living below the federal poverty level were African American/Black (38.9%), Asian (31.9%), Hispanic/Latino (32.2%) and those who had not completed high school (26.8%).

- A higher percentage of African American/Black residents (38.9%) were living below the federal poverty line than any other race/ethnicity in Butte County, which may be cause for concern as poverty is highly associated with poorer health and diminished access to healthcare. Similarly, the infant mortality rate was higher among African American/Black residents (42.1 per 1000 live births) than any other race/ethnicity in Butte County. This should be interpreted with caution as this difference was statistically unstable; however it is consistent with statewide and national trends concerning ethnic / racial disparities in infant mortality rates.

- More Asian residents (25.8%) were receiving Supplemental Nutrition Assistance Program (SNAP) benefits than any other race in Butte County, which was not reflected in the data for Asian residents of California overall (4.0%).

- Labor and delivery services for teenage females in Butte County were substantially more likely to be paid for by Medi-Cal (87.9%) than private insurance (10.8%), self-pay (0.6%), or other third party payer sources (0.6%), indicating that socio-economic factors are associated with teenage pregnancy rates in Butte County.

- Consistent with statewide and national trends, there were close to twice as many homeless males as females in Butte County (61.7% vs. 36.5%); however, there was some indication that homeless women were more likely to inhabit the rural areas of the county.

- Twenty percent of survey respondents reported having attained up to a high school diploma or General Equivalency Degree (GED). Eighteen percent had attained an associate or technical degree, 27.7% reported they had a four-year college degree, and 25.1% had a graduate or professional degree.

- Roughly 33% of survey respondents reported an annual household income of under $34,999. Approximately 38% reported an income between $35,000 and $79,999, and about 29% reported an income of over $80,000.

- Homelessness was indicated as a top health concern facing Butte County by 46.4% of survey respondents.

Resources Available to Meet the CHNA Needs

Although the health of Feather River Hospital's community has issues to address, there is a wide network of resources available to help improve the areas of need including the priority areas identified by Feather River Hospital's 2016 CHNA.

In Butte County, the 2-1-1 system (dial 211 on any phone to access) is also used to help identify community assets and resources. The 2-1-1 database contains listings for more than 750 programs providing services from over 400 agencies in Butte County. The 2-1-1 system also identifies services for more than twenty specialized population groups such as families, seniors or teens. Resources include:

Health System	**Food System**	**Community Organizations**
- Alternative Medicine Providers - Community Health Centers - Dentists and Dental Clinics - Disease-based Support Groups - Emergency Medical Services - Eye & Ear Care Providers - Free Clinics - Health Insurance Plans - Hospitals - Mental Health Providers - Nursing Homes - Pharmacies - Private Physicians - Public Health Department - Rehabilitation, Home Health & Hospice Providers - School Nurses, Counselors, Psychologists - Substance Abuse Treatment and Recovery - Urgent Care Centers **Public Safety** - Alternative Custody Programs - Anti Bullying Programs - Domestic Violence & Crisis Response Organizations - Emergency Operations Centers - Emergency Preparedness Coalitions	- Community Gardens - Farmers' Markets - Food pantry/Bank - Food Policy and System Groups - Food Purchasing Programs - Full Service Grocery Stores - Garden Supply Centers - Home Delivered Meal Services - Nutrition Education Programs/Services - School Lunch Programs **Housing** - Affordable Housing Programs - Aging in Place Efforts - Assisted Living Facilities - Foster Care Homes (Adult/Child) - Home Building Charities - Homeless Coalitions - Homeless Shelters - Rehab Programs - Subsidized Housing Developments - Rental Housing Landlords and Developments	- 12-Step Organizations - Crisis Intervention - Chambers of Commerce - Economic Development Organizations - Faith-Based Organizations - Human Service Organizations - Informal Groups and Meetings - Local Charities, Grant-Makers, & Foundations - Multi-Sector Coalitions - Service Organizations **Employment** - Business Associations - Development and Social Service Department - Economic Development Organizations - Farmers and Rural Employers - Labor Organizations - Major Employers - Public Employers - Self-Employed and Startups - Unemployment and Job -Placement Services - Volunteer Organizations **Education** - Charter and Private Schools

- Environmental Protection Organizations - Jail - Law Enforcement Training Centers - National Guard - Neighborhood Watch Programs - Police and Fire Departments - Probation and Fire Departments	- Weatherization, Home Improvement, and Home Safety Programs **Transportation** - Bicycle Infrastructure - Long Distance Bus Services - Mobility Managers - Public Transportation Providers - Safe Streets Initiatives/Polices - Taxis	- Childcare and Preschool Providers (0-5) - Community Centers - Community College and University - Homeschool Organizations - K-12 School Districts - Nature Centers - Public Libraries - Senior Centers - Tutoring/Mentoring Organizations - Virtual & Online Learning - Vocational/Trade Schools

BUTTE COUNTY

COMMUNITY HEALTH ASSESSMENT

2015 – 2017

(REVISED – OCTOBER 2016)

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INTRODUCTION

OUR COMMUNITY'S HEALTH

The way we define and measure health is changing dramatically—both nationally and in our own community. While medical care and personal behavior are important, maintaining good health involves much more than a doctor visit or having access to a medical facility.

A variety of other factors can influence a person's health such as access to healthy foods, educational and career support, available transportation options, safe neighborhoods, and opportunities to stay active, to name a few. We also need to examine these broader social and economic influences (*see Figure Intro-1*) if we are to fully understand our community's health.

Figure Intro-1: The layers in our society that influence health
(Robert Wood Johnson Foundation Commission to Build a Healthier America)

With this new definition of health, we are better able to work together to set and achieve goals for the community's wellbeing. *Figure Intro-2* describes how the framework of how we look at health has changed. We can now focus on:

- Planning strategically for our community's long-term health and wellbeing
- Looking at the whole community instead of just certain sections of the community
- Partnering with multiple organizations to reach shared goals
- Assembling community assets and resources to help Butte County improve its health

A Paradigm Shift in Community Health	
FROM	**TO**
Operational planning	Strategic planning
Focus on one agency	Focus on community & the entire health system
Needs assessment	Emphasis on assets and resources
Medically oriented model	Broad definition of health
Agency knows all	Everyone knows something

Figure Intro-2: A change of framework in how we look at health
(www.naccho.org/topics/infrastructure/MAPP/index.cfrn)

TOGETHER WE CAN! HEALTHY LIVING IN BUTTE COUNTY

Hundreds of local agencies and community members have formed a partnership called Together We Can! Healthy Living in Butte County. Their first task was to develop a shared vision of a healthier Butte County.

The partnership's work has produced this written countywide Community Health Assessment (CHA) which describes the county's health status, defines areas for improvement and identifies assets that can be mobilized to improve health for everyone in Butte County. The CHA will be the basis for the Community Health Improvement Plan (CHIP). The CHIP will outline the agreed upon action steps to address the priority health issues and the parties responsible for implementing those steps.

VISION AND VALUES

Together We Can! Healthy Living in Butte County is using a modified Mobilizing for Action through Planning and Partnerships (MAPP) model to complete the assessment. To guide this strategic planning process, Together We Can! Healthy Living in Butte County partner agencies and community members developed a list of vision statements as follows:

- Diversity is valued in our community.
- Everyone receives a high quality education and children thrive.
- Our environment is clean and safe.
- We support outdoor physical activity, arts, and music.
- Our community provides abundant employment opportunities and transportation resources.
- Everyone has a home and nourishing food.
- Everyone is healthy and has access to quality medical and mental health care.

The Together We Can! Healthy Living in Butte County Partnership also developed a set of Values by which the health planning process should be run. The values are:

- ❖ People are our highest value
- ❖ Respect
- ❖ Compassion
- ❖ Diversity
- ❖ Honesty
- ❖ Communication
- ❖ Collaboration
- ❖ Representation
- ❖ Results
- ❖ Environmental Sensitivity

THE PROCESS AND INVOLVEMENT

Our community health planning project began in the spring of 2014 and we hope to complete it in the summer-fall of 2015. The overall process is composed of five steps, as shown in *Figure Intro-3* below:

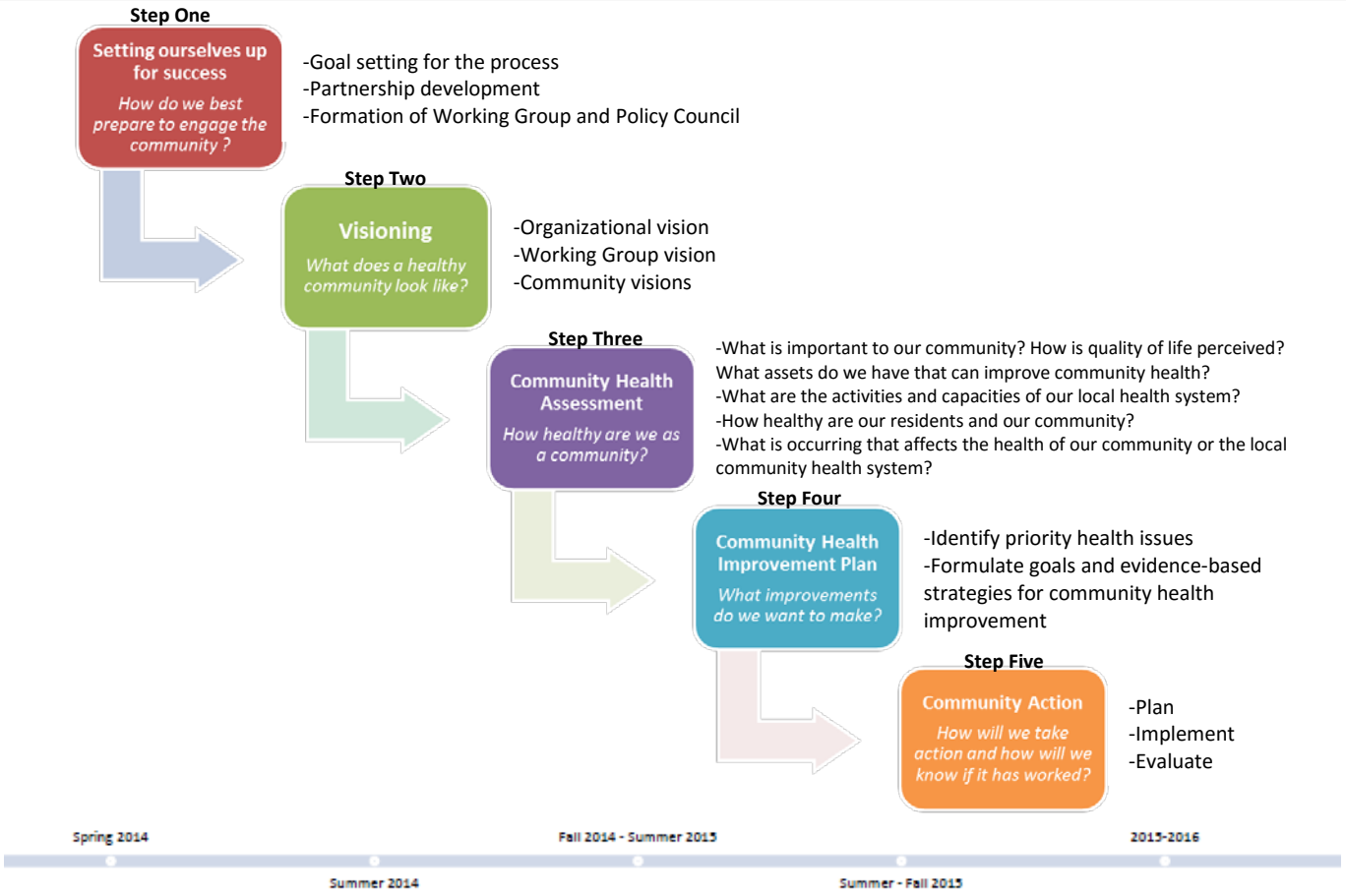


Figure Intro-3: Butte County community health assessment and improvement planning process

Project Involvement

The project consists of two primary committees: the Policy Council and Working Group (*see Figure Intro-4*).

For a list of all Policy Council and Working Group Members, see *Appendix Intro-1*.

The **Policy Council** is composed of community leaders who are in positions of authority over their respective agencies and organizations. They represent area hospitals, cultural, religious and community groups, policy makers, and social service agencies. They direct the strategy for the CHA and CHIP and have final approval before the CHA and CHIP are widely disseminated.

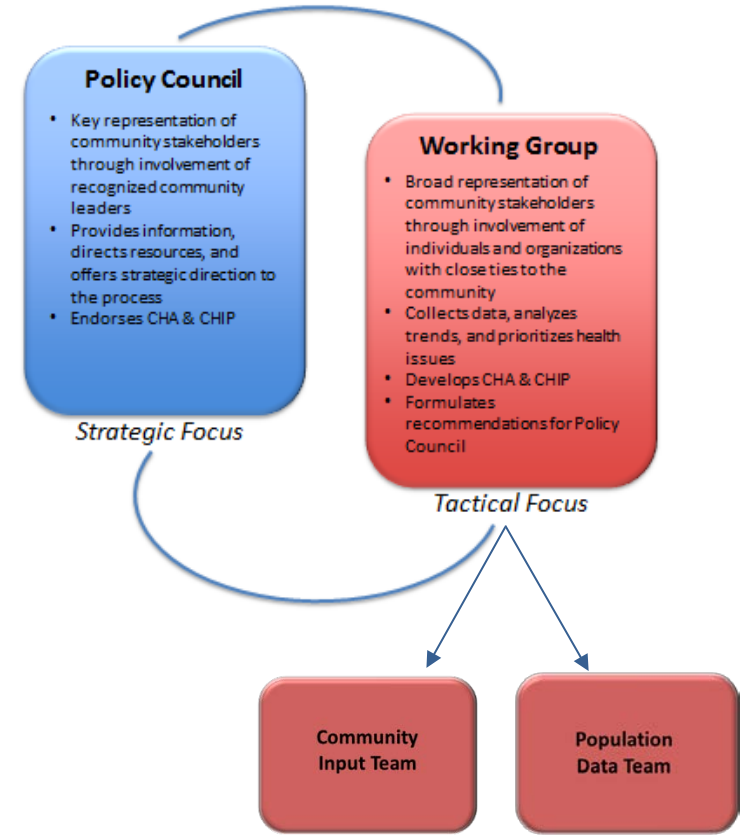


Figure Intro-4: Organizational structure for the project

The **Working Group** is composed of a broad array of community representatives who provide the "on the ground" workforce to implement the process. Primary Working Group responsibilities include collecting data, analyzing trends, conducting community outreach, prioritizing health issues, and assisting with the development of the CHA and CHIP.

The Working Group has two topic-oriented teams:

- **Population Data Team –** This team identifies and analyzes existing secondary health data from publicly available sources and community partners.
- **Community Input Team –** This team develops strategies for gathering health feedback and recommendations from community members in Butte County.

BUTTE COUNTY ASSETS AND RESOURCES

A vital component to community health improvement planning is to have a listing or description of the local assets and/or resources that can be mobilized and employed to address health issues. Community assets/resources are especially important for populations with the greatest health disparities – those who are most vulnerable and are experiencing the worst conditions for good health. See *Appendix Intro-2* for a local asset inventory compiled by partners and community members throughout the assessment process.

In Butte County, the 2-1-1 system is also used to identify community assets and resources. The 2-1-1 database contains listings for more than 750 programs providing services from over 400 agencies in Butte County. The 2-1-1 system also identifies services for more than twenty specialized population groups such as families, seniors or teens. Many stakeholders involved in the Together We Can! Healthy Living in Butte County project routinely contribute information related to their agencies, programs, services and locations to the 2-1-1 database. The Butte County 2-1-1 system can be accessed at http://www.helpcentral.org/ and will be used to identify and mobilize resources during the health improvement phase of the project.

ORGANIZATION OF THE REPORT

The Community Health Assessment has the following chapters:

- **Chapter 1 – Community Profile:** A description of Butte County's demographics.
- **Chapter 2 - Community Themes and Strengths Assessment:** An analysis of qualitative health data/information collected through various forms of community engagement.
- **Chapter 3 – Community Health Status Assessment:** An analysis of quantitative/ secondary data related to the community's health and quality of life.
- **Chapter 4 - Local Community Health System Assessment:** An analysis of the current performance and capabilities of Butte County's local community health system.
- **Chapter 5 - Forces of Change Assessment:** An analysis of the varying forces such as legislation, technology, and funding that may affect our community.
- **Chapter 6 - Conclusion:** A summary of the key CHA findings.

CHAPTER 1: BUTTE COUNTY'S COMMUNITY PROFILE

DEMOGRAPHIC CHARACTERISTICS

Butte County Overview

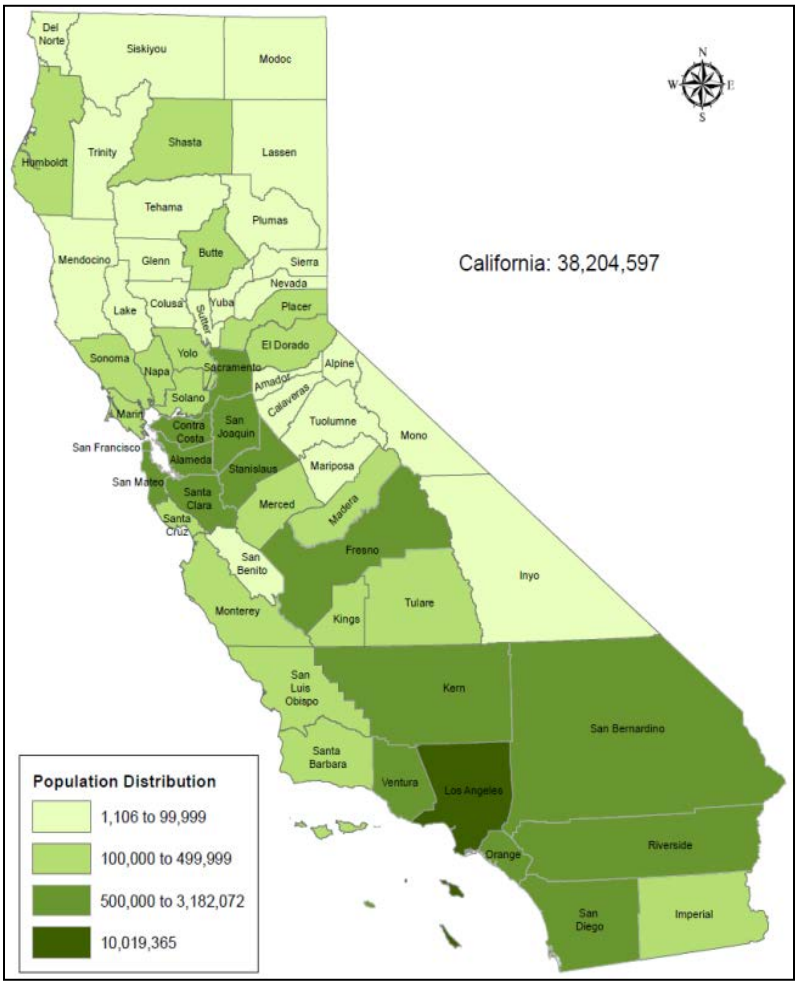


Figure Profile-1: Population Distribution

Data Source: California Department of Finance, Demographic Research Unit December 2013

It is important to understand some basic information about Butte County to appreciate the findings that are presented in this Community Health Assessment Report. This section provides a summary of the demographics of Butte County.

Butte County is located in Northern California and encompasses approximately 1,677 square miles, of which 1,636 square miles are land and 41 square miles are water.

According to the 2013 Census, California's population is 38,204,597, and Butte County is ranked the 27th largest county with a population of 222,090 (see *Figure Profile-1*).

Population

Population estimates for California have increased every year since 2010. Butte County estimates have also increased every year since 2010 except for 2011. California had an average estimated increase in population of 0.9% each year while Butte County's population estimates only increased by an average of 0.3% each year (see *Table Profile-1*).

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

Population by Year	Butte County	Trend	California	Trend
2010	219,914	-	37,333,601	-
2011	219,913	-0.0%	37,668,681	+0.9%
2012	221,016	+0.5%	37,999,878	+0.9%
2013	222,090	+0.5%	38,332,521	+0.9%

Data Source: (United States Census Bureau, 2014)

Gender and Age

The distribution of males to females in Butte County in 2010-2012 was similar to that of California (see *Table Profile-2*).

Table Profile-2: Gender distribution in Butte County, 2010- 2012

Gender	Butte County	Percent	California	Percent
Male	108,931	49.5%	18,561,020	49.7%
Female	111,140	50.5%	18,764,048	50.3%

Data Source: (United States Census Bureau, n.d.)

Total population increase has been steady in Butte County with an increase between 2010 and 2012 of 1571 people. As expected in a growing population, many age groups had increasing numbers. Exceptions included school-age children between the ages of 5 and 9 which remained unchanged in population, and decreases in the number of young teens between the ages 10 and 14 and adults between the ages 25 and 64 (see *Table Profile-3*).

Table Profile-3: Age distribution in Butte County, 2010- 2012

Age group	Butte County 2010		Butte County 2012		Trend 2010-2012
	Number	Percent	Number	Percent	
Total population	219,968		221,539		↑
Under 5 years	12368	5.6%	12170	5.6%	↔
5 to 9 years	12394	5.6%	12489	5.6%	↔
10 to 14 years	12879	5.9%	12479	5.6%	↓
15 to 24	40694	18.5%	42812	19.3%	↑
25 to 64	107709	49.0%	105728	47.7%	↓
65 to 84	28214	12.8%	30018	13.5%	↑
85 and over	5710	2.6%	5843	2.6%	↔

Data Source: U.S. Census Bureau: 2010 and 2012

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. The definitions of race and ethnicity are as follows:

Race refers to groups of people who have differences and similarities in biological traits deemed by society to be socially significant, meaning that people treat other people differently because of them. For instance, while eye color is not socially significant, differences and similarities in skin color are.

Ethnicity refers to shared cultural practices, perspectives, and distinctions that set apart one group of people from another. That is, ethnicity is a shared cultural heritage. The most common characteristics distinguishing various ethnic groups are ancestry, a sense of history, language, religion, and forms of dress. Ethnic differences are learned, not inherited.

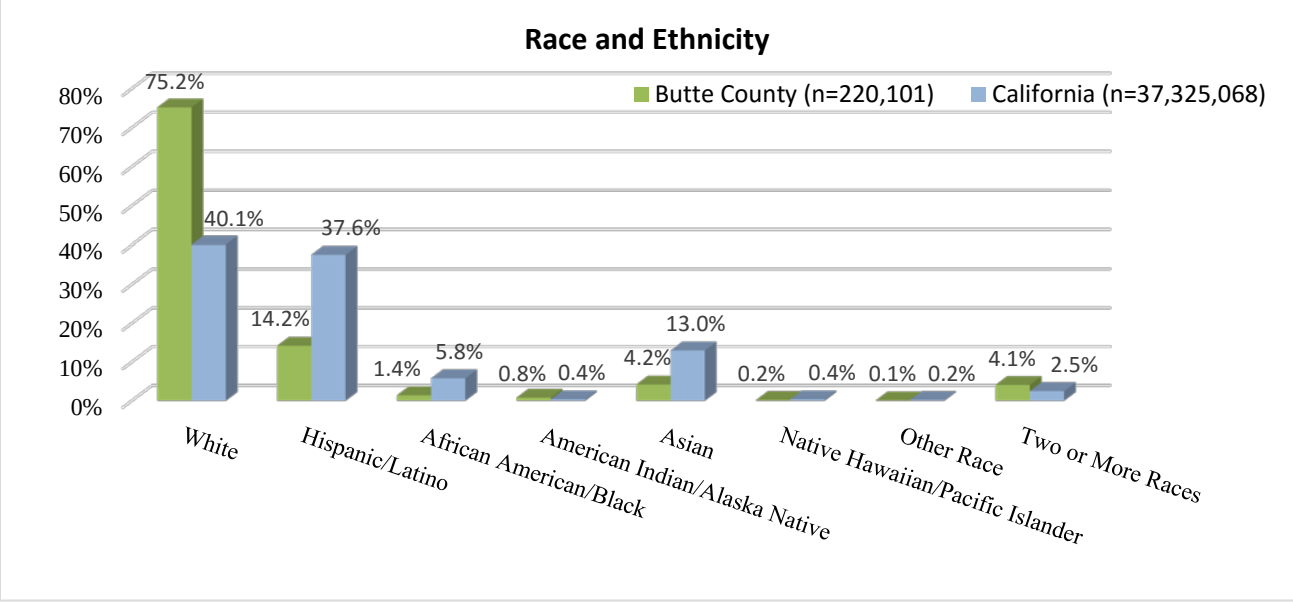


Figure Profile-2: Percentage of the population by Race and Ethnicity, Butte County and California, 2012
Derived from Source: (United States Census Bureau, n.d.)

Butte County has a much larger White population than California overall, but a much smaller Hispanic/Latino population than the state. There is also a slightly higher percentage of

American Indian/Alaskan Natives, but lower African American/Black and Asian populations than California overall (see *Figure Profile-2*).

Racial and ethnic diversity has been increasing recently in Butte County. Between 2010 and 2013, there was a large increase in the Native Hawaiian/Pacific Islander population, a moderate increase in the American Indian/Alaska Native population and the African American/Black population, and a small increase in the Asian population. During the same time period, there was a small decrease in the White population, as well as the population identifying as two or more races (see *Table Profile-4*).

Table Profile-4: Changes in population by Race and Ethnicity in Butte County, 2010 and 2013

Butte County Overview	2010 Census		2013 Census		2010-2013 Change	
	Counts	Percentages	Counts	Percentages	Change	Percentage Change
African American/Black	3,415	1.6%	3,998	1.8%	583	17.1%
American Indian/Alaska Native	4,395	2.0%	5,330	2.4%	935	21.3%
Asian	9,057	4.1%	9,680	4.4%	623	6.9%
Native Hawaiian/Pacific Islander	452	0.2%	660	0.3%	208	46.2%
Two or More Races	10,444	4.6%	9,106	4.1%	-1,338	-12.8%
White	180,096	81.9%	164,569	74.1%	-15,527	-8.6%

Data Source: (United States Census Bureau, n.d.)

Population with Limited English Proficiency

According to the U.S. Department of Health and Human Services, individuals with Limited English Proficiency face unique challenges in achieving a state of good health. These individuals may need a trained interpreter to facilitate interactions with health services personnel. They may also require documents to be translated in order to fully understand important issues related to their health or health services. In Butte County, 5.9% of community members over the age of 5 have Limited English Proficiency, compared to 19.6% for California.

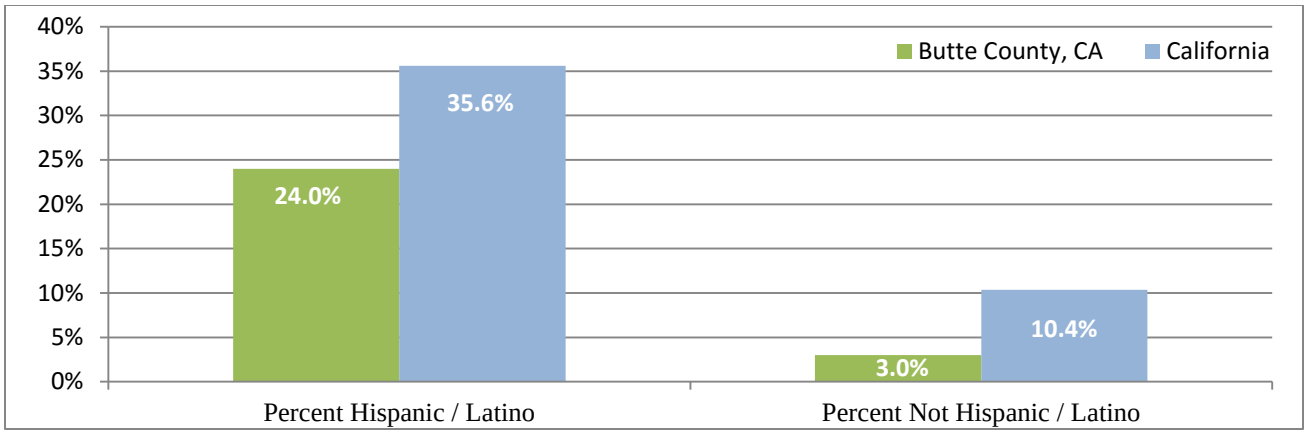


Figure Profile-3: Percentage of Population with Limited English Proficiency by Ethnicity in Butte County

Source: US Census Bureau, American Community Survey: 2008-12

In Butte County, 24% of the Hispanic/Latino (any race) population have Limited English Proficiency compared to 35.6% for California overall (see *Figure Profile-3*).

According to the 2012 American Community Survey, a greater percentage of Butte County residents over the age of 5 spoke only English at home compared to residents of California overall. In addition, a lower percentage of Butte County residents spoke Spanish at home than residents of California (see *Table Profile-5*).

Table Profile-5: Language other than English spoken at home

Language at home, Aged 5-17 years				
Language	Butte County		California	
English only	82.3%	27,217	55.4%	3,696,661
Spanish	12.3%	4,059	35.0%	2,336,226
Other	5.5%	1786	9.7%	640,732
Language at home, Aged 18 years and over				
English only	87.5%	154,746	56.4%	16,434,338
Spanish	7.5%	13,186	27.4%	7,986,228
Other	5.1%	9004	16.3%	4,737,771

Data Source: American Community Survey 2012

According to the 2010 Census, most people over the age of 5 in Butte County spoke only English at home. Of these English speakers, 15.3% were between the ages of 5 and 17, 67.1% were between the ages of 18 and 64, and 17.6% were age 65 or older. Fourteen percent of Butte County residents over the age of 5 primarily spoke a language other than English at home. Of these residents, 22% were between the ages of 5 and 17, 69% were between the ages of 18 and 64, and 9% were age 65 or older (see *Table Profile-6*).

Table Profile-6: Characteristics of people by language spoken at home in Butte County, 2008-2012

Butte County, California			
Subject Age Group	**Total**	**People who speak only English at home**	**Percent distribution of people who speak a language other than English at home**
Total population 5 years and over	207,761	178,715, (86.1%)	29,046, (13.9%)
5 to 17 years	16.2%	15.3%	22.0%
18 to 64 years	67.4%	67.1%	69.0%
65 years and over	16.4%	17.6%	9.0%

Data Source: US Census Bureau, American Community Survey: 2008-12. Source Geography: Tract.

It is important to consider that children and the elderly tend to use more health services than the general population. While the percentage of people in Butte County who primarily speak a language other than English at home may seem small in comparison to the percentage that speak only English, a higher proportion of those that speak a language other than English are children than for those that speak only English. The opposite is true for the elderly; however, this age group uses a higher level of health care services in terms of both volume and intensity of care than any other age group. The need for trained interpreters to facilitate interactions with health services personnel in the care of both children and the elderly may be considerable in Butte County.

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. CDC estimates the total number of Americans living with at least one disability is about 50 million, or one in five people. 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 provides a broad measure of the need for personal assistance services, similar to having difficulty in one or more instrumental activities of daily living (IADL). It is based on the 2008-2012 American Community Survey questionnaire 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 17(a-c) of the 2008-2012 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."

Table Profile-7: Disability prevalence in Butte County California, and California, 2008-2010

Location	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	4.6%	2.5%	138,547	15.3%	8.2%	32,613
California	2.9%	1.5%	23,054,795	18.6%	10.5%	4,069,068

Data Source: American Community Survey 2008-2010.

In Butte County, a higher percentage of adults between the ages of 18 and 64 have disabilities than for California overall. This is especially concerning when considered in light of the previously mentioned barriers to good health experienced by people with disabilities. That is, in Butte County, more health resources may be needed for individuals with disabilities than are available at the current time (see *Table Profile-7*).

A lower percentage of adults age 65 and over in Butte County have disabilities than for California overall. This should be interpreted with caution, as it is possible that disabled persons

in this age group relocate to other geographic regions where more services may be available for the disabled.

Household Characteristics

The majority of households in both Butte County and the state are family households. Married-couple families make up slightly less than half of the households in Butte County, which is also true for California households overall. The percentage of single-parent families in Butte County is lower than that for California. Slightly more Butte County residents live alone than California residents overall. Nearly 12% of Butte County households include adults age 65 and over, which is higher than for the state (see *Table Profile-8*).

Table Profile-8: Household characteristics 2012

Characteristics	Butte County	California
HOUSEHOLDS BY TYPE		
Total households	84,421	12,474,950
Family households (families)	60.6%	68.5%
Married-couple family	43.3%	48.8%
Male householder, no wife present, family	5.8%	6.0%
Female householder, no husband present, family	11.6%	13.7%
Householder living alone	29.1%	24.3%
Aged 65 years and over	11.7%	8.5%
Number of grandparents responsible for own grandchildren under 18 years	2,047	305,358
Who are female	67.4%	61.5%
Who are married	68.4%	73.1%

Data Source: American Community Survey 3-Year Estimates; 2010-2012

A large proportion of grandparents living in Butte County are responsible for their grandchildren. Forty-four percent are living with grandchildren under the age of 18. This is a considerably higher percentage than for the state. Of grandparents in Butte County, 17% have been responsible for their grandchildren for five or more years, compared with 10.5% of grandparents for California overall. In Butte County, it is essential that programs and services intended for children under the age of 18 are reaching out to grandparents responsible for the wellbeing of their grandchildren in addition to targeting traditional guardians (see *Table Profile-9*).

Table Profile-9: Characteristics of households with grandparents 2012

Characteristics	Butte County	California
GRANDPARENTS		
Number of grandparents living with own grandchildren under 18 years	4,629	1,119,000
*Responsible for grandchildren	44.2%	27.3%
AGES OF GRANDCHILDREN THAT ARE THE RESPONSIBILITY OF GRANDPARENTS		
Less than 1 year	6.0%	5.6%
1 or 2 years	11.7%	6.8%
3 or 4 years	9.5%	4.4%
5 or more years	17.0%	10.5%

Data Source: American Community Survey 3-Year Estimates; 2010-2012

*Grandparents who provide most of the basic care to their grandchildren on a temporary or permanent basis

For a list of works cited throughout the document, see *Appendix-Works Cited.*

CHAPTER 2: BUTTE COUNTY THEMES & STRENGTHS FOR A HEALTHY COMMUNITY

COMMUNITY ENGAGEMENT

The Themes & Strengths Assessment is a qualitative process that engages the community to identify strengths, resources, issues and concerns regarding the community's health and wellbeing.

Data was collected at community events using "comment walls" (see *Figure Themes-1*). Event goers were asked if they thought they lived in a healthy community (yes or no) and why they felt that way.

Comment walls were hosted by the American Association of University Women, Butte County Library, Butte Schools Self-Funded Programs, Community Action Agency of Butte County, Enloe Medical Center, Far Northern Regional Center, Northern Valley Indian Health Children's Center, City of Oroville and Youth for Change Center for Homeless Youth.

Figure Themes-1: Community members providing input at a "comment wall" location.

Of the 631 respondents, 58% (368) did not feel that they lived in a healthy community mostly because of environmental concerns, substance abuse and homelessness issues. Participants also identified some positive contributors to our community's health such as outdoor and

recreational opportunities, access to healthy and nutritious food, and a sense of community. *Table Themes-1* provides a summary of responses for the 15 comment wall events.

Table Themes-1: Summary Table for Community Events

Combined Results for (15) Community Events			
Would you say that you live in a healthy community?		No: 368 (58%) Yes: 263 (42%)	
What are some things that make it healthy?	Count	**What are some things that keep it from being healthy?**	Count
Outdoor activities, parks & recreation	107	Environmental issues	84
Access to healthy and nutritious food	77	Drug and alcohol related issues	82
Sense of community	57	Homelessness and related issues	51
Physical environment	21	Violent crime, vandalism, and / or theft	48
Public infrastructure and services	20	Nutrition & healthy lifestyle	35
Medical facilities and services	10	Public safety related issues	28
Religious or spiritual services	6	Public infrastructure and services	22
Education K-12	5	Poor social behaviors	21
Higher education	5	Access to healthcare	19
Shopping, dining, and entertainment	3	Economic issues	15
Arts and culture	1	Mental health related issues	14
Cost of living	1	Domestic abuse	6
		Political climate	5

Figure Themes-2: Community members participating in a Focused Conversation session.

Data was also collected through focused conversations of pre-selected populations and other groups who wanted to participate (see *Figure Themes-2*). All focused conversation groups were asked the same questions as the "comment wall" event goers; however, focused conservation participants were also asked to elaborate on what was needed to make their community healthier. The pre-selected populations included African Americans, Head Start parents, senior citizens, Alternative Custody participants, migrant workers, Hmong, recipients of mental health services, and the homeless. Other participants included the Tobacco Prevention Coalition and members of the Working Group. This approach ensured we heard from hard to reach populations whose needs and concerns might be unique.

Focused conversations were facilitated by Working Group members who had received facilitation training to ensure consistency of results. The agendas and materials were universal for all groups. There were 113 community members who participated, with an average group size of 12.

Across all focused conversations, a majority of participants highlighted the following as the top reasons that make Butte County "a ***healthy*** place to live":

Outdoor Activities, Parks & Recreation

Participants specifically mentioned the county's many parks and walking trails, playground areas, bike/cycling paths, water landmarks, Frisbee parks, and indoor exercise facilities.

"I like having Bidwell Park in my backyard, it's beautiful and I can go exercise for free" – recipient of mental health services.

Butte County's Medical Services and Facilities

Participants noted their general satsifaction with the Butte County healthcare system. The county's mental health and substance abuse services were also identified as positive resources.

"We have a lot of local resources to get medical care. I don't have to leave Oroville to get the help I need" – Hmong participant.

Sense of Community

A common theme among the focused conversations was the strong "sense of community" many particpants felt not only in Butte County, but in their individual communites as well. Assets such as our area's youth, religious and spriritual services, the "college presence" in Chico, community volunteers, neighborhood involvement and availability of community programs enable us to achieve the "relaxed feel" that our communities offer.

"We have a strong sense of community in my neighborhood. A lot of people are involved and help each other. It's a good place to raise kids" –Head Start parent participant.

Access to Healthy and Nutritious Food

Butte County's geography, resources and local agricultural options greatly enhance the healthy food choices available to community members. Access to fresh produce at local farmers markets and stores was mentioned by many participants who also appreciated the nutritional information materials and education provided by local agencies.

"There are some good places to buy food that I can afford, I don't just have to shop at the 99 cent stores" – senior citizen participant.

Across all focused conversations, a majority of participants highlighted the following as the top reasons they think Butte County is "***unhealthy***" and what we need to do about it:

Drug and Alcohol Related Issues

> ***"It's not like when we were kids, now teenagers can get this stuff whenever they want. And it's cheap too." – Alternative Custody participant.***

Drug and alcohol related issues were seen as a major factor in what "prevents" Butte County from being healthy. The prevalence of marijuana growers and retailers troubled many groups, specifically the increased crime that can result from their presence. The number of liquor stores in the county was a concern, especially considering the wide-scale promotion and availability of these products (especially for young people). Methamphetamine abuse was also a concern because some felt that "drug houses" were everywhere and "drugs are easy to get if you have the money".

Recommendations:

- *Increase alcohol, tobacco, and other drug-related prevention and education (including school-based services).*
- *Develop and implement stricter marijuana laws, especially related to cultivation practices.*
- *Address the alcohol retailer density in our county and increase compliance with related laws.*
- *Increase the cost of retail licenses (and taxes) to pay for more enforcement.*

Mental Health Issues

Many groups expressed concern regarding mental health issues in the county. It was recognized that mental health problems and drug/alcohol abuse often co-exist in many members of our community, and that there are not enough treatment slots available for the numbers of people who need them. This also makes the community less safe.

Recommendations:

- *More facilities and services, with better oversight of the intervention and treatment programs, are needed in the community.*
- *More education and a more robust effort to inform the public of available mental health resources are needed, especially as it pertains to services for youth.*

Public Infrastructure and Environment

While the county's public infrastructure drew praise, health issues and concerns were also identified. Several groups expressed anxieties about the lack of sidewalks and street lights. Others expressed a desire for more public flower beds and community gardens. The need to increase the number of parks and other recreational options that are both "senior-friendly" and safe for children was discussed. Too much trash in neighborhoods that could "pose risks" (e.g. used syringes/needles) to children, along with the large number of "blighted" properties and the many health hazards associated with them, were also of concern. The bad air quality during harvest season was mentioned.

"My son rides his bike to and from school. It's going to start getting dark earlier, and I'm worried that drivers won't be able to see him at night"– Head Start program participant.

Recommendations:

- *Re-direct existing funding for park safety, better lighting, sidewalks*
- *Increase the number of walkable and bike-able streets*
- *Increase the number of public flower beds and community gardens*
- *Increase the number of accessible and safe parks*
- *Focus on removing dangerous debris from public parks and sidewalks*
- *Develop and implement a "blight abatement" program*

Public Safety / Violent Crime

Crime and safety were on the agenda for several of the groups. There were those who felt that not only was more law enforcement needed, but community members needed to understand what law enforcement resources were available to them. Some expressed concerns about public safety especially in rural areas of the county. The potential crimes associated with public loitering and the safety of Chico's downtown plaza was discussed as well as the concern that there weren't enough police officers in the county. For many parents, speeding in residential neighborhoods and the number of shootings caused alarm.

"I don't live in the city. I'm worried if something bad happens it will take a long time for the police to get to my house"– migrant education participant.

Recommendations:

- *Increase the number of police and firefighters*
- *Increase community involvement: neighborhood watches that are persistent*
- *Increase use of Megan's Law: better tracking and accountibility of offenders' movements*
- *Speed up the court system*
- *Increase presence of volunteers/people at parks to improve safety/cleanliness*

Nutrition and Healthy Lifestyles

Obesity, poor nutrition, lack of physical activity and related conditions such as diabetes and hypertension were highlighted by many groups. Too many "food deserts" and a lack of transportation to obtain healthy food were identified as potential contributing factors. Some young people viewed unhealthy food choices as a "cultural challenge" that needs to be addressed. For example, unhealthy food preparation methods and ingredient choices are common cultural staples and passed down generationally. The need for more nutrition education and an increased focus on prevention was identified. Others expressed concern about diabetes and hypertension.

"My grandmother and mother have always cooked with lard, and we always ate flour tortillas. This is how I was taught"– migrant education participant.

Recommendations:

- *Improve accessibility to affordable, healthy foods*
- *Model healthy choices: eating, work potlucks*
- *Implement a sugary drink tax*
- *Incentivize and encourage healthy retailers*
- *More farmers markets in more locations*
- *Attract businesses that provide healthy foods*
- *Better access to quality foods in remote areas*
- *Better community planning to allow for walkable and bikeable communities*
- *Connect local food to local retailers*
- *Farm bill: revamp subsidies; consider fruits and vegetables "important" crops*
- *More physical activity and health education (cooking) in schools*

Homelessness and Poverty Related Issues

Many groups talked about homelessness and their appreciation of the existing homeless services in the county, but felt more resources (including prevention and enforcement) were needed. Alcohol abuse and its effect on public safety involving the homeless population in Chico, especially in the downtown area, was discussed. Many felt that the county's lack of affordable housing options was a major contributing factor. Preventative efforts such as life-skills classes, especially related to budget management, and other training opportunities may help the homeless population to "stand on their own two feet". Homeless participants stated that more employment opportunitites could be generated if the area did not rely on student seasonal work, and that homeless work programs and "tent cities" should be explored. Others mentioned a need for more food banks.

"Let's get practical about homeless issues: giving the homeless canned food is nice but how do they cook it"? – recipient of mental health services.

Recommendations:

- *Make more affordable housing options available*
- *Make the application process for affordable housing easier*
- *Increase resources available to the homeless such as counseling, education and housing*
- *Make and implement more effective homeless policies and enforce them*

Community Health Survey

A Community Health Survey *(*see *Appendix Themes-1)* was developed to gain insight into issues that affect the health of those living and working in Butte County. The survey consisted of 36 questions. Participation in the survey was voluntary, and care was taken to ensure that respondents' answers were confidential in accordance with laws pertaining to privacy of personal and protected health information. The survey was made available in English, Spanish, and Hmong; and in both paper and electronic formats for each language.

A link to the electronic survey was emailed to the Policy Council, Working Group, and other community partners who were encouraged to forward the link to their contacts. Links to the survey were also posted on the *TOGETHER WE CAN! Healthy Living in Butte County* website and promoted through social media, including Facebook and Twitter.

The paper survey was distributed at key locations in the community including libraries, churches, post offices and community events.

There were 2,471 surveys completed between September 23 and October 17, 2014. Of these, 30.0% were completed in the paper version, and 70.0% were completed electronically. The majority of the surveys returned were in English (97.5 %), with 1.4% in Spanish and 1.1% in Hmong.

Forty percent of respondents received the survey by email. Eleven percent obtained the survey at a community meeting or event, two percent at church, and less than 0.5% at post offices or stores. Over 46.0% came across the survey by other means, including 5.0% through social media and 8.0% in the workplace.

In order to capture a broad range of responses, good faith efforts were made to reach a diverse sample of people living and working in Butte County, albeit not a representative sample of the population. The response rate to the survey did provide a large enough sample size to stratify responses across key demographic groups where appropriate.

SURVEY RESULTS

Demographics of Respondents

Place of Residence

Table Themes-2: Survey Respondents Place of Residence

Where do you live?			
Chico	51.6%	Concow	0.2%
Oroville	18.4%	Forbestown	0.2%
Paradise	10.8%	Cohasset	0.1%
Gridley	3.6%	Berry Creek	0.1%
Thermalito	3.2%	Cherokee	0.1%
Magalia	3.2%	Honcut	0.1%
Durham	1.9%	Clipper Mills	0.0%
Palermo	1.0%	Nord	0.0%
Biggs	0.8%	Richvale	0.0%
Forest Ranch	0.6%	Butte Meadows	0.0%
South Oroville	0.5%	Stirling City	0.0%
Yankee Hill	0.3%	Other	2.9%
Bangor	0.2%		(n=2412)

- Slightly more than half of respondents lived in Chico, followed by Oroville (18.4%) and Paradise (10.8%).
- The most recent US Census estimates indicate that 39.7% of people living in Butte County live in Chico, 24.0% live in Oroville, and 11.8% live in Paradise.

Place of Work

Table Themes-3: Survey Respondents Place of Work

Where do you work? (n=2402)	
Chico	36.4%
Oroville	30.7%
Do not work	16.1%
Paradise	5.5%
Gridley	2.0%
Work outside Butte County	1.4%
Durham	0.7%
Biggs	0.4%
Magalia	0.4%
Thermalito	0.3%
Palermo	0.3%
Richvale	0.1%
Other	5.6%

- Most survey respondents (72.6%) reported working in Chico, Oroville, and Paradise.
- Sixteen percent of respondents reported they were currently not working.
- Only 1.4% reported working outside of Butte County.

Table Themes-4: Survey Respondents Place of Residence by Work Location

Place of Residence by Work Location. Percent of Total Respondents in Local of Residence Indicated.									
	Locale of Work	**Chico**	**Durham**	**Magalia**	**Oroville**	**Paradise**	**Therm-alito**	**Work outside Butte County**	**Do not work**
Locale of Residence									
Chico, (n=1250)		57.0%	0.3%	0.1%	15.5%	2.2%	0.0%	1.9%	17.2%
Durham, (n=45)		32.6%	20.9%	0.0%	20.9%	9.3%	0.0%	0.0%	7.0%
Gridley, (n=93)		5.6%	2.2%	0.0%	34.8%	1.1%	0.0%	4.5%	14.6%
Magalia, (n=77)		16.9%	1.3%	9.1%	28.6%	22.1%	0.0%	1.3%	13.0%
Oroville, (n=458)		8.6%	0.0%	0.0%	71.4%	0.9%	0.0%	0.2%	13.6%
Paradise, (n=260)		21.7%	0.4%	0.8%	24.4%	28.7%	0.4%	1.2%	17.4%
Therma-lito, (n=85)		6.0%	0.0%	0.0%	51.2%	0.0%	8.3%	0.0%	22.6%

- About sixty percent of Chico residents worked in Chico, while nearly sixteen percent worked in Oroville.
- About seventy percent of Oroville residents worked in Oroville, while almost nine percent worked in Chico.
- Almost thirty percent of Paradise residents worked in Paradise, while nearly twenty-five percent worked in Oroville and about twenty-two percent worked in Chico.

Gender Identity and Sexual Orientation of Respondents

- Roughly 75% of respondents identified as female, and 25% identified as male.
- In comparison, the 2012 census estimates for Butte County were much more balanced, with 50.5% identifying as female and 49.5% identifying as male, suggesting that our survey over sampled female respondents.
- Ninety-two percent of respondents identified as heterosexual, while 6.2% identified as LGBT+ (Lesbian, Gay, Bisexual, Queer, Questioning, Pansexual, Asexual, or 2-Spirit).
- In comparison, in a 2012 Gallup Poll 4.0% of respondents in the state of California overall and 3.4% in the nation identified as LGBT+. In the 2012 California Health Interview Survey, 3.6% of respondents overall and 2.0% from Butte County identified as LGBT+, suggesting that our survey may have over sampled the LGBT+ community.

Age of Respondents

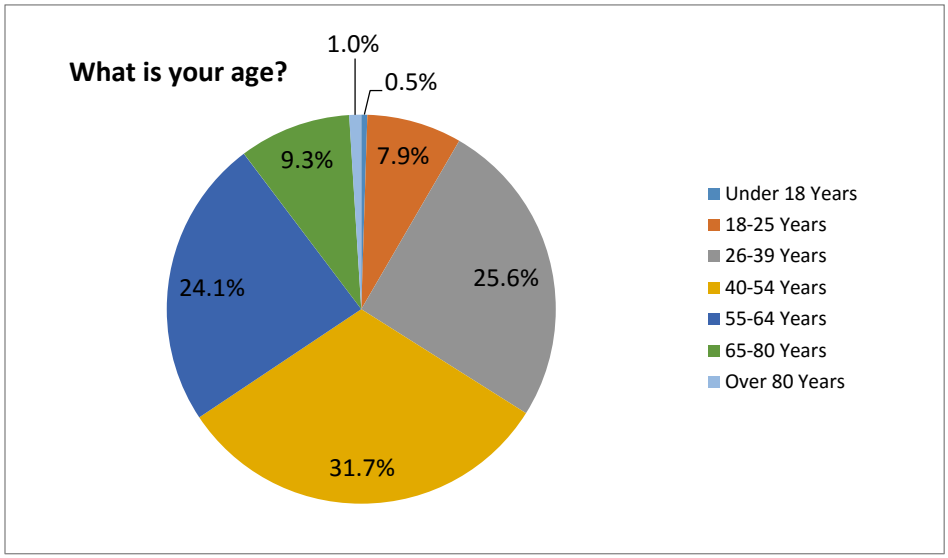


Figure Themes-3: Age of Healthy Living in Butte County Survey Respondents

- About 81% of the survey respondents were between 26 and 64 years of age. Nearly 9% were age 25 or younger, and about 10% percent were age 65 or older *(see Figure Themes-3)*.

Race/Ethnicity of Respondents

- Ten percent of survey respondents identified their ethnicity as Hispanic/Latino.
- Eighty-five percent of respondents identified their race as White, followed by Hispanic/Latino (10.0%), American Indian/Alaska Native (6.2%), Asian (7.2%), African American/Black (2.4%) and Hmong (1.9%).
- The percentage of Hispanic/Latino (any race) respondents was lower than the 2012 Hispanic/Latino population estimates for Butte County (24.1%).
- The percentage of American Indian/Alaska Native survey respondents was 3.4 times higher than the 2012 Census population percentage estimates for the County.

Highest Educational Level Achieved

- Twenty percent of respondents reported having attained up to a high school diploma or General Equivalency Degree (GED). Eighteen percent had attained an associate or technical degree, 27.7% reported they had a four-year college degree, and 25.1% had a graduate or professional degree.

Household Members

- Seventy-nine percent of respondents reported they had no children age five or younger living with them. Of respondents who did have children age five or younger in their household, 18.6% reported having one to two children in their household, and 2.2%

reported having three to four children. Less than 1.0% of respondents had 5 or more children age five or younger living with them.

Household Income of Respondents

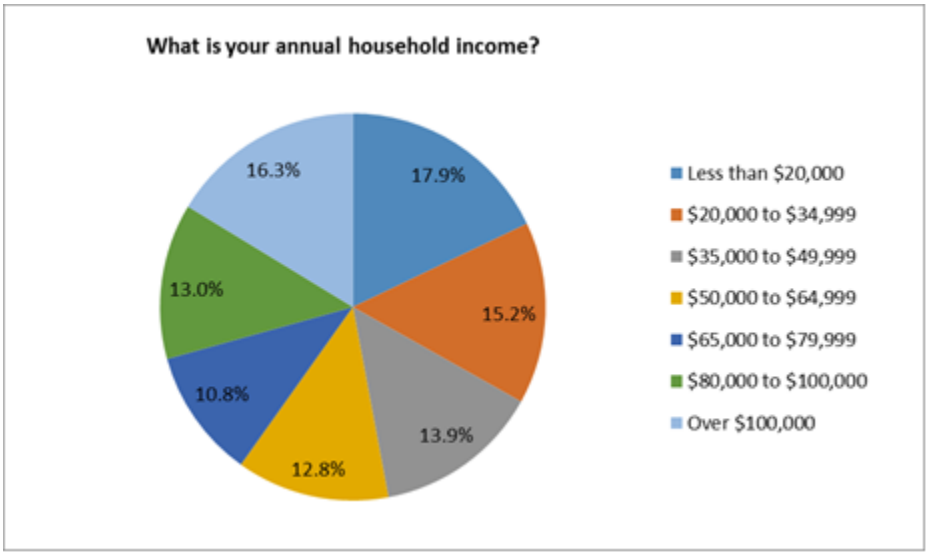


Figure Themes-4: Household Income of Respondents

- Roughly 33% of survey respondents reported an annual household income of under $34,999. About 38% reported an income between $35,000 and $79,999, and about 29% reported an income of over $80,000 (see *Figure Themes-4*).

Table Themes-5: Survey Respondents Place of Residence by Income

Location by Income. Percent of Total Respondents in Location Indicated.							
Local of Residence	**$20,000 to $34,999**	**$35,000 to $49,999**	**$50,000 to $64,999**	**$65,000 to $79,999**	**$80,000 to $100,000**	**Less than $20,000**	**Over $100,000**
Chico, (n=1250)	10.7%	10.3%	11.2%	8.4%	11.8%	17.0%	17.0%
Durham, (n=45)	6.7%	11.1%	6.7%	11.1%	24.4%	0.0%	26.7%
Gridley, (n=93)	21.5%	12.9%	12.9%	8.6%	16.1%	9.7%	4.3%
Magalia, (n=77)	14.3%	16.9%	13.0%	9.1%	10.4%	14.3%	13.0%
Oroville, (n=458)	17.7%	13.3%	10.5%	10.9%	8.1%	17.0%	9.6%
Paradise, (n=260)	14.6%	16.2%	10.8%	11.5%	11.9%	12.3%	9.6%
Thermalito, (n=85)	15.3%	9.4%	11.8%	10.6%	9.4%	22.4%	4.7%

- Respondents living in Chico most frequently earned either less than $20,000 or over $100,000, while those living in Oroville most frequently earned either $20,000 to $35,000 or less than $20,000. Respondents living in Paradise most frequently earned $35,000 to $49,999 (see *Table Themes-5*).

Table Themes-6: Race/Ethnicity of Respondents by Income.

Race/Ethnicity by Income. Percent of Total Respondents Self-Identifying as Race/Ethnicity Indicated.							
Race/ Ethnicity	**$20,000 to $34,999**	**$35,000 to $49,999**	**$50,000 to $64,999**	**$65,000 to $79,999**	**$80,000 to $100,000**	**Less than $20,000**	**Over $100,000**
White, (n=1830)	14.0%	12.4%	12.6%	10.8%	13.7%	15.4%	17.4%
Hispanic/Latino, (n=228)	22.4%	24.0%	7.9%	8.8%	8.8%	26.8%	6.1%
African American/Black, (n=51)	29.4%	21.6%	7.8%	5.9%	3.9%	29.4%	0.0%
American Indian/Alaskan Native, (n=132)	30.3%	11.4%	7.6%	14.4%	4.5%	22.7%	4.5%
Asian, (n=62)	22.6%	19.4%	9.7%	8.1%	8.1%	21.0%	4.8%
Asian Indian, (n=25)	4.0%	0.0%	16.0%	16.0%	12.0%	0.0%	4.0%
Native Hawaiian, (n=8)	12.5%	12.5%	12.5%	0.0%	37.5%	12.5%	12.5%
Pacific Islander, (n=9)	0.0%	0.0%	33.3%	11.1%	22.2%	33.3%	0.0%
Chinese, (n=9)	0.0%	33.3%	0.0%	0.0%	33.3%	33.3%	0.0%
Filipino, (n=16)	18.8%	6.3%	6.3%	0.0%	18.8%	37.5%	12.5%
Hmong, (n=61)	18.0%	14.8%	6.6%	4.9%	8.2%	39.3%	1.6%
Laotian, (n=7)	0.0%	28.6%	0.0%	14.3%	28.6%	14.3%	14.3%

- Respondents identifying as White most frequently reported an income of over $100,000; while respondents identifying as Hispanic/Latino, Filipino, and Hmong most frequently reported earning less than $20,000 (see *Table Themes-6*).
- American Indian/Alaskan Native respondents most frequently reported earning $20,000 to $34,999; while Native Hawaiians most frequently earned $80,000 to $100,000.

Perspectives on Health in Butte County

Factors Making Butte County a Good Place to Live

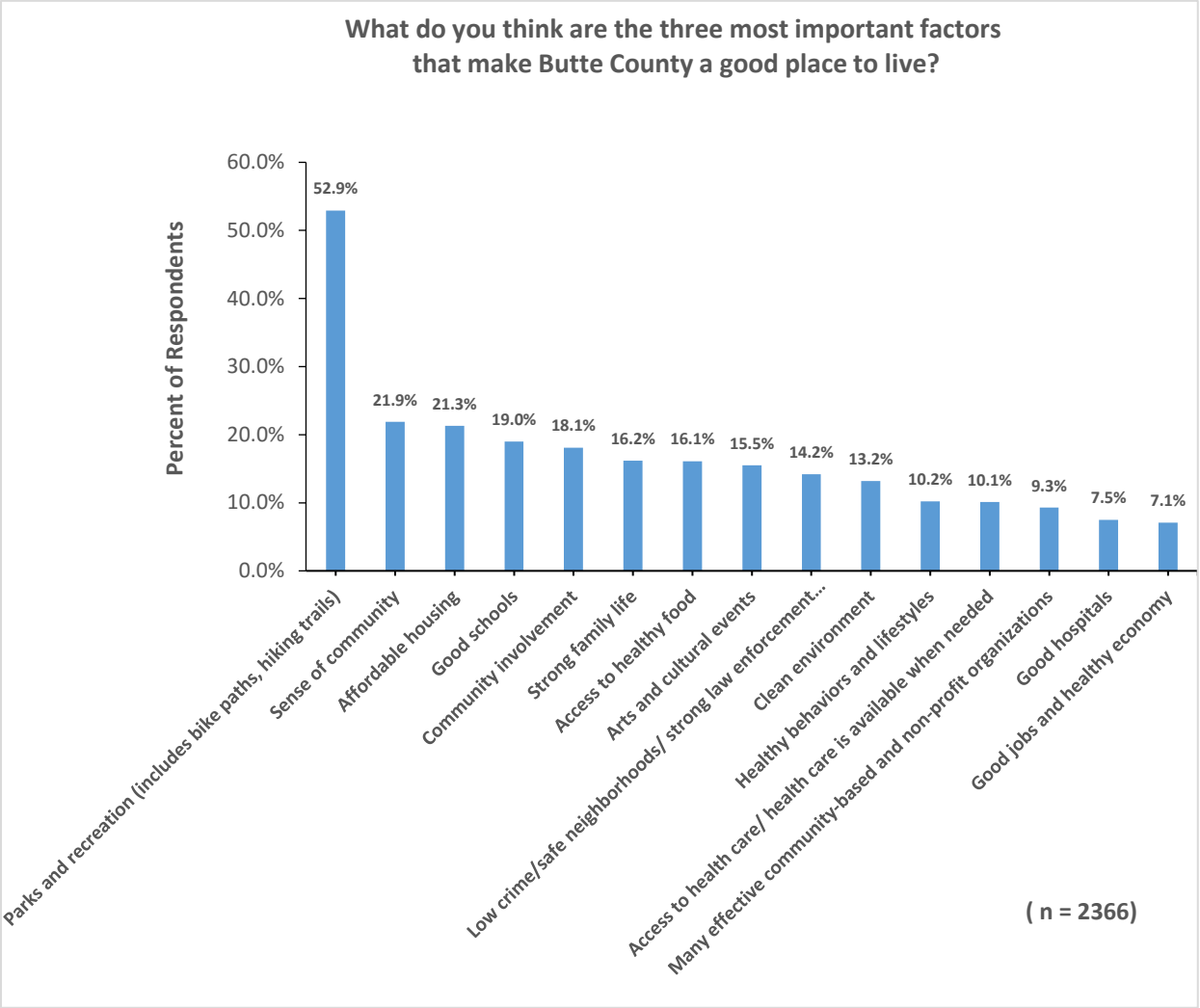


Figure Themes-5: Top Factors Making Butte County a Good Place to Live.

- Slightly more than half of survey respondents identified parks and recreation as one of the top three factors that make Butte County a good place to live.
- Other highly ranked responses included: a sense of community, affordable housing, good schools, and community involvement (see *Figure Themes-5*).

Table Themes-7: Factors Making Butte County a Good Place to Live by Age

Key Livability Factors in Butte County by Age Group, Percent of Total Respondents in Age Group Indicated.						
Age	**Parks and Recreation**	**Sense of Community**	**Affordable Housing**	**Good Schools**	**Community Involvement**	**Strong Family Life**
18-25 Years, (n=182)	47.3%	20.3%	22.5%	18.7%	17.0%	8.8%
26-39 Years, (n=587)	50.8%	18.9%	22.1%	22.7%	18.2%	20.1%
40-54 Years, (n=703)	55.3%	23.8%	21.6%	19.5%	18.2%	16.4%
55-64 Years, (n=537)	52.5%	21.4%	20.5%	15.8%	16.0%	16.2%
65-80 Years, (n=206)	38.8%	22.8%	15.0%	15.0%	21.4%	6.3%
Over 80 Years, (n=22)	45.5%	13.6%	9.1%	18.2%	13.6%	18.2%
Under 18 Years, (n=10)	40.0%	20.0%	10.0%	30.0%	10.0%	0.0%

Table Themes-8: Factors Making Butte County a Good Place to Live by Gender

Key Livability Factors in Butte County by Gender, Percent of Total Respondents in Gender Group Indicated.						
Gender	**Parks and Recreation**	**Sense of Community**	**Affordable Housing**	**Good Schools**	**Community Involvement**	**Strong Family Life**
Female, (n=1675)	51.8%	21.7%	21.1%	18.1%	17.3%	15.2%
Identity is not listed, please self-identify, (n=11)	54.5%	0.0%	18.2%	9.1%	9.1%	18.2%
Male, (n=557)	49.6%	20.3%	19.7%	21.7%	19.6%	17.2%
Transgender female (n=3)	66.7%	0.0%	33.3%	0.0%	0.0%	0.0%
Transgender male (n=7)	14.3%	42.9%	28.6%	14.3%	28.6%	0.0%

- Parks and recreation was the top choice among all age groups, for both men and women, and for most races/ethnicities (see *Tables Themes-7, 8, and 10*).

Table Themes-9: Factors Making Butte County a Good Place to Live by Location

Key Livability Factors in Butte County by Geographic Location, Percent of Total Respondents in Location Indicated.						
Local of Residence	**Parks and Recreation**	**Sense of Community**	**Affordable Housing**	**Good Schools**	**Community Involvement**	**Strong Family Life**
Chico, (n=1250)	57.5%	26.3%	15.4%	19.7%	19.1%	13.6%
Durham, (n=45)	46.7%	40.0%	6.7%	24.4%	28.9%	24.4%
Gridley, (n=93)	14.0%	19.4%	30.1%	21.5%	20.4%	21.5%
Magalia, (n=77)	45.5%	14.3%	32.5%	18.2%	15.6%	10.4%
Oroville, (n=458)	47.2%	14.0%	30.1%	16.6%	14.8%	21.0%
Paradise, (n=260)	49.6%	16.5%	24.2%	15.0%	19.6%	17.7%
Thermalito, (n=85)	42.4%	8.2%	28.2%	18.8%	20.0%	20.0%

- Parks and recreation was the most frequently selected factor in all cities in Butte County, except for Gridley, where the top choice was affordable housing.
- In Durham and Chico, the second most frequently selected factor was a sense of community (see *Table Themes-9*).

Table Themes-10: Factors Making Butte County a Good Place to Live by Race/Ethnicity

Key Livability Factors in Butte County by Race/Ethnicity, Percent of Total Respondents in Racial/Ethnic Group Indicated.						
Race / Ethnicity	**Parks and Recreation**	**Sense of Community**	**Affordable Housing**	**Good Schools**	**Community Involvement**	**Strong Family Life**
White, (n=1830)	55.4%	23.0%	20.3%	18.9%	17.7%	15.3%
Hispanic/Latino, (n=228)	38.6%	16.7%	19.3%	21.5%	18.9%	11.4%
African American/Black, (n=51)	45.1%	13.7%	29.4%	27.5%	19.6%	13.7%
Am Indian/Alaskan Native, (n=132)	47.7%	15.2%	20.5%	18.9%	13.6%	12.1%
Asian, (n=62)	50.0%	11.3%	25.8%	22.6%	19.4%	30.6%
Asian Indian, (n=25)	16.0%	24.0%	4.0%	28.0%	8.0%	60.0%
Native Hawaiian, (n=8)	75.0%	12.5%	12.5%	12.5%	37.5%	50.0%
Pacific Islander, (n=9)	55.6%	22.2%	22.2%	11.1%	33.3%	22.2%
Chinese, (n=9)	33.3%	0.0%	22.2%	11.1%	11.1%	33.3%
Filipino, (n=16)	56.3%	0.0%	18.8%	6.3%	12.5%	12.5%
Hmong, (n=61)	21.3%	16.4%	24.6%	21.3%	31.1%	29.5%
Laotian, (n=7)	42.9%	14.3%	0.0%	28.6%	57.1%	85.7%

- Community involvement was the factor selected most frequently by Hmong and Laotian respondents and the second most frequent choice for Native Hawaiians/Pacific Islanders (see *Table Themes-10*).

Table Themes-11: Factors Making Butte County a Good Place to Live by Income

Key Livability Factors in Butte County by Income, Percent of Total Respondents in Income Bracket Indicated.						
Household Income	**Parks and Recreation**	**Sense of Community**	**Affordable Housing**	**Good Schools**	**Community Involvement**	**Strong Family Life**
$20,000 to $34,999 (n=329)	45.3%	15.2%	20.1%	22.2%	15.8%	14.0%
$35,000 to $49,999 (n=294)	53.4%	20.1%	23.8%	19.4%	18.0%	15.0%
$50,000 to $64,999 (n=269)	59.1%	26.0%	19.7%	15.6%	21.6%	15.6%
$65,000 to $79,999 (n=229)	56.8%	24.0%	22.7%	20.5%	19.2%	13.1%
$80,000 to $100,000 (n=273)	61.9%	27.8%	22.7%	19.8%	12.8%	21.2%
Less than $20,000 (n=391)	37.9%	14.3%	21.2%	18.9%	22.8%	8.2%
Over $100,000 (n=342)	57.6%	29.5%	18.4%	18.7%	17.0%	23.1%

- Parks and recreation was the most frequently selected factor across all income levels (see *Table Themes-11*).

Key Health Issues Facing Butte County

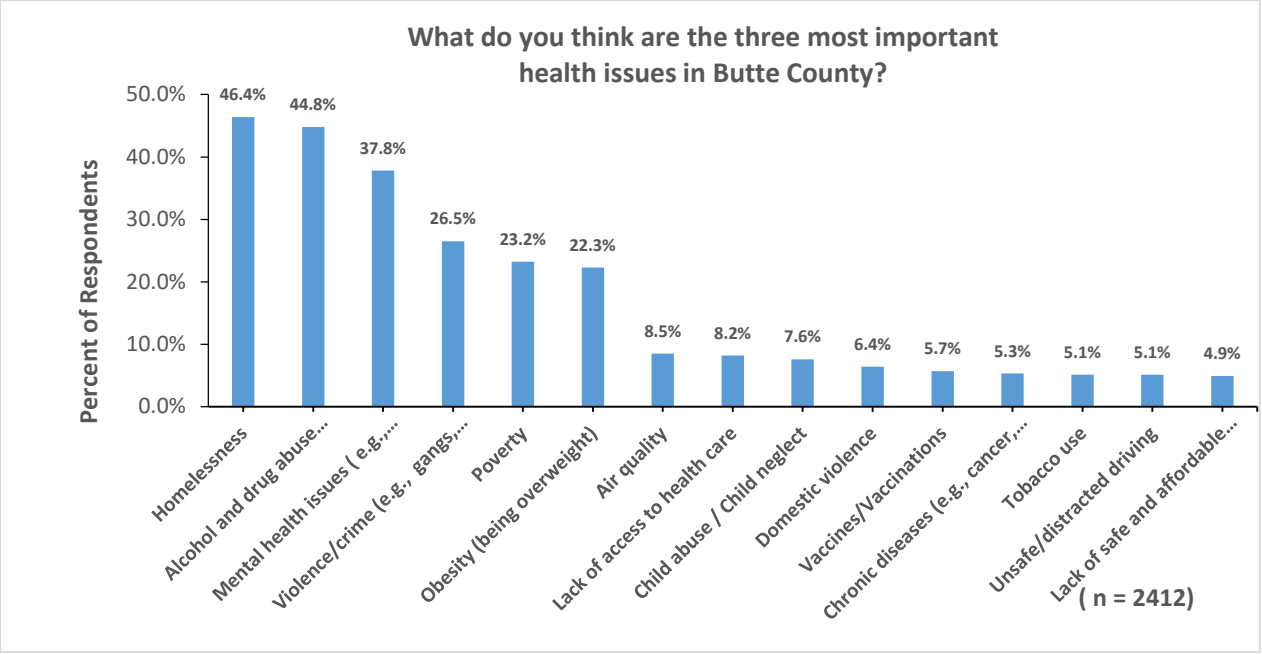


Figure Themes- 6: Top Health Issues Facing Butte County.

- Overall, 46.4% of respondents chose homelessness as the top health issue facing Butte County, while 44.8% chose alcohol and drug abuse.

- Other top health concerns included mental health issues, violence/crime, poverty, and obesity *(see Figure Themes- 6).*

Table Themes-12: Key Health Issues by Age Group

Key Health Issues Facing Butte County by Age Group, Percent of Total Respondents in Age Group Indicated.						
Age	**Homelessness**	**Alcohol and Drug Abuse**	**Mental Health**	**Violence and Crime**	**Obesity**	**Poverty**
18-25 Years, (n=182)	51.6%	43.4%	26.9%	30.2%	14.3%	21.4%
26-39 Years, (n=587)	45.0%	44.1%	34.6%	27.8%	21.6%	25.0%
40-54 Years, (n=703)	44.8%	47.1%	42.5%	26.3%	22.0%	22.8%
55-64 Years, (n=537)	45.8%	45.1%	37.4%	23.3%	24.6%	22.9%
65-80 Years, (n=206)	42.7%	34.0%	35.0%	22.8%	22.3%	21.4%
Over 80 Years, (n=22)	45.5%	40.9%	36.4%	4.5%	27.3%	9.1%
Under 18 Years, (n=10)	60.0%	30.0%	20.0%	80.0%	20.0%	30.0%

- Homelessness was the top choice across all age groups, except those between the ages of 40 and 54, who indicated alcohol and drug abuse as the top health issue (*see Table Themes-12*).

Table Themes-13: Key Health Issues by Sexual Orientation

Key Health Issues Facing Butte County by Sexual Orientation, Percent of Total Respondents in Sexual Orientation Group Indicated.						
Sexual Orientation	**Homelessness**	**Alcohol and Drug Abuse**	**Mental Health**	**Violence and Crime**	**Obesity**	**Poverty**
Heterosexual, (n=1974)	45.8%	44.9%	37.3%	26.2%	22.9%	23.3%
LGBT+, (n=132)	43.9%	45.5%	46.2%	24.2%	16.7%	25.8%
Self-Identify, (n=36)	40.5%	40.5%	29.7%	37.8%	8.1%	18.9%

- Respondents identifying as heterosexual chose homelessness as the top health issue.
- Respondents identifying as LGBT+ chose mental health as the top health issue.
- Respondents identifying as other chose alcohol and drug abuse as the top health issue.
- Mental health and obesity were the only health issues in which there were considerable differences between heterosexual and LGBT+ respondent's choices, with the difference in the proportion of respondents choosing mental health being statistically significant.

Table Themes-14: Key Health Issues by Location

Key Health Issues Facing Butte County by Geographic Location, Percent of Total Respondents in Location Indicated.						
Local of Residence	**Homelessness**	**Alcohol and Drug Abuse**	**Mental Health**	**Violence and Crime**	**Obesity**	**Poverty**
Chico, (n=1250)	55.3%	41.6%	38.2%	29.5%	17.6%	19.1%
Durham, (n=45)	53.3%	44.4%	28.9%	28.9%	20.0%	11.1%
Gridley, (n=93)	18.3%	39.8%	31.2%	23.7%	36.6%	14.0%
Magalia, (n=77)	41.6%	45.5%	41.6%	20.8%	15.6%	26.0%
Oroville, (n=458)	38.4%	48.5%	34.9%	25.5%	28.2%	28.8%
Paradise, (n=260)	36.9%	48.8%	42.7%	17.3%	26.5%	27.7%
Thermalito, (n=85)	20.0%	45.9%	31.8%	27.1%	23.5%	31.8%

- For respondents in Chico and Durham, the top issue was homelessness. Alcohol and drug abuse was the top choice for Gridley, Oroville, Paradise, and Thermalito (see *Table Themes-14*).

Table Themes-15: Key Health Issues by Race/Ethnicity

Key Health Issues Facing Butte County by Race/Ethnicity, Percent of Total Respondents in Racial/Ethnic Group Indicated.						
Race/Ethnicity	**Homelessness**	**Alcohol and Drug Abuse**	**Mental Health**	**Violence and Crime**	**Obesity**	**Poverty**
White, (n=1830)	46.9%	45.8%	39.2%	25.7%	22.8%	22.1%
Hispanic/Latino, (n=228)	40.8%	36.0%	31.1%	30.3%	24.1%	18.9%
African American/Black, (n=51)	39.2%	49.0%	43.1%	19.6%	13.7%	27.5%
Am Indian/Alaskan Nat, (n=132)	42.4%	40.2%	28.0%	34.1%	20.5%	20.5%
Asian, (n=62)	45.2%	30.6%	27.4%	22.6%	22.6%	30.6%
Asian Indian, (n=25)	60.0%	52.0%	8.0%	16.0%	12.0%	52.0%
Native Hawaiian, (n=8)	37.5%	50.0%	25.0%	12.5%	25.0%	25.0%
Pacific Islander, (n=9)	55.6%	33.3%	22.2%	22.2%	33.3%	0.0%
Chinese, (n=9)	44.4%	11.1%	11.1%	44.4%	11.1%	11.1%
Filipino, (n=16)	56.3%	37.5%	12.5%	25.0%	18.8%	25.0%
Hmong, (n=61)	26.2%	31.1%	13.1%	39.3%	18.0%	36.1%
Laotian, (n=7)	28.6%	14.3%	28.6%	42.9%	28.6%	42.9%

- Homelessness was the top choice for most ethnic groups, with a few exceptions. Among Chinese respondents, homelessness and violence/crime tied for the most frequently selected health issue. Alcohol and drug abuse was the top choice for African American/Black and Native Hawaiian respondents (see *Table Themes-15*).
- For Hmong respondents, violence/crime was the top choice. For Laotian respondents, the top choice was a tie between poverty and violence/crime (see *Table Themes-15*).

Table Themes-16: Key Health Issues by Income

Key Health Issues Facing Butte County by Income, Percent of Total Respondents in Income Bracket Indicated.						
Household Income	**Homelessness**	**Alcohol and Drug Abuse**	**Mental Health**	**Violence and Crime**	**Obesity**	**Poverty**
Less than $20,000, (n=391)	41.9%	34.8%	29.2%	25.6%	12.0%	25.1%
$20,000 to $34,999, (n=329)	44.7%	38.6%	34.3%	23.4%	23.1%	25.2%
$35,000 to $49,999, (n=294)	44.6%	47.3%	38.4%	27.2%	20.7%	23.1%
$50,000 to $64,999, (n=269)	47.6%	48.3%	40.5%	26.4%	21.9%	25.3%
$65,000 to $79,999, (n=229)	48.5%	52.0%	38.9%	25.3%	24.0%	24.5%
$80,000 to $100,000, (n=273)	47.6%	51.6%	38.8%	24.5%	27.5%	20.5%
Over $100,000, (n=342)	45.9%	45.6%	44.2%	25.7%	28.7%	17.3%

- Homelessness was the top choice for respondents earning up to $34,999, and those earning over $100,000. Alcohol and drug abuse was the top choice for respondents earning between $35,000 and $100,000 (see *Table Themes-16*).

Perception of Health in Butte County[1]

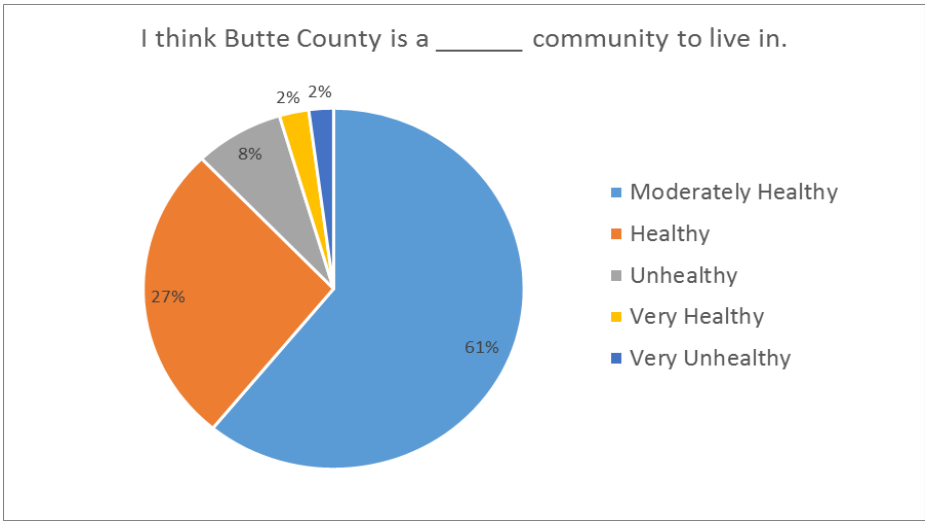


Figure Themes-7: Perception of Health in Butte County

- Eighty-eight percent of survey respondents rated Butte County as either a healthy or moderately healthy place to live (see *Figure Themes-7*).

[1]By contrast, only 42% of the community event and focused conversation group respondents reported they felt they lived in a healthy community.

Table Themes-17: Perception of Health by Age

I Think Butte County is a _____ Place to Live (Healthy), by Age. Percent of Total Respondents in Racial/Ethnic Group Indicated.					
Age	**Very Healthy**	**Healthy**	**Moderately Healthy**	**Unhealthy**	**Very Unhealthy**
18-25 Years, (n=182)	1.6%	21.4%	67.0%	6.0%	1.6%
26-39 Years, (n=587)	2.2%	25.0%	57.6%	10.4%	3.4%
40-54 Years, (n=703)	1.7%	23.5%	61.7%	9.2%	1.8%
55-64 Years, (n=537)	2.8%	30.9%	56.8%	6.1%	1.9%
65-80 Years, (n=206)	4.9%	35.4%	53.4%	1.9%	1.5%
Over 80 Years, (n=22)	0.0%	40.9%	54.5%	0.0%	0.0%
Under 18 Years, (n=10)	10.0%	20.0%	50.0%	10.0%	10.0%

- Most age groups rated Butte County as moderately healthy (see *Table Themes-17*).

Table Themes-18: Perception of Health by Gender

I Think Butte County is a _____ Place to Live (Healthy), by Gender. Percent of Total Respondents in Gender Group Indicated.					
Gender	**Very Healthy**	**Healthy**	**Moderately Healthy**	**Unhealthy**	**Very Unhealthy**
Female, (n=1675)	2.3%	25.6%	60.4%	7.8%	1.9%
Identity is not listed, please self-identify, (n=11)	0.0%	9.1%	72.7%	18.2%	0.0%
Male, (n=557)	2.7%	30.7%	55.1%	7.2%	3.1%
Transgender female, (n=3)	0.0%	33.3%	66.7%	0.0%	0.0%

- The majority of men, women, and transgender females rated Butte County as moderately healthy (see *Tables Themes-18*).

Table Themes-19: Perception of Health by Location

I Think Butte County is a _____ Place to Live (Healthy), by Location. Percent of Total Respondents in Location Indicated.					
Local of Residence	**Very Healthy**	**Healthy**	**Moderately Healthy**	**Unhealthy**	**Very Unhealthy**
Chico, (n=1250)	2.9%	31.8%	57.3%	4.6%	1.3%
Durham, (n=45)	2.2%	26.7%	62.2%	2.2%	2.2%
Gridley, (n=93)	3.2%	28.0%	55.9%	8.6%	0.0%
Magalia, (n=77)	1.3%	24.7%	63.6%	7.8%	1.3%
Oroville, (n=458)	2.0%	14.4%	64.0%	14.8%	4.4%
Paradise, (n=260)	1.9%	28.1%	60.4%	7.3%	1.2%
Thermalito, (n=85)	2.4%	16.5%	58.8%	11.8%	10.6%

- Respondents from most communities within Butte County rated it as moderately healthy (see *Table Themes-19*).

Perception of Safety in Butte County

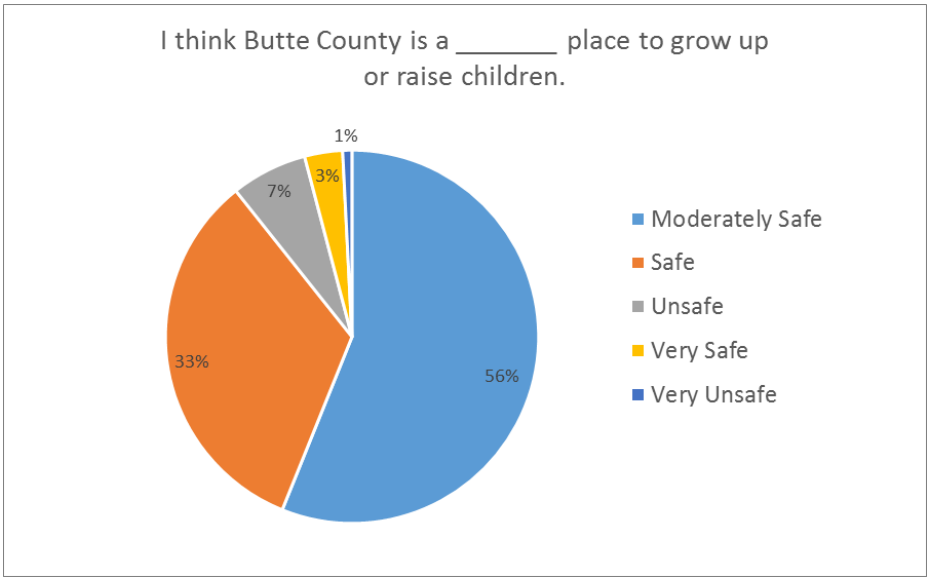


Figure Themes-8: Perception of Safety in Butte County

Table Themes-20: Perception of Safety by Age

I Think Butte County is a _____ Place to Grow Up and Raise Children (Safety), by Age. Percent of Total Respondents in Age Group Indicated.					
Age	**Very Safe**	**Safe**	**Moderately Safe**	**Unsafe**	**Very Unsafe**
Under 18 Years	2.2%	26.9%	57.1%	12.1%	0.0%
18-25 Years	3.7%	30.0%	54.7%	9.2%	1.5%
26-39 Years	3.0%	31.0%	57.2%	6.8%	0.7%
40-54 Years	3.5%	36.5%	54.0%	3.4%	0.9%
55-64 Years	3.9%	40.8%	49.0%	3.4%	0.5%
65-80 Years	4.5%	40.9%	50.0%	0.0%	0.0%
Over 80 Years	0.0%	20.0%	70.0%	10.0%	0.0%

- Eighty-nine percent of survey respondents rated Butte County as either a safe or moderately safe place to grow up or raise children (see *Figure Themes-8*). This trend held true across all age groups (see *Table Themes-20*).

Table Themes-21: Perception of Safety by Income

I Think Butte County is a _____ Place to Grow Up and Raise Children (Safety), by Income. Percent of Total Respondents in Income Group Indicated.					
Household Income	**Very Safe**	**Safe**	**Moderately Safe**	**Unsafe**	**Very Unsafe**
Less than $20,000	4.3%	26.1%	57.0%	10.2%	1.8%
$20,000 to $34,999	2.1%	26.4%	60.8%	9.4%	1.2%
$35,000 to $49,999	2.7%	34.0%	59.5%	2.7%	0.7%
$50,000 to $64,999	3.0%	38.3%	52.4%	5.2%	0.7%
$65,000 to $79,999	3.5%	34.1%	56.8%	5.2%	0.4%
$80,000 to $100,000	3.7%	38.8%	50.2%	5.5%	1.1%
Over $100,000	4.4%	36.8%	52.0%	6.1%	0.0%

Table Themes-22: Perception of Safety by Location

I Think Butte County is a _____ Place to Grow Up and Raise Children (Safety), by Location. Percent of Total Respondents in Location Indicated.					
Local of Residence	**Very Safe**	**Safe**	**Moderately Safe**	**Unsafe**	**Very Unsafe**
Chico, (n=1250)	4.2%	35.7%	51.7%	6.1%	0.4%
Durham, (n=45)	2.2%	46.7%	44.4%	2.2%	0.0%
Gridley, (n=93)	3.2%	45.2%	48.4%	2.2%	0.0%
Magalia, (n=77)	1.3%	26.0%	64.9%	6.5%	0.0%
Oroville, (n=458)	1.5%	20.7%	65.9%	10.0%	1.5%
Paradise, (n=260)	4.2%	39.2%	50.4%	5.0%	0.4%
Thermalito, (n=85)	0.0%	23.5%	57.6%	12.9%	4.7%

- Over half of respondents in each income bracket also rated Butte County as a safe or moderately safe place to grow up or raise children, as well as the majority of respondents from each community within Butte County (see *Tables Themes-21, 22*).

Desired Improvements in Physical Environment

- Survey respondents rated park safety as the highest ranking improvement they'd like to see in the physical environment of Butte County. The second highest ranking was park amenities (including toddler playground areas), and the third was bikeways (including bike lanes). Transportation and sidewalks were also noted as key areas to be improved.

Table Themes-23: Desired Improvements in Park Safety by Income

Desired Improvements to Physical Environment (Park Safety), by Income. Percent of Total Respondents in Income Bracket Indicated.					
Household Income	**Very Important**	**Important**	**Moderately Important**	**Unimportant**	**Very Unimportant**
Less than $20,000	37.3%	29.7%	15.6%	1.3%	6.9%
$20,000 to $34,999	46.5%	28.0%	11.9%	0.6%	7.3%
$35,000 to $49,999	48.3%	31.6%	8.8%	1.0%	5.4%
$50,000 to $64,999	43.1%	35.3%	13.0%	0.7%	4.1%
$65,000 to $79,999	38.4%	40.2%	9.2%	0.9%	5.2%
$80,000 to $100,000	49.8%	29.7%	10.6%	1.8%	4.8%
Over $100,000	45.3%	34.2%	14.6%	0.0%	3.5%

Table Themes-24: Desired Improvements in Park Safety by Location

Desired Improvements to Physical Environment (Park Safety), by Location. Percent of Total Respondents in Location Indicated.					
Local of Residence	**Very Important**	**Important**	**Moderately Important**	**Unimportant**	**Very Unimportant**
Chico, (n=1250)	47.0%	29.5%	12.2%	1.0%	4.6%
Durham, (n=45)	46.7%	28.9%	13.3%	0.0%	0.0%
Gridley, (n=93)	39.8%	30.1%	12.9%	3.2%	3.2%
Magalia, (n=77)	40.3%	31.2%	13.0%	3.9%	5.2%
Oroville, (n=458)	38.6%	35.6%	10.3%	1.5%	9.6%
Paradise, (n=260)	36.9%	35.0%	15.8%	0.8%	4.2%
Thermalito, (n=85)	38.8%	31.8%	15.3%	2.4%	4.7%

- Park Safety was the highest ranking desired improvement across all income brackets as well as the majority of respondents from each community within Butte County (see *Table Themes-23, 24*).

Satisfaction with Housing Situation

- Over 80.0% of respondents reported they felt satisfied with their housing situation.

Table Themes-25: Satisfaction with Housing by Location

Satisfied with Housing by Location. Percent of Total Respondents in Location Indicated.		
Location	**Yes**	**No**
Chico, (n=1250)	78.6%	19.4%
Durham, (n=45)	88.9%	6.7%
Gridley, (n=93)	81.7%	17.2%
Magalia, (n=77)	76.6%	23.4%
Oroville, (n=458)	78.2%	21.4%
Paradise, (n=260)	80.0%	19.2%
Thermalito, (n=85)	71.8%	27.1%

Table Themes-26: Satisfaction with Housing by Income

Satisfied with Housing by Income. Percent of Total Respondents in Income Bracket Indicated.		
Household Income	**Yes**	**No**
Less than $20,000	61.9%	36.3%
$20,000 to $34,999	72.0%	27.4%
$35,000 to $49,999	78.6%	20.7%
$50,000 to $64,999	80.7%	19.3%
$65,000 to $79,999	88.6%	10.9%
$80,000 to $100,000	88.3%	11.7%
Over $100,000	92.7%	6.7%

- The majority of respondents in all Butte County communities reported they felt satisfied with their housing situation (see *Table Themes-25*).
- Across all income levels, most respondents reported feeling satisfied with their housing situation (see *Table Themes-26*).

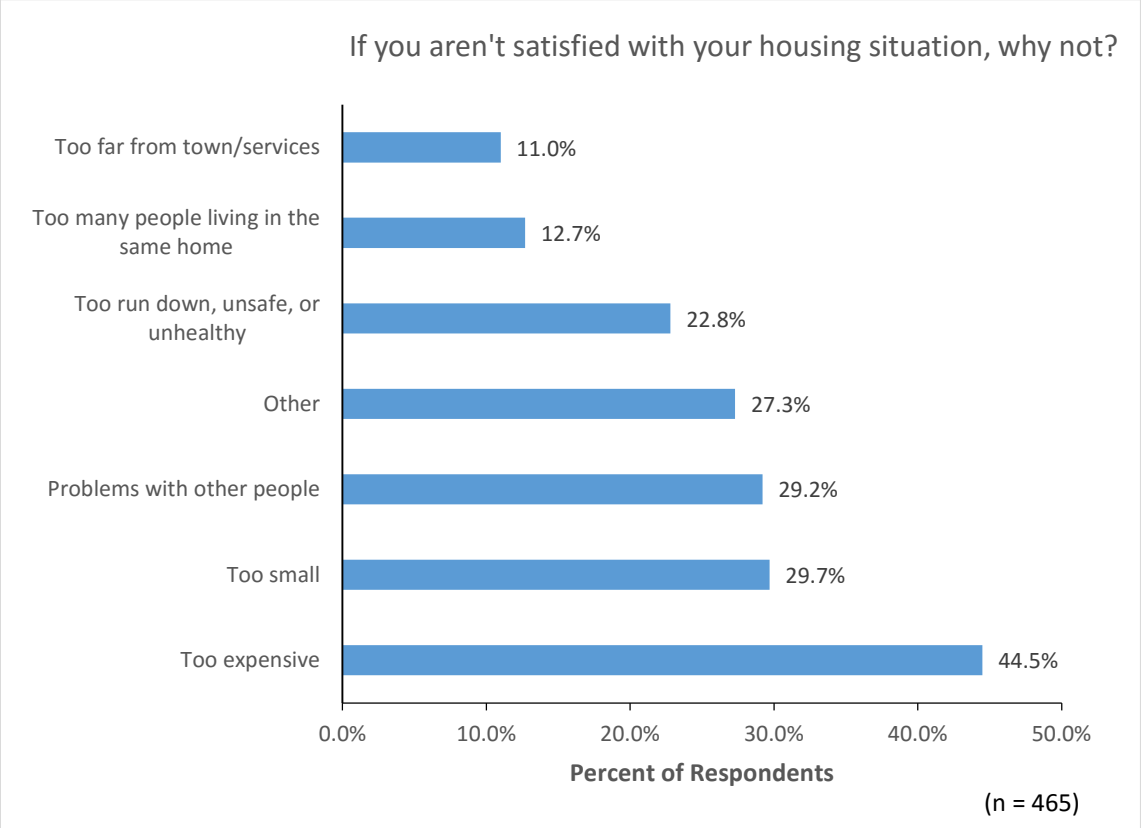


Figure Themes-9: Reasons for Dissatisfaction with Housing Situation

- Of those who did not feel satisfied, the primary reason was that housing was too expensive. Some respondents felt their homes were too small or reported having problems with other people such as neighbors. Other respondents reported their homes were too run down, unsafe, or unhealthy (see *Figure Themes-9*).

Access to Health Care Services

Location of Health Care Services in Butte County

Table Themes-27: Location of Healthcare Services

Where Do You Go Most Often to Access Healthcare Services for Yourself and Your Family?	
Private Doctor's Office	54.9%
Clinics/ health centers	26.6%
Butte County hospitals including emergency services	8.5%
Schools/university based health centers	3.2%
Veterans Affairs (VA)	0.8%
Mobile health vans	0.2%
Alcohol or drug dependency programs	0.2%
Other (please specify)	5.5%
	(n=2237)

- Slightly more than half of survey respondents reported they most often went to a private doctor's office for health care services. About a quarter went to clinics and health centers, and about a tenth went to the county's hospitals (See *Table Themes-27*).
- This trend generally held true across the various communities within Butte County.

Use of Services Outside Home City

- When respondents accessed health care outside of their home city, the most common reason reported was that their doctor of choice was in another city. This was the case for 32.2% of respondents. Twenty-eight percent reported that there were no providers for the services they needed in their home city, and 9.1% reported there were no doctors in their city who accepted Medi-Cal or Medicaid. Additionally, 8.2% reported their insurance only covered providers in another area.

Table Themes-28: Reason for Using Healthcare Elsewhere by Location

Reason for Using Healthcare Elsewhere by Location. Percent of Total Respondents in Location Indicated.					
Location	**Provider of choice in another city**	**Insurance only covers providers in other area**	**Local providers not accepting Medicare/Medi-Cal**	**No providers for services I need**	**Other**
Chico, (n=1250)	15.6%	5.0%	6.4%	17.5%	14.8%
Durham, (n=45)	22.2%	6.7%	4.4%	24.4%	8.9%
Gridley, (n=93)	25.8%	2.2%	6.5%	28.0%	9.7%
Magalia, (n=77)	27.3%	3.9%	9.1%	27.3%	14.3%
Oroville, (n=458)	27.7%	5.9%	6.8%	18.1%	15.1%
Paradise, (n=260)	27.7%	7.7%	4.2%	20.4%	15.0%
Thermalito, (n=85)	28.2%	4.7%	4.7%	16.5%	11.8%

- For respondents that lived in Chico, Durham, or Gridley, the most common reason for obtaining healthcare elsewhere was a lack of providers for services needed. For respondents in Oroville, Paradise, and Thermalito the most common reason was their provider of choice being in another city (see *Table Themes-28*).

Use of Mental Health Care Services

- Sixty-six percent of respondents did not use mental health services in the past year.
- Altogether: 28.3% sought counseling or therapy; 9.1% sought services for psychiatric medication management; 5.5% sought emergency mental health care; 4.0% were hospitalized; and 2.5% received residential treatment.
- Additionally, 3.1% of respondents indicated a need for services but did not use them.
- Sixty-three percent of survey respondents who indicated a need for mental health services reported being able to obtain them in Butte County; 29.0% were not able to get the services they needed in Butte County; and 17.0% were only able to get some of the services they needed.

Method of Payment for Health Care Services

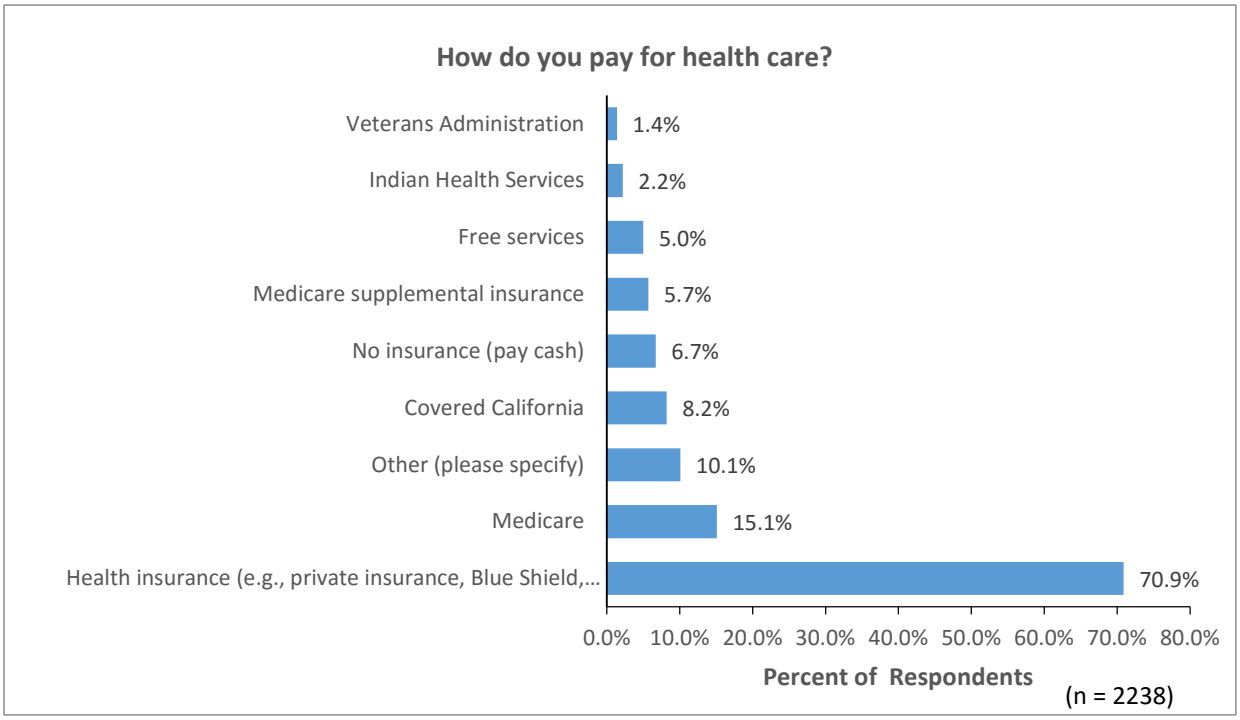


Figure Themes-10: Method of Payment for Health Care Services

- Most survey respondents reported paying for health care services through insurance. A considerable number paid by Medicare or Covered California, had no insurance and paid with cash, or used Medicare supplemental insurance (see *Figure Themes-10*).

Use of Social Service Benefits

- Overall, 56.7% of respondents reported they and their families received no social service benefits within the past year. Twenty-seven percent received Medi-Cal or Medicare benefits, 16.8% received Social Security benefits, and 14.5% received food stamps (SNAP/CalFresh).
- Of those receiving social service benefits, 91.7% were able to get them in Butte County.

Table Themes-29: Social Services Benefits Received by Location

Social Services Benefits Received by Location. Percent of Total Respondents in Location Indicated.											
Local of Residence	**Cal-Works**	**Medi-Cal/ Medicare**	**Respite Care**	**SSI and SSDI**	**Child Care**	**Child Welfare**	**Food Stamps**	**Housing Assistance**	**Legal Aid**	**Unemployment**	**VA benefits**
Chico, (n=1250)	3.1%	23.3%	1.0%	15.0%	2.1%	0.9%	13.4%	3.4%	1.0%	4.9%	1.8%
Durham, (n=45)	0.0%	11.1%	4.4%	8.9%	0.0%	0.0%	4.4%	0.0%	2.2%	2.2%	2.2%
Gridley, (n=93)	3.2%	26.9%	1.1%	7.5%	3.2%	1.1%	17.2%	1.1%	1.1%	2.2%	0.0%
Magalia, (n=77)	2.6%	27.3%	1.3%	26.0%	1.3%	2.6%	11.7%	2.6%	1.3%	6.5%	5.2%
Oroville, (n=458)	3.3%	29.5%	1.1%	13.3%	1.3%	2.6%	15.1%	3.3%	1.3%	5.9%	2.2%
Paradise, (n=260)	2.3%	19.6%	0.4%	14.6%	1.2%	0.8%	9.2%	1.9%	2.3%	4.6%	4.6%
Thermalito, (n=85)	2.4%	29.4%	1.2%	23.5%	2.4%	7.1%	21.2%	1.2%	0.0%	3.5%	2.4%

- For respondents in all Butte County communities, the most frequently used social service benefit was Medi-Cal or Medicare, followed by Social Security Income or Social Security Disability Income (SSI/SSDI) and Food Stamps, (see *Table Themes-29*).

Employment

Employment Status

- Fifty-nine percent of survey respondents reported they were working full-time; 22.4% were not currently employed; 12.8% were working part-time; and 6.3% were self-employed.

Table Themes-30: Employment Status by Location.

Employment Status by Location. Percent of Total Respondents in location Indicated.				
Local of Residence	**Employed full-time**	**Employed part-time**	**Not employed**	**Self-employed**
Chico, (n=1250)	50.7%	14.0%	21.4%	6.5%
Durham, (n=45)	62.2%	13.3%	6.7%	11.1%
Gridley, (n=93)	57.0%	10.8%	21.5%	2.2%
Magalia, (n=77)	58.4%	14.3%	15.6%	6.5%
Oroville, (n=458)	60.7%	9.6%	18.8%	4.4%
Paradise, (n=260)	52.7%	11.9%	23.5%	5.0%
Thermalito, (n=85)	52.9%	7.1%	32.9%	2.4%

- The majority of respondents in each community within Butte County were employed full time (see *Table Themes-30*).

Reasons for Not Working

- Of those who were not working: 39% were retired; 19.9% were medically ill or disabled; 12.8% could not find work; 10.0% were not working in order to take care of family; 9.8% were students; and 1.0% reported needing additional training.

Jobs for Youth and Adults in Butte County

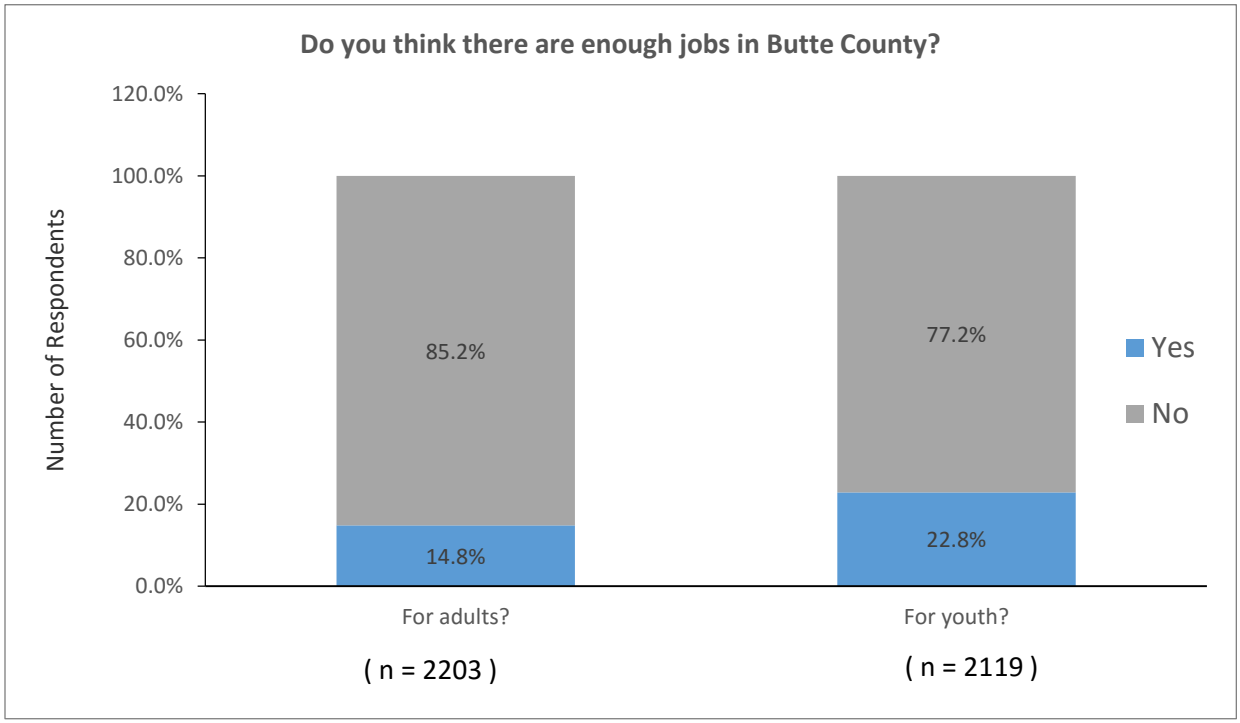


Figure Themes-11: Availability of Jobs in Butte County

- The majority of survey respondents indicated that there were not enough jobs for adults or for youth in Butte County (See *Figure -11*). This may stem from the economic impact that the recession beginning in 2007 has had on Butte County over the past several years.

Stress at Work

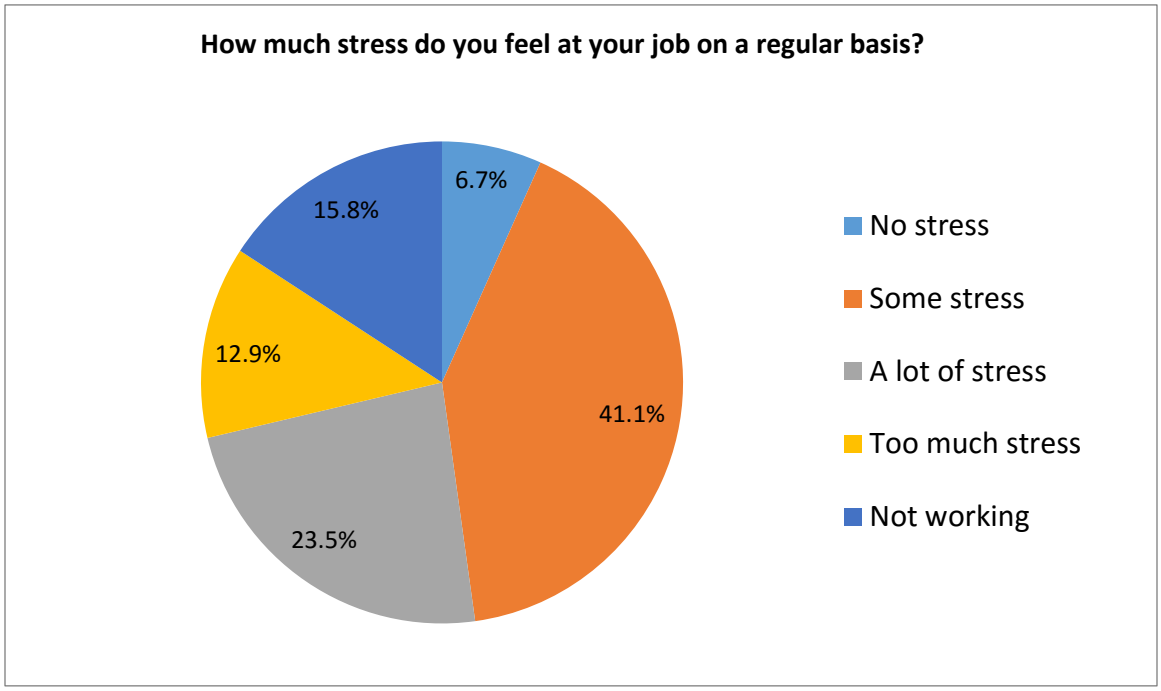


Figure Themes-12: Stress in the Workplace

- The majority of respondents reported experiencing some stress at work on a regular basis. A considerable number reported experiencing a lot of stress at work, while about half as many reported experiencing too much stress. A relatively low number of respondents reported feeling no stress at work (see *Figure Themes-12*).

Recreation

Favorite Places for Recreation in Butte County

- When asked to select the places they most often frequent for recreation, 77.2% of respondents chose Butte County's parks, rivers, lakes, beaches, and forests. In addition, 46% chose restaurants; 34.9% chose walking or biking through the neighborhood; 33.3% chose movie theatres; 19.9% chose church; 19.1% chose health or fitness clubs; and 15.9% chose libraries.

Table Themes-31: Favorite Places for Recreation by Location

In Butte County the Places I Go Most Often for Recreation, by Respondent's Residence Location.							
Recreation	**Chico,** (n=1250)	**Durham,** (n=45)	**Gridley,** (n=93)	**Magalia,** (n=77)	**Oroville,** (n=458)	**Paradise,** (n=260)	**Thermalito,** (n=85)
Parks Rivers Beach Woods	71.1%	66.7%	63.4%	68.8%	72.5%	70.8%	75.3%
Movie Theaters	27.4%	24.4%	36.6%	40.3%	37.6%	28.1%	36.5%
Live Theatre Perform-ances	15.1%	20.0%	4.3%	5.2%	8.7%	14.6%	3.5%
Social Clubs	6.7%	4.4%	4.3%	6.5%	3.5%	9.2%	8.2%
Sports Fields	10.6%	26.7%	17.2%	10.4%	13.8%	10.4%	14.1%
Swimming Pools	8.2%	2.2%	8.6%	7.8%	6.3%	8.8%	7.1%
Fitness /Health Clubs	23.1%	20.0%	11.8%	11.7%	9.4%	18.8%	8.2%
Casinos	3.7%	2.2%	5.4%	13.0%	15.9%	6.5%	23.5%
Restaurants	41.0%	55.6%	45.2%	55.8%	43.7%	37.7%	43.5%
Yoga Tai Chi Centers	4.0%	4.4%	3.2%	0.0%	2.8%	2.7%	1.2%
Church	15.9%	22.2%	23.7%	19.5%	22.5%	19.6%	27.1%
Senior Ctrs.	0.4%	2.2%	0.0%	1.3%	0.9%	1.2%	2.4%
Library	16.3%	15.6%	16.1%	22.1%	9.6%	16.2%	17.6%
Neighborhood (Walking/ Biking)	37.3%	26.7%	28.0%	22.1%	27.1%	33.8%	16.5%
Bars	9.7%	4.4%	5.4%	0.0%	4.8%	4.2%	1.2%

- The overwhelming majority of communities within Butte County also selected parks, rivers, lakes, beaches, and forests as the places they most often went for recreation (see *Table Themes-31*).

Volunteerism

- Overall, 38% of survey respondents reported spending 1 to 5 hours per month volunteering, 11.9% spent between 6 and 10 hours, and 14.1% spent over 10 hours.
- Thirty-six percent of respondents reported they do not participate in volunteer activities.
- Respondents reported a variety of volunteer activities that interested them, including and in order of decreasing magnitude: tutoring or teaching; mentoring youth; fundraising; collecting, preparing, or distributing food; and collecting, making, or distributing clothing or crafts.

Substance Use

Table Themes-32: Alcohol and Drug Use (Substance Use)

Do You Use the Following Substances?				
	Every Day	**Some Days**	**Not At All**	**Others in Household**
Alcohol	4.5%	51.7%	38.6%	5.2%
Cigarettes	8.6%	3.3%	83.0%	5.2%
Electronic Cigarettes	0.9%	3.5%	93.4%	2.2%
Chew, Snus or Snuff	0.8%	1.2%	95.0%	2.9%
Cigars and Cigarillos	0.9%	2.4%	95.3%	1.4%
Cocaine	0.4%	0.4%	98.7%	0.5%
Methamphetamine	0.4%	0.5%	98.6%	0.5%
Heroin	0.3%	0.2%	99.0%	0.5%
Marijuana	2.7%	6.0%	87.4%	4.0%
Synthetic Marijuana	0.3%	0.2%	99.0%	0.5%
(n=2192)				

- Alcohol was the most frequently used substance reported by survey respondents, with over half using at least some alcohol, and almost one in twenty reporting daily use.

- Cigarettes were used on a daily basis more frequently than any other substance, including other forms of nicotine containing substances (e.g. electronic cigarettes, cigars and cigarillos). Alcohol was the second most frequently used substance on a daily basis, followed by marijuana (see *Table Themes-32*).

CHAPTER 3: COMMUNITY HEALTH STATUS ASSESSMENT

INTRODUCTION

The Community Health Status Assessment section examines more quantifiable aspects of health such as the prevalence of chronic disease, birth rates, and leading causes of death in the county. This was accomplished using secondary data sources such as the U.S. Census Bureau, Centers for Disease Control and Prevention, U.S. Bureau of Labor Statistics, Center for Medicare and Medicaid Services, California Department of Vital Statistics, California Health Interview Survey, and many others.

Indicators of community health are grouped into several broad categories including:

- Socioeconomic Characteristics
- Quality of Life
- Chronic Disease
- Mental Health
- Substance-Related and Addictive Disorders
- Sexually Transmitted Infections
- Maternal and Child Data
- Aging and Senior-Related Health
- Healthcare and Preventative Services
- Causes of Death

SOCIOECONOMIC CHARACTERISTICS

Socioeconomic status (SES) is a measure of a family's or individual's social and economic position. It is based on education, income, and occupation. An assessment of community health in Butte County would be incomplete without measuring the SES of its residents. SES greatly influences an individual's access to resources that are important for health, such as: healthcare, education, safe and affordable housing, food, and recreation. Access to these resources helps facilitate good health and wellbeing.

Household Income

Household income refers to the combined income of all people living in one home. Household income includes: salaries and wages, retirement income, government assistance, and capital gains from investments such as real estate or stocks and bonds. The median household income for Butte County is considerably lower than for California overall, as well as nationally (see *Table Status-1*).

Table Status-1: Median Household Income in Butte County, California, and U.S., 2011-2014.

Report Area	Median Income 2012	Median Income 2013	Median Income 2014
Butte County	$40,960	$42,752	$43,365
California	$58,328	$60,190	$61,933
United States	$51,371	$52,250	$53,657

Source: U.S. Census Bureau, 2012-2014 American Community Survey.
- Median Income in inflation adjusted dollars for each year.

POPULATION IN POVERTY

Poverty may result in negative health consequences. These may include: increased risk of mortality, increased prevalence of medical conditions and disease incidence, depression, violence, and poor health behaviors. In order to define household poverty status, either every-one living in a household is considered to be living in poverty, or no one in a household is living in poverty. The family characteristics used to determine poverty status include: number of people within the household, number of children under age 18, and whether the head of the household is over age 65. If a household's total income is less than the poverty threshold then all of the members of the household are considered to be impoverished. According to the 2016 poverty guidelines a single member household is living in poverty if they earn less than $11,888 per year, while a household of four is living in poverty if they earn less than $24,300.

A community's high poverty rate may indicate economic and social challenges among people living there. It may also indicate a lack of available employment, or a shortage of skilled labor capable of earning higher wages. Poverty lowers access to health resources including: health services, healthy food, and other health necessities. Between 2010 and 2014, 21.5% of Butte County residents were living below the federal poverty level. Groups in Butte County that exhibited higher rates of poverty were African American/Black, Asian, Hispanic/Latino and those who had not completed high school. Poverty status details for Butte County residents by sex, race/ethnicity and educational status are displayed below (see *Table Status-2, 3*).

Table Status-2: Poverty status in Butte County by sex and race, 2010-2014.

Characteristics	Total	Number below poverty level	% below poverty level
Sex			
Male	107,442	23,315	21.7%
Female	109,150	23,358	21.4%
Race/Ethnicity			
African American/Black	3,071	1,265	41.2%
American Indian/Alaska Native	2,465	759	30.8%
Asian	9,303	3,247	34.9%
Native Hawaiian/Pacific Islander	370	76	20.5%
Hispanic/Latino (any race)	32,031	10,186	31.8%
Not Hispanic/Latino	161,048	28,667	17.8%
White	181,184	35,150	19.4%
Total Population in Butte County			
Population for whom poverty status is determined	216,592	46,567	21.5%

Source: U.S. Census Bureau, 2010-2014 American Community Survey (* ACS) 5 – Year Estimates.

Table Status-3: Poverty status in Butte County by education, 2010-2014.

Educational Attainment	Total	Number below poverty level	% below poverty level
Less than high school graduate	16,756	4,809	28.7%
High school graduate (or equivalent)	32,694	5,754	17.6%
Some college, associate's degree	55,760	8,536	15.4%
Bachelor's degree or higher	55,431	2,644	7.5%
Population 25 years and over	140,139	21,722	15.5%

Source: U.S. Census Bureau, 2010-2014 American Community Survey (* ACS) 5 – Year Estimates.

Children in Poverty

Negative health effects are associated with poverty in all age groups, including children. Children living in poverty lack adequate access to healthcare and are at a greater risk of accidental injury. This leads to higher morbidity and mortality rates among children living in poverty. Educational challenges associated with poverty may lead to additional health risks in these children. Between 2010 and 2014, 24.5% of children under the age of 18 were living below the federal poverty level in Butte County. This was higher than for both California overall and the United States, in which 22.7% and 21.9% were living below the federal poverty level, respectively.

Children Eligible for Free/Reduced Price Lunch

An indirect measure of child poverty is the percentage of children enrolled in the National School Lunch Program. The program offers federally assisted meals in both public and nonprofit private schools as well as residential child care institutions. Children may be eligible for free or reduced price lunch in these institutions if:

1. Their guardians participate in assistance programs including: Supplemental Nutrition Assistance Program (SNAP); Food Distribution Program on Indian Reservations (FDPIR); or Temporary Assistance for Needy Families (TANF). Benefits received from SNAP, FDPIR, or TANF are determined through an application process; or

2. They have been documented as homeless, runaway, or migrant children; a foster child; or enrolled in a Federally-Funded Head Start Program.

During the 2013-2014 school year, over half of the students enrolled in Butte County public schools were eligible for Free or Reduced Price Lunch (see *Table Status-4*).

Table Status-4: Children eligible for Free/Reduced Price Lunch in Butte County, California, and U.S., 2013-2014.

Report Area	Total Student Enrollment	Number Free/Reduced Price Lunch Eligible	Percent Free/Reduced Price Lunch Eligible
Butte County	31,052	18,535	59.7%
California	6,215,786	3,610,385	58.1%
United States	50,195,195	26,012,902	52.4%

Source: Data Source: National Center for Education Statistics, NCES - Common Core of Data, 2013-14. Source geography: Address.

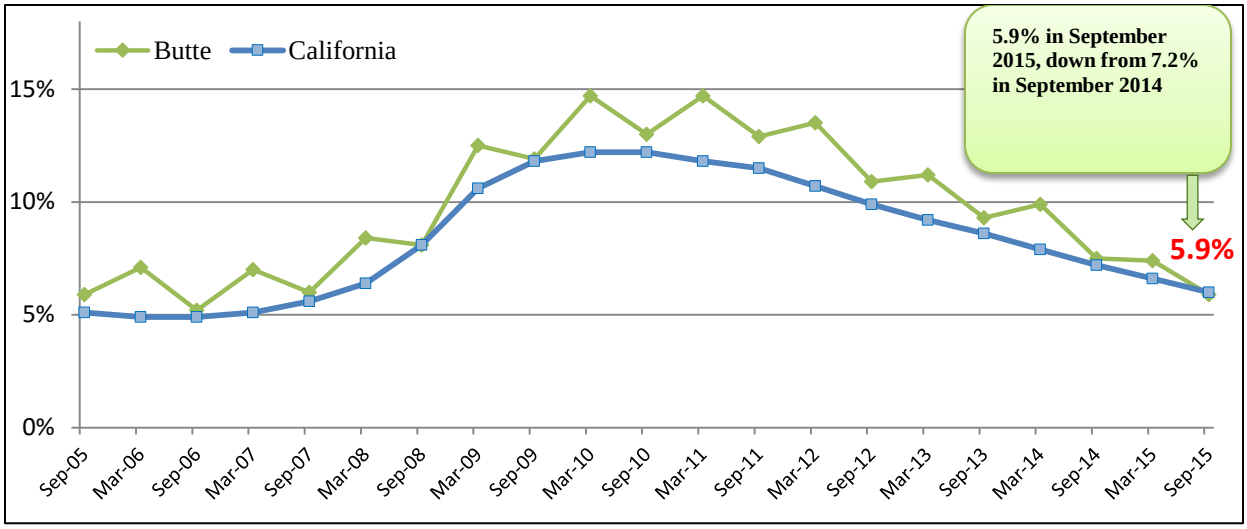


Figure Status-1: Unemployment trend in Butte County and California, 2005-2015.
Derived from Bureau of Labor Statistics.

Unemployment

A community's unemployment rate is a measure of economic health and is also associated with poorer health outcomes. Continuously high unemployment rates can indicate the presence of structural and/or socioeconomic issues within a community. The unemployment rate in Butte County has ranged from 4.9% in September 2006 to 14.7% in September 2010. During this time period, the unemployment rate for Butte County was considerably higher than for California overall; however, the unemployment rate for both Butte County and the state has been dropping since it peaked in 2010 (see *Figure Status-1*).

Table Status-5: Unemployment by race/ethnicity in Butte County and California, 2010-2014.

Unemployment	Butte County	California
Overall Unemployment	13.1%	11.0%
African American/Black	16.4%	17.8%
American Indian/Alaska Native	29.6%	16.9%
Asian	11.3%	8.2%
Hispanic/Latino (any race)	17.2%	12.7%
Native Hawaiian/ Pacific Islander	11.7%	15.6%
Two or More Races	14.8%	14.6%
White	12.6%	10.4%

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

Between 2010 and 2014, unemployment in Butte County was highest among American Indian/Alaska Natives and community members that identified their ethnicity as Hispanic/Latino. The unemployment percentages for these racial and ethnic groups were also higher in Butte County than throughout the state (see *Table Status-5*).

There tends to be lower educational attainment as well as fewer employment opportunities available in rural areas in comparison to metropolitan areas[2,3]. The higher rate of unemployment among American Indian/Alaska Natives in Butte County compared with California as a whole may be related to the degree of rurality experienced by American Indian/Alaska Natives in the county, as well as the higher rate of overall unemployment in Butte County.

Educational Attainment

Educational attainment is defined as the highest level of formal education completed (i.e., high school diploma or equivalent, bachelor's degree, graduate/professional degree). An educated workforce is an important factor for economic development. Completion of formal education is associated with higher paying jobs and access to resources that impact health such as: food, housing, transportation, health insurance, recreation, and other basic necessities for physical and mental wellbeing. In Butte County, 88.5% of adults age 25 and older have at least a high school diploma, which is higher than for California (81.7%). However, fewer adults in the County have a Bachelor's degree or higher (27.1%) compared to the State (31.7%), (see *Table Status-6*).

Table Status-6: Education Attainment in population age 25 years and over in Butte County and California, 2014.

Education Attainment	Butte County	%	California	%
Total population 25 years and over	144,423	-	25,654,292	-
Less than 9th grade	6,210	4.3%	2,591,083	10.1%
9th to 12th grade, no diploma	10,398	7.2%	2,103,652	8.2%
High school graduate or equivalent	34,228	23.7%	5,336,093	20.8%
Some college, no degree	39,572	27.4%	5,643,944	22.0%
Associate's degree	14,876	10.3%	2,026,689	7.9%
Bachelor's degree	25,563	17.7%	5,002,587	19.5%
Graduate / Professional degree	13,576	9.4%	2,950,244	11.5%
Percent High School Graduate or higher	127,814	88.5%	20,959,557	81.7%
Percent Bachelor's degree or higher	39,139	27.1%	8,132,411	31.7%

Source: 2014 American Community Survey (1-year estimates).

High School Graduation

The high school graduation rate in Butte County is historically high at the present time, and is also higher than for the state of California overall (see *Table Status-7*).

[2] Byun S, Meece J, Irvin, M. (2010). Rural-nonrural differences in educational attainment: results from the National Educational Longitudinal Study of 1988-2000. Paper presented at the annual meeting of the American Educational Research Association, Denver, CO; May 2010.

[3] O'Hare, William P., (2009). The forgotten fifth: child poverty in rural America The Carsey Institute at the Scholars' Repository. Paper 76.

Table Status-7: On-time High School graduation in Butte County and California.

Location	Average Freshman Base Enrollment	Estimated Number of Diplomas Issued	On-Time Graduation %
Butte County	2,625	2,090	79.6%
California	524,273	372,310	71.0%

Source: National Center for Education Statistics, NCES - Common Core of Data: 2008-09. Source geography: County.

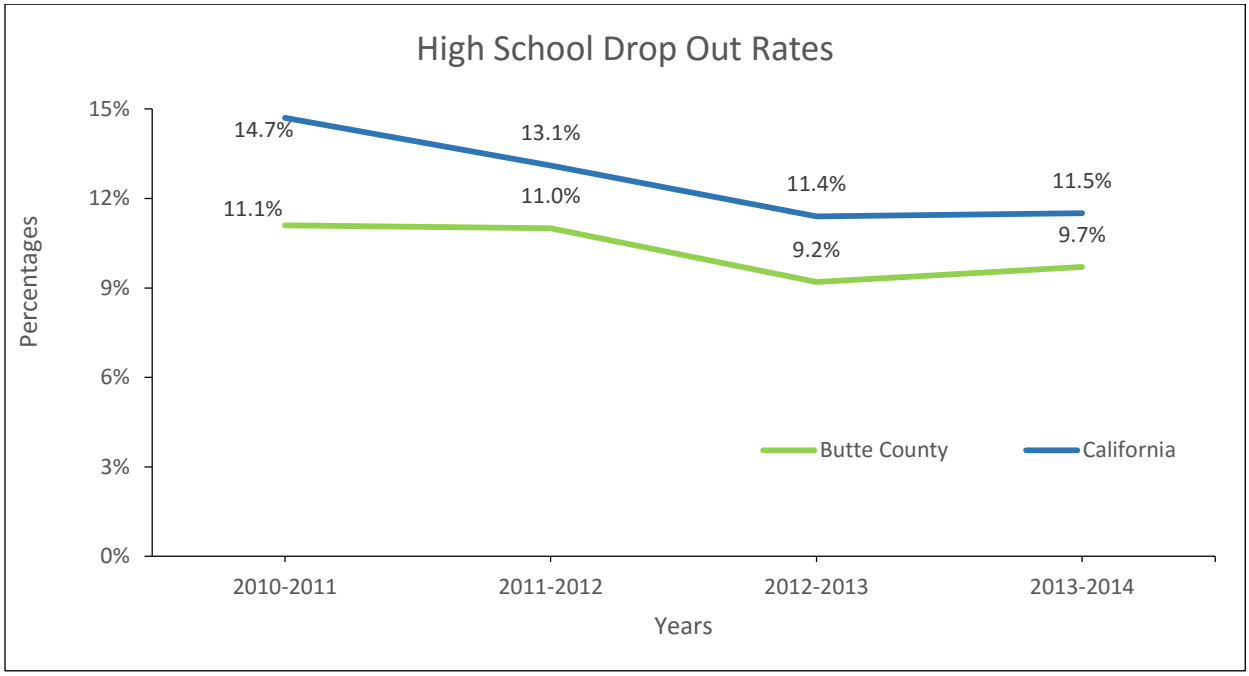


Figure Status-2: High School dropout rates, residents over age 25 years, Butte County and California, 2010-2011 to 2013-2014. Source: Child Trends Databank. (2014). High school dropout rates. Retrieved July 21, 2016 from: http://www.childtrends.org/?indicators=high-school-dropout-rates

High School Dropout Rates

Students who do not complete high school are more likely to be unemployed, live in poverty, be dependent on welfare benefits, have poor physical and mental health, and engage in criminal activity. Some students who drop out of high school earn an equivalency degree, such as a GED; however an equivalency degree is associated with a lower earning potential than a traditional high school diploma. Economic consequences for communities with high dropout rates include greater spending on public assistance programs, higher crime rates, and lower tax revenues. Lower dropout rates are directly related to higher incomes and lower poverty levels, which strengthens economies and diversifies the workforce. Between 2011 and 2014, Butte County had a lower high school dropout rate than California overall (see *Figure Status-2*).

QUALITY OF LIFE

Quality of life is considered by the National Center for Chronic Disease Prevention and Health Promotion to be "a broad multidimensional concept that usually includes subjective evaluations of both positive and negative aspects of life". In other words, it is the general well-being of individuals and societies. The physical environment influences quality of life and affects physical and mental health. These factors are connected with different levels of community engagement.

Air Quality and Pollution

Outdoor air quality in Butte County is monitored hourly by measuring pollutants of fine particles in the air and average ozone levels. This reporting method, called the air quality index (AQI), was developed by the U.S. Environmental Protection Agency (EPA). An AQI score between 0 and 50 indicates good air quality, between 51 and 100 indicates moderate air quality, and scores of 151 and greater indicate unhealthy air quality. Butte County ranks 33rd out of 58 counties in California for air quality, with an average AQI score of 45.5.

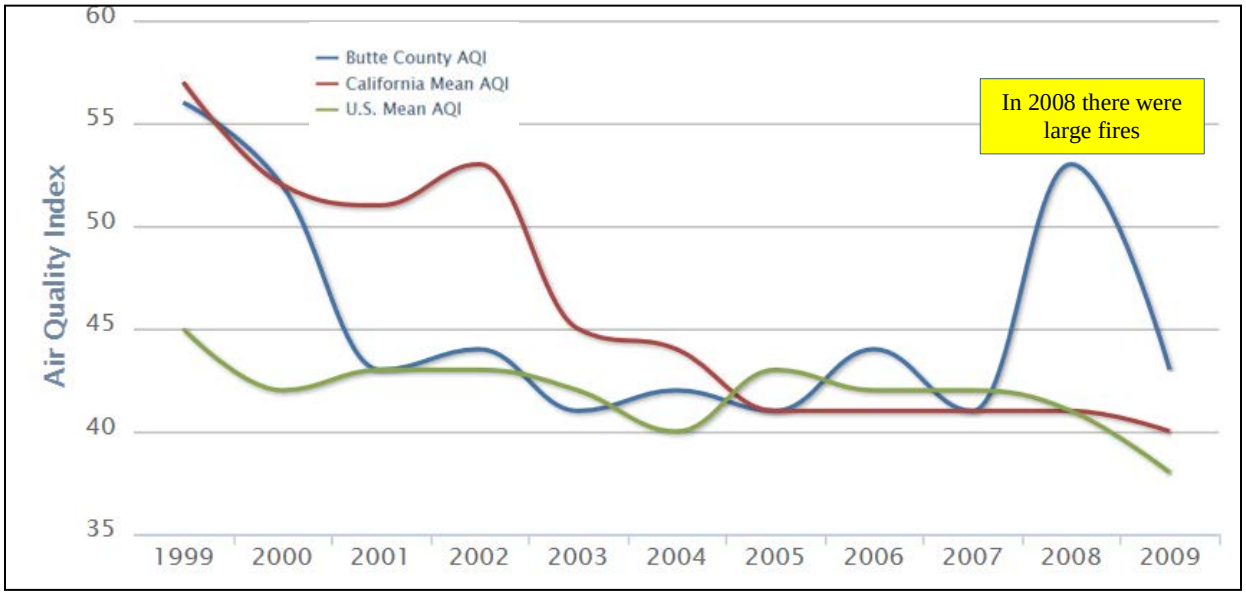


Figure Status-3: Air Quality index (AQI) by year, Butte County, California, and U.S.
Source: The U.S. Environmental Protection Agency (EPA) (http://www.usa.com/butte-county-ca-air-quality.htm)
Note: High AQI values indicate poor air quality.

Air Quality can be affected by the pollution emitted from stationary sources such as: factories, power plants, and smelters; dry cleaners and degreasing operations; mobile sources such as cars, buses, planes, trucks, and trains; and naturally occurring sources such as windblown dust, and volcanic eruptions. In 2008, Butte County had poor air quality due to large fires (see *Figure Status-3*).

A community with high levels of pollutants will have an increased need for health services. Air pollution standards help to protect human health, reduce damage to sensitive vegetation, and preserve the aesthetic value of communities. If a region exceeds one or more of the contaminants identified by the California Air Resources Board to decrease air quality, the state may restrict new industrial facilities from being built and exert regulations on existing operations in the future.

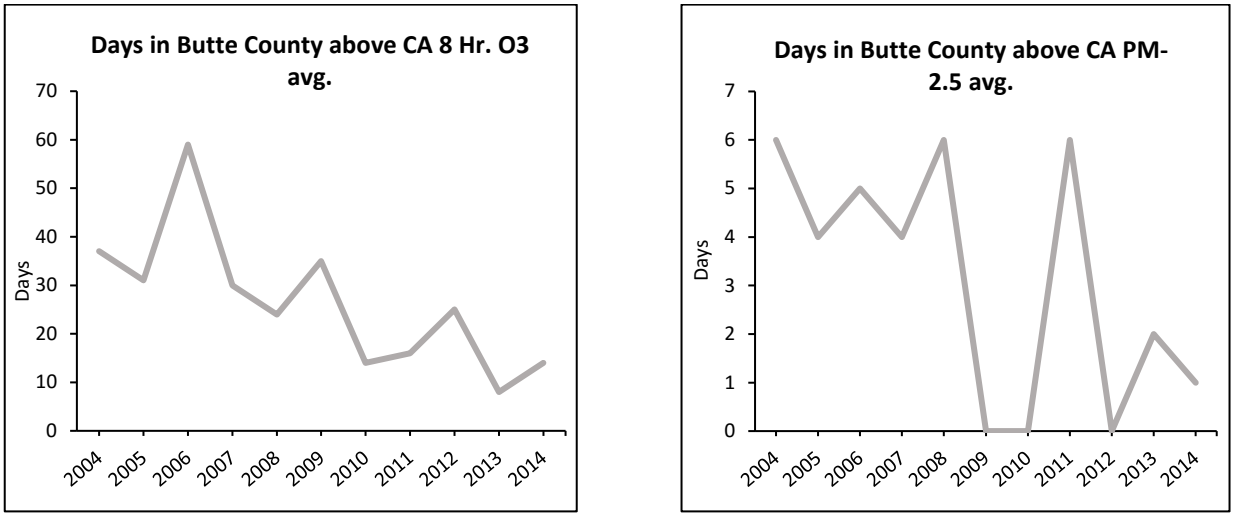


Figure Status-4: Days in Butte County above California State Average Ozone (O3), and Particulate Matter 2.5 micrometers or smaller (PM-2.5), 2004-2014.
Source: California Air Resource Board

Two of these contaminants are ozone (03) and particulate matter smaller than 2.5 micrometers (PM-2.5). The number of days per year that Butte County has exceeded the California state averages for these contaminants has shown an decreasing trend overall from 2004 to 2014. However, there was high degree of variation in air quality over this time period, (see *Figure Status-4*).

Access to Transportation

People who live close to public transportation are less likely to drive and may have increased physical activity, reducing their risk for chronic disease and obesity[4]. Access to public transportation is especially important for low-income and elderly individuals who may not have access to a motor vehicle. Increased use of public transportation has environmental health benefits including reductions in air pollution, greenhouse gases, and noise pollution.

[4] Frank, L.D., Andresen, M., Schmid, T. (2004). Obesity relationships with community design, physical activity, and time spent in cars. Am J Prev Med 27:87-96.

Use of Public Transportation for Workplace Commuting

Most people have a daily commute to their place of work. Carpooling and use of public transportation produces less air pollution and may indicate environmental conservation. See Table Status-8 below for data on workforce commuting in Butte County.

Table Status-8: Means of Transportation to Work in Butte County, 2010 to 2014.

Mode of Transportation	2010	2014	Percent of total in 2014	Percent Change, 2010 to 2014
Driving Alone	60,020	65,568	73.4%	9.2%
Carpool	12,874	8,819	9.9%	-31.5%
Public Transportation	970	1,248	51.1%	28.7%
Bicycle	2,292	2,444	2.7%	6.6%
Walking	2,463	3,598	4.0%	46.1%
Motorcycle, Taxicab, other	753	1,654	1.9%	87.3%
Work at Home	4,374	5,957	6.7%	36.2%
Total	83,746	89,288	100.0%	6.6%

Source: U.S. Bureau of the Census, 2010 and 2014 American Community Survey

Public Safety and Crime

An area with a high crime rate is often perceived as a less desirable place to live and directly impacts quality of life. Population size and the rate of crime reporting to law enforcement agencies affects the overall crime rate for a community. There are two main types of crime: violent crime and property crime. Violent crime is composed of four offenses: murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault. Property crime consists of: burglary, larceny-theft, motor vehicle theft, and arson. Property theft differs from burglary in that it occurs without the threat of violence or use of force.

Table Status-9: Reported major crimes per 100,000 Population from 2010-2014 in Butte County.

Crimes	Year				
	2010	2011	2012	2013	2014
Violent Crimes	**346.4**	**261.8**	**309.2**	**285.4**	**302.6**
Homicide	3.2	3.6	5.0	5.9	4.9
Forcible Rape	39.1	29.1	30.7	34.2	32.6
Robbery	71.4	71.8	75.5	66.6	66.5
Aggravated Assault	230.0	152.3	194.8	177.4	197.3
Property Crimes	**2700.3**	**2443.0**	**2558.3**	**2801.2**	**2959.8**
Burglary	840.5	710.8	867.5	758.5	744.1
Motor Vehicle Theft	261.8	279.5	268.1	403.3	339.2
Total Larceny-Theft	**1597.9**	**1452.6**	**1422.7**	**1639.4**	**1876.5**
Larceny-Theft over $400	476.4	437.7	446.2	515.4	588.3
Larceny-Theft under $400	1121.5	1014.9	976.5	1124.0	1288.2
Arson	**348.7**	**324.5**	**301.1**	**325.9**	**404.4**

Source: California Attorney General's Office – http://stats.doj.ca.gov

No clear trends in reported crimes in Butte County were observed between 2010 and 2014 (see *Table Status-9*).

Food Affordability

Food security is defined as having enough to eat and the ability to purchase or obtain healthy food in socially acceptable ways[5]. Eating a healthy diet plays a significant role in preventing obesity, cardiovascular disease, and type II diabetes. An unhealthy diet can impair intellectual performance and has been linked to more frequent school absences and poorer educational achievement for children[6].

[5] Anderson, S.A. (1990). Core indicators of nutritional state for difficult to sample populations. *The Journal of Nutrition*, 120(11), 1555-1600.

[6] Agricultural Research Service. Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2010. Washington, DC: Department of Agriculture and United States Department of Health and Human Services; May 2010. Retrieved from: http://www.cnpp.usda.gov/Publications/DietaryGuidelines/2010/DGAC/Report/2010DGACReport-camera-ready-Jan11-11.pdf

Table Status-10: Food Insecurity, Butte County and California, 2014.

Report Area	Percent of Population Experiencing Food Insecurity	Estimated Number of Food Insecure Households	Percent Below 200% of the Federal Poverty Level (Eligible for SNAP, WIC, School Lunch, CSFP, TEFAP)
Butte County	18.0%	39,960	82.0%
California	13.9%	5,401,770	78.6%

Source: Gundersen, C., A. Dewey, A. Crumbaugh, M. Kato & E. Engelhard. Map the Meal Gap 2016: Food Insecurity and Child Food Insecurity Estimates at the County Level. Feeding America, 2016. Retrieved May 20, 2016 from: http://map.feedingamerica.org/county/2014/overall/california/county/butte

In 2014, over half of the households in Butte County with incomes below the federal poverty level reported being food insecure. This indicates that normal eating patterns were disrupted because the household could not afford enough food or lacked access to other food resources (see *Table Status-10*).

Supplemental Nutrition Assistance Program (SNAP)

The Supplemental Nutrition Assistance Program (SNAP, formerly known as the Food Stamp Program) is the Nation's largest domestic food and nutrition assistance program for low-income Americans. Although it is a federal aid program, benefits are distributed by each U.S. state's Division of Social Services or Children and Family Services based on household income criteria.

Table Status-11: Food stamp program Butte County-SNAP/CalFresh.

SNAP/CalFresh Eligibility	Butte County – 2013		California - 2012	
	Number	Percent	Number	Percent
Total Income Eligible Individuals,	51,492	-	7,017,486	-
Eligible Non-Participating	21,523	41.8%	2,596,470	37.0%
Participating Individuals, Feb, 2016	32,004	62.2%	4,354,475	62.1%

Source: California Food Policy Advocates, 2016. Retrieved May 20, 2016 from: http://cfpa.net/county-profiles

Over half of the eligible population in Butte County and California overall participate in SNAP/CalFresh. Both California and Butte County were similar in the rate of eligibility, but eligible non-participants were slightly higher in Butte County (see *Table Status-11*).

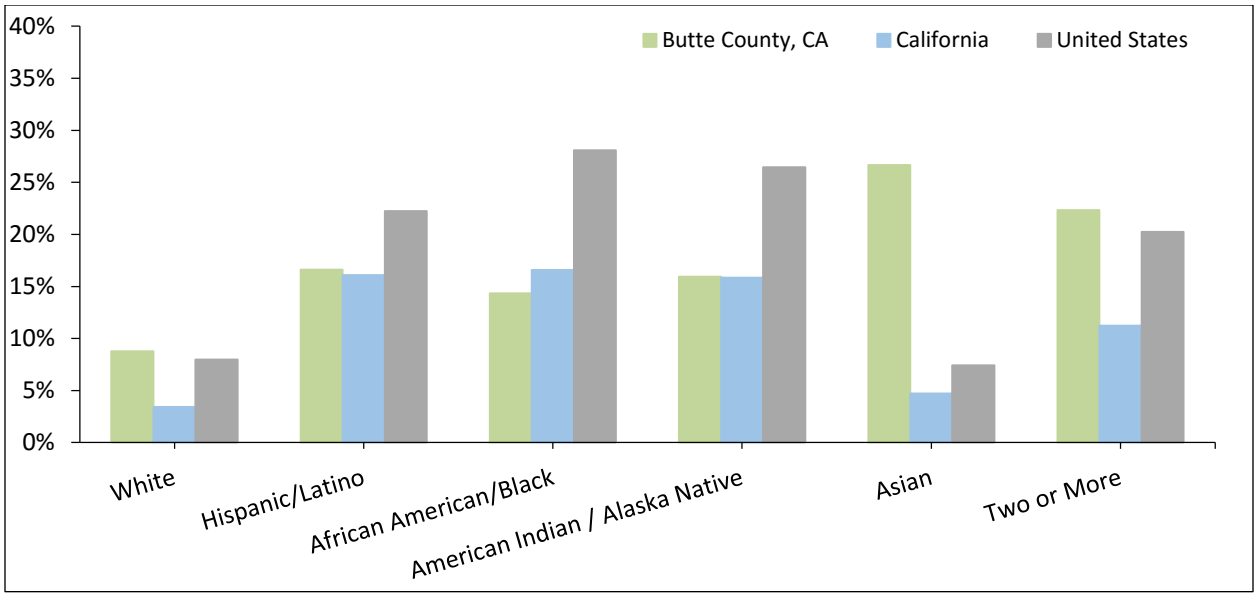


Figure Status-4: Percentage of households receiving Supplemental Nutrition Assistance Program (SNAP) benefits by Race/Ethnicity, Butte County, California, and United States.
Source: (Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract)

In Butte County, the percentages of all ethnicities receiving SNAP exceeded the statewide average, with the Asian population having the highest percent in Butte County. This indicates that food is less affordable for these populations since they are spending more of their total income toward food purchases (see *Figure Status-4*). Of note, the difference between the percentage of the Asian populations in Butte County and in California overall receiving SNAP was much greater than for any other race or ethnicity. This was also true when compared nationally, and illustrates a socioeconomic disparity affecting quality of life particular to the Asian population of Butte County.

Accessibility to Grocery Stores

Grocery stores are defined as supermarkets and small stores that primarily sell canned and frozen foods, fresh fruits and vegetables, fresh and prepared meats, fish, and poultry. This definition does not include convenience stores, supercenters and warehouse club stores that sell food. Accessibility to grocery stores in Butte County is similar to California overall (see *Table Status-12*).

Table Status-12: Number of grocery stores per 100,000 population, 2012.

Report Area	Total Population	Establishments Number	Establishments, Rate per 100,000 Population
Butte County	220,000	47	21.36
California	37,253,956	8,013	21.51
United States	312,471,327	66,047	21.14

Source: US Census Bureau, County Business Patterns: 2012.

Access to Nutritious Food

According to the National Center for Chronic Disease Prevention and Health Promotion[7] "lack of access to healthier foods may make it more difficult for neighborhood residents to maintain a nutritious diet that supports normal weight and optimal health". Increased accessibility to retail food vendors makes healthier foods more available, improves diet and may lead to a reduction in obesity rates.

Table Status-13: Percentage of the population living in census tracts designated as food deserts, Butte County, California, U.S., 2010.

Report Area	Total Population	Population with Low Food Access	Percent Population with Low Food Access
Butte County	220,000	45,216	20.5%
California	37,253,956	5,332,093	14.3%

Source: US Department of Agriculture, Economic Research Service, 2010.

A food desert is defined as a low-income area where a substantial number of residents have low access to food. This highlights populations and geographies facing food insecurity. In Butte County, nearly one quarter of the population has low food access, which is higher than that for California overall (see *Table Status-13*).

[7] State Initiatives Supporting Healthier Food Retail: An Overview of the National Landscape. Retrieved from: http://www.cdc.gov/obesity/downloads/Healthier_Food_Retail.pdf

HOMELESSNESS

In 2014, more than half a million people were homeless on any given night in the United States. More than one hundred thousand people were homeless in California - which had a higher percentage of the nation's homeless persons residing (20%) than any other state. However, homelessness has declined by 11% nationwide and by 18% in California since 2007[8].

Every two years, the Butte Countywide Homeless Continuum of Care conducts a one day, point-in-time census and survey of those experiencing homelessness. According to the California 2015 Point-In-Time Homeless Census and Survey, homelessness in Butte County may also be declining. In 2015 it was estimated that there were over 1,100 homeless persons (adults, accompanied youth, and unaccompanied youth combined) residing in Butte County, which represented a 27.4 % decrease from the previous 2013 estimate (see *Table Status-14*).

Table Status-14: Butte County Homeless Population Estimates, 2011, 2013 and 2015.

Location	2011	2013	2015
Chico	1,043 (58.9%)	804 (51.8%)	571 (50.7%)
Gridley	97 (5.5%)	65 (4.2%)	36 (3.2%)
Oroville	545 (30.8%)	579 (37.3%)	390 (34.6%)
Paradise	71 (4.0%)	89 (5.7%)	49 (4.3%)
Other	16 (0.9%)	16 (1.0%)	81 (7.2%)
Total	1,772	1,553	1,127

Source: Butte Countywide Homeless Continuum of Care 2011, 2013 and 2015 Homeless Survey Reports.

While the estimated number of homeless persons has been declining on a national, state, and local level, homelessness continues to exert a severe impact on people's physical and mental well-being.

Health Inequity for the Homeless Population

In contrast to the general population, people experiencing homelessness are at elevated risk for communicable disease, chronic illness, and being victims of violence. They are more likely to experience poor mental health and to develop substance-related and addictive disorders. It is estimated that the mortality rate for homeless persons may be up to nine times greater than for the general population[9].

[8] https://www.hudexchange.info/resources/documents/2014-AHAR-Part1-508-version.pdf, retrieved July 21, 2015.

[9] http://www.cdc.gov/features/homelessness/ retrieved September 2, 2016.

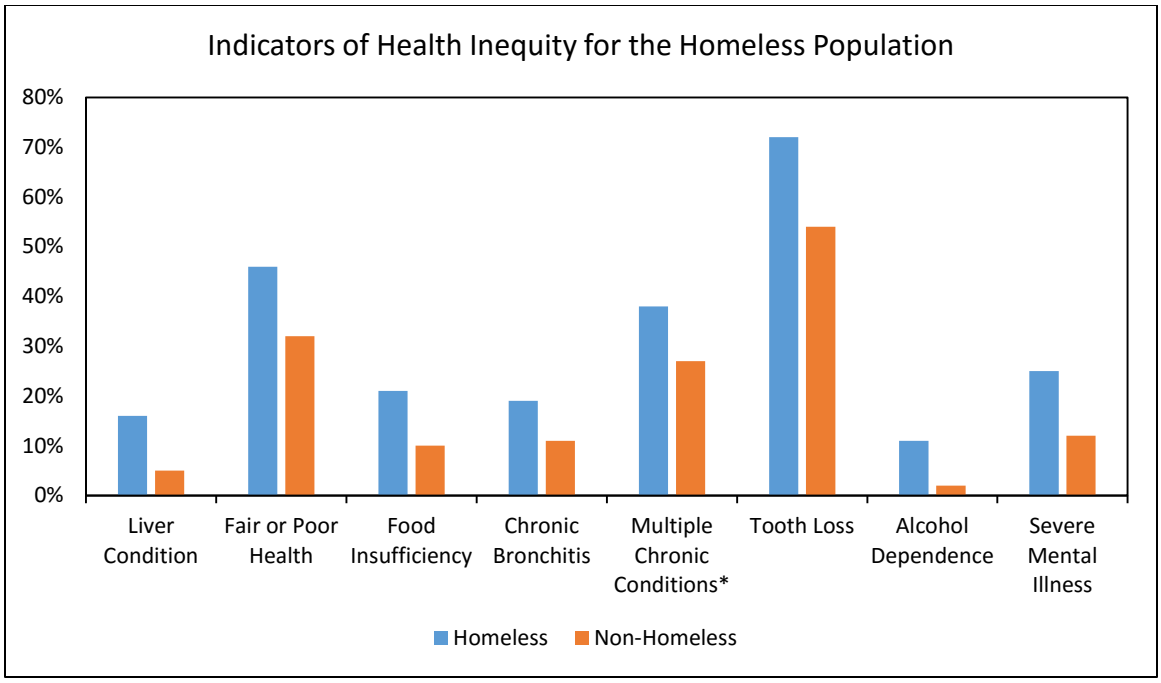


Figure Status-5: Health Status of Homeless and Non-Homeless Health Center Users.
Source: Fact Sheet, Homelessness & Health: What's the Connection? National Health Care for the Homeless Council, June, 2011. * - Includes two or more of the following: hypertension, diabetes, asthma, emphysema, chronic bronchitis, heart problems, stroke, liver condition, weak/failing kidneys, cancer, and HIV/AIDS.

Individuals experiencing homelessness have high rates of acute and chronic illness. A 2011 study which looked at the health status and health care experiences among homeless patients in federally supported health centers found that even among largely low-income populations, there are significant disparities when comparing homeless and non-homeless populations (see *Figure Status-5*).

Factors that Cause or Contribute to Health Inequity for the Homeless Population:

- Harmful exposure to extreme weather elements (frostbite, hypothermia, heatstroke, dehydration)
- Lack of regular, adequate food intake (malnutrition)
- Unhealthy diet (usually high in starch, sugars, salt, low in fresh vegetables and fruits) typically found at soup kitchens and shelters
- Living in crowded conditions (i.e. shelters) or visiting locations for services that may be crowded increase risk for acquiring a communicable disease
- Lack of adequate sleep due to noise, temperature, safety and comfort concerns
- Inability to properly care for injuries and illness due to lack of access to facilities to bathe, keep bandages clean, and get proper rest and recuperation. Therefore minor issues easily develop into large problems such as infections and pneumonia, and those discharged from the hospital can lose any progress they made in healing

- Limited access to clean water
- No safe place to store medications or syringes properly
- Behavioral health issues such as depression or alcoholism often develop or are made worse in high stress, dangerous and unpredictable situations
- Limited access to medical care due to transportation challenges

The most recent Homeless Point-in-Time Census and Survey (January 2015), indicated that of the 975 adults who completed the survey, the following "disabling conditions" were self-reported in the following percentages countywide shown below in *Table Status-15*.

Table Status-15: Prevalence of Disabling Conditions in the Butte County Homeless Population

Disability	Percentage Countywide
Disabling Condition	54%
Physical Disability	27%
Developmental Disability	5%
Chronic Health Condition	17%
HIV/AIDS	1%
Mental Illness	38%
Drug Abuse	22%
Alcohol Abuse	16%

In the table above, "disabling condition" is self-defined by the person taking the survey, and could include one or more of the disabilities listed in the chart. Fifty-four percent of respondents reported having some type of a disabling condition. A physical disability was reported by 27% of the survey respondents, and 17% reported a chronic health condition. Mental illness was reported by 38% of respondents, while 5% said they had a developmental disability. This figure of 54% is significant, considering that the Continuum of Cares believes these percentages to be lower than reality, due to the self-reporting aspect of the survey.

Table Status-15: Butte County homelessness, by gender in selected cities, 2015.

Location	Gender				Total
	Male	Female	Transgender	Unknown	
Chico	356 (62%)	204 (36%)	4 (1%)	7 (1%)	571
Gridley	21 (58%)	13 (36%)	0 (0%)	2 (6%)	36
Oroville	275 (71%)	110 (28%)	0 (0%)	5 (1%)	390
Paradise	31 (63%)	17 (35%)	0 (0%)	1 (2%)	49
Other	38 (47%)	40 (49%)	0 (0%)	3 (4%)	81
Total	721 (64%)	384 (34%)	4 (1%)	18 (2%)	1,127

Source: Butte Countywide Homeless Continuum of Care 2015 Homeless Survey Report

Of the Butte County survey respondents, there were nearly twice as many homeless males as females. These findings are consistent with national estimates of gender frequencies among homeless populations (see *Table Status-15*).

In Butte County, the majority of homeless survey respondents reported being incarcerated at some time, illustrating the connection between crime, incarceration, and homelessness. Forty-two percent indicated having no income of any kind and 36% attributed being homeless to financial difficulties. Drug abuse was reported by 22% of respondents and alcohol abuse was reported by 16 % of respondents, (see *Table Status-16*).

Table Status-16: Notable results from the 2015 Point-in-Time Homelessness survey

68% have spent time in jail or prison	25% were living in places not meant for habitation (vehicle, abandoned building, train station, or anywhere outside)
36% reported "employment / financial reasons" as the cause of homelessness	21% reported having been the foster care system at some point in their lifetime
42% reported having no income whatsoever	30% reported having some college education; 3% reported having an associate's degree; 5% reported having a college degree or more
9% reported having children	7% identified as being US Military Veterans

Source: Point-In-Time Homeless Census & Survey Report Butte County Homeless Continuum of Care Council, 2015.

Homeless individuals attempt to survive in high stress, unhealthy and dangerous environments, with extremely limited resources, which compromises their health in ways that housed individuals do not experience. In the absence of basic human necessities the severity of health conditions among homeless persons can increase rapidly, as nutritional deficits and diminished access to preventative care often results in more serious illness. The resulting health issues they experience are frequently co-occurring, with a complex mix of severe physical, psychiatric, substance use and social problems. This dynamic often results in visits to emergency rooms and hospitalization, with limited options for discharge plans, creating a circular pattern of increasing degradation in their health. After medical care is offered, treatment cannot be sustained for many homeless persons lacking resources and transportation. The National Agency for Healthcare Research and Quality has found that homeless individuals visit the emergency department and are hospitalized at rates up to 10 times higher than patients with low-income housing. Readmission rates for this population are also high, and discharging patients directly to the street disrupts the continuity of care started at the hospital. Growing and strengthening community resources to improve discharge outcomes is therefore an essential component of improving health outcomes for those experiencing homelessness. The delivery of treatment and services to persons experiencing homelessness is an important factor for continuing to reduce homelessness in Butte County.

Veterans

Veterans are defined as men and women who have served in the military (even for a short time), but are not currently serving or on active duty in the U.S. Army, Navy, Air Force, Marine Corps, or the Coast Guard; or who served in the U.S. Merchant Marines during World War II.

Table Status-17: Military Veteran population status in Butte County, 2010-2014.

Subject	Butte County Population Estimates		
	Total Estimate	Veterans Estimate	Nonveterans Estimate
Civilian population 18 years and over	175,808	17,116	158,692
SEX			
Male	49.1%	93.8%	44.2%
Female	50.9%	6.2%	55.8%
AGE			
18 to 34 years	34.4%	7.0%	37.4%
35 to 54 years	28.5%	18.6%	29.5%
55 to 64 years	16.8%	20.7%	16.3%
65 to 74 years	10.8%	27.2%	9.1%
75 years and over	9.5%	26.5%	7.6%
RACE AND HISPANIC OR LATINO ORIGIN			
White	85.9%	92.3%	85.3%
Hispanic/ Latino	12.6%	6.2%	13.2%
African American/Black	1.4%	0.8%	1.5%
American Indian/ Alaska Native	1.2%	1.3%	1.2%
Asian	3.9%	1.3%	4.1%
Native Hawaiian/Pacific Islander	0.2%	0.1%	0.2%
Two or more races	4.7%	3.5%	4.8%
Some other race	2.7%	0.7%	2.9%
MEDIAN INCOME IN THE PAST 12 MONTHS			
Civilian pop. 18 years and over with income	$21,130	$32,013	$20,067

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates.

Those who served in the National Guard or Reserves are classified as veterans only if they were called to active duty, not counting the 4-6 months for initial training or yearly summer camps. All other civilians are classified as nonveterans. The overwhelming majority of military veterans residing in Butte County are white males, and nearly three quarters are 55 years of age or older (see *Table Status-17*).

CHRONIC DISEASES

Chronic diseases account for roughly 2 out of 3 deaths worldwide. In the United States, chronic non-communicable health conditions are the top driver of healthcare costs. These health conditions are often a result of lifestyle choices and behaviors, and in many instances are preventable. A quarter of adults and three quarters of seniors in the U.S. have multiple chronic conditions, which increases the complexity, severity, and the cost of their care[10].

The Center for Medicare and Medicaid Services (CMS) is the largest third party payer of medical expenses in the U.S., and most hospitals receive a significant portion of their reimbursement for care from CMS. CMS tracks data for 17 chronic conditions among its beneficiaries, as these account for the majority of CMS spending on healthcare[11,12].

Table Status-18: Prevalence in Medicare and Medi-Cal Services Beneficiaries, 2014.

Chronic Condition	Butte County	California
Hypertension	50.7%	50.1%
Hyperlipidemia	43.9%	41.7%
Arthritis	24.6%	27.2%
Diabetes	23.3%	25.6%
Ischemic Heart Disease	20.6%	24.2%
Chronic Kidney Disease	17.8%	16.6%
Depression	16.7%	13.9%
COPD	13.3%	8.8%
Heart Failure	10.8%	13.0%
Alzheimer's Disease/Dementia	8.2%	9.5%
Atrial Fibrillation	8.1%	7.3%
Cancer	7.6%	7.4%
Asthma	5.9%	5.2%
Osteoporosis	5.2%	6.8%
Stroke	3.8%	3.5%
Schizophrenia/Other Psychotic Disorders	2.9%	3.5%
Hepatitis (Chronic Viral B & C)	1.5%	1.3%
Autism Spectrum Disorders	0.2%	0.1%
HIV/AIDS	0.2%	0.5%

Source: Derived from Chronic Conditions among Medicare Beneficiaries, Chartbook, 2014. http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/CC_Main.html, retrieved January, 5th, 2015.

[10] Goodman, et al. (2014). IOM and DHHS Meeting on Making Clinical Practice Guidelines Appropriate for Patients with Multiple Chronic Conditions. Annals of Family Medicine, 12(3): 256–259.

[11] Anderson, G. (2010). Chronic care: making the case for ongoing care. Princeton, NJ: Robert Wood Johnson Foundation.

[12] Bauer. U.E., Briss, P.A., Goodman, R.A., & Bowman, B.A., (2014). Prevention of chronic disease in the 21st century: elimination of the leading preventable causes of premature death and disability in the USA. Lancet, 384 (9937):45-52.

The top chronic conditions among CMS beneficiaries in both Butte County and California are hypertension (e.g. high blood pressure) and hyperlipidemia (e.g. high cholesterol and triglycerides) followed by arthritis, diabetes, and ischemic heart disease (blocked arteries), (see *Table Status-18*). This section of the report focuses on obesity, diabetes, cancer, cardiovascular disease, asthma, and chronic obstructive pulmonary disease (COPD). Other sections of this document place emphasis on chronic conditions related to aging and mental health.

Obesity

Obesity has become one of the most concerning national health issues. In the last 30 years, national obesity rates have doubled in adults and tripled in children. Obesity results from a combination of various biological, behavioral, environmental and socioeconomic factors. However, obesity is most often associated with poor diet and limited physical activity.

Table Status-19: Adults who are overweight or obese by Race/Ethnicity

Adult 19+ Years Overweight/Obese [i]	Butte County	California
Total	58.6%	60.7%
White	58.2%	60.6%
African American/Black	65.8%*	72.5%
Hispanic/Latino	49.3%	71.7%
Asian	35.2%*	10.0%

Source: California Health Interview Survey, 2011 – 2014 (pooled).

* Statistically unstable: an unstable cell has not met the criteria for a minimum number of respondents needed AND/OR has exceeded an acceptable value for coefficient of variance.

In Butte County, almost 60.0% of adults are overweight or obese. This is a slightly lower percentage than California. In Butte County there is some variation in the obesity rate across race and ethnicity. For example, individuals identifying as Hispanic/Latino tend to have lower overweight and obesity rates than those identifying as White in the County. However, the opposite is true for the State overall (see *Table Status-19*).

Table Status-20: Teens age 12 to 17 who are overweight or obese by Race/Ethnicity

5-19 Year Olds Overweight/Obese[iii]	Butte County	California
Total	27.7%	32.1%
White	22.0%	29.2%
African American/Black	100.0%*	46.2%
Hispanic/Latino	46.4%*	39.6%
Asian	33.3%*	20.1%

Source: California Health Interview Survey, 2011 – 2014 (pooled).

* Statistically unstable: an unstable cell has not met the criteria for a minimum number of respondents needed AND/OR has exceeded an acceptable value for coefficient of variance.

Obesity has also reached epidemic levels among youth. Obese youth are at higher risk for: cardiovascular diseases (such as high cholesterol or high blood pressure); bone and joint problems; sleep apnea; and social and psychological problems such as stigmatization and poor self-esteem. Twenty-eight percent of youth in Butte County between the ages 12 and 17 are considered overweight or obese. The youth obesity rate in Butte County is lower than that for California overall; and White youth in Butte County have a lower obesity rate than the total population of the County and that White youth in the State overall. It appears at first glance that the youth obesity rate in Butte County is higher for African American/Black, Asian, and Hispanic Latino children in Butte County than in California as a whole, although the rates for Butte County reported here are statistically unreliable (see *Table Status-20*). However, the higher rates of youth obesity among some racial and ethnic minorities is consistent with what is observed nationally. The underlying factors leading to differences in youth obesity rates among racial and ethnic groups can likely be attributed to socioeconomic status (SES), culture, environment, some biological factors, and the way in which these factors interact. The impact that these variables have on behavioral patterns associated with obesity should be considered when developing policies and efficacious clinical practices to prevent and treat childhood obesity[13].

Obesity is even a growing concern among low-income preschoolers between the ages of 2 and 5. According to the Butte County Women, Infants, and Children (WIC) program, roughly 4 in 10 Butte County preschoolers are overweight. This highlights the importance of targeting pre-school aged children and their families when providing nutrition based education and services.

Table Status-21: Adults with No Leisure-Time Physical Activity

Report Area	Population Age 20+	Population with no Leisure Time Physical Activity	Percent Population with no Leisure Time Physical Activity
Butte County	167,483	29,470	16.9%
California	27,770,244	5,194,134	19.3%
United States	231,354,647	56,230,453	22.7%

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Diabetes Atlas: 2012, Source geography: County; U.S. Census Bureau, 2012 American Community Survey (* ACS) 1 – Year Estimates.

Obesity can be exacerbated by a lack of physical activity. In Butte County, the percentage of adults ages 20 years and older who reported having no physical activity was lower than that of

[13] Caprio, S., et al., (2008). Influence of Race, Ethnicity, and Culture on Childhood Obesity: Implications for Prevention and Treatment: A consensus statement of Shaping America's Health and the Obesity Society. Diabetes Care, 31(11): 2211–2221.

California overall. The rate of inactivity in Butte County was considerably lower than that for the nation as a whole (see *Table Status-21*).

Regular physical activity aids muscle development, bone health, and heart health. The Centers for Disease Control and Prevention recommends that children and adolescents participate in one hour or more of exercise every day[14]. Children who regularly exercise tend to do better in school, have lower levels of depression and anxiety, and are more likely to become healthy adults[15]. Exercise should include aerobic activity (e.g., brisk walking or running), muscle strengthening (e.g. push-ups), and bone strengthening activities (e.g. jumping rope).

Since 1996, California Education Code (EC) Section 60800 requires that each local educational agency (LEA) administer a state-designated physical fitness test (PFT) to all students in grades five, seven, and nine. The test designated for this purpose by the State Board of Education is the FitnessGram®, developed by The Cooper Institute. It provides criterion-referenced standards to evaluate fitness that represent the minimum levels of fitness known to be associated with health and physical characteristics that offer protection against disease resulting from physical inactivity. Achievement of the fitness standards is based on a score falling in the Healthy Fitness Zone (HFZ) representing six fitness areas.

Table Status-22: Fitness standards in 9th graders

Fitness standards	Butte County	California
9th graders meeting all fitness standards*	39.5%	37.6%
White	41.8%	47.3%
African American/Black	35.4%	31.2%
Hispanic/Latino	30.9%	30.5%
Asian	56.9%	52.6%

California Department of Education, Physical Fitness Testing Research Files, 2014-2015; retrieved March 21, 2016 from: http://data1.cde.ca.gov/dataquest/PhysFitness/PFTDN/MeetingHFZ2011.aspx?r=0&t=4&y=2014-15&c=00000000000000&n=0000

The aim is for students to meet the standards in all six FitnessGram® HFZ areas. In Butte County, less than 40.0% of all 9th graders achieved the HFZ fitness standards. Of those who met the standards, almost half were Asian, followed by White students (see *Table Status-22*).

[14] Division of Nutrition, Physical Activity, and Obesity, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. (2011). How much physical activity do children need? Retrieved from: http://www.cdc.gov/physicalactivity/everyone/guidelines/children.html

[15] Division of Nutrition, Physical Activity, and Obesity, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. (2008). Physical activity and the health of young people. Retrieved from: http://www.cdc.gov/HealthyYouth/physicalactivity/pdf/facts.pdf

Diabetes

Diabetes (mellitus) is a group of chronic diseases characterized by high blood glucose levels resulting from defects in insulin production, insulin action, or both. It is associated with high morbidity and mortality rates. The most common types of diabetes are: type 1, type 2, and gestational diabetes. Serious complications from diabetes include kidney damage and chronic kidney disease, nerve damage, risk of amputation, blindness, stroke, heart disease, complications in pregnancy, and even premature death. However, people with diabetes can take steps to control symptoms of the disease and lower their risk for complications.

There is a clear link between obesity and type 2 diabetes in that as the rate of obesity increases so does the rate of type 2 diabetes. According to the 2011-2012 California Health Interview Survey (CHIS), approximately 9% of the adult Butte County population has been diagnosed with some form of diabetes, with nearly 17% of the population age 65 and over being diagnosed. This is consistent with national trends, as the overall rate of adults diagnosed with diabetes has been rapidly increasing, with the highest percentage of new cases occurring in adults age 55 and over[16]. Diagnoses of type 2 diabetes increase with age due to a decreased level of activity and exercise, loss of muscle mass, and increase in weight[17].

Cases of diabetes during pregnancy include both pre-existing and gestational diabetes. Gestational diabetes is defined as diabetes first diagnosed during pregnancy in which a woman's glucose tolerance may return to normal after delivery; however, her risk for developing diabetes remains high. All forms of diabetes during pregnancy may result in complications during labor and delivery. According to the 2011-2012 CHIS, the rate of pre-existing or gestational diabetes during pregnancy in Butte County is slightly higher (about 7 cases per 100 pregnancies) than for California (about 5 cases per 100 pregnancies).

Cancer

Cancer is the leading cause of death in Butte County. It is characterized by the uncontrolled growth and spread of abnormal cells and consists of more than 100 different diseases. The risk of developing cancer increases with age and varies by gender and race. As the average age of the population has increased, so has the incidence of cancer. Family history of cancer is also associated with risk for these diseases. Up to 80.0% percent of all cancers are related to lifestyle or environmental factors, such as smoking and diet. Changes in lifestyle or environmental conditions may greatly reduce the incidence of cancer. Opportunities exist to reduce the burden of cancer through improved prevention, early detection, and treatment. For instance, there is convincing evidence that screening for colorectal cancer reduces the death

[16] http://www.cdc.gov/diabetes/statistics/age/fig1.htm

[17] http://www.mayoclinic.org/diseases-conditions/type-2-diabetes/basics/risk-factors/con-20031902

rate (mortality rate) in adults between the ages of 50 and 75. Early detection is key to the effective treatment of many cancers and can be lifesaving. In addition, the cost of treating cancer is significantly lower if detected early.

Table Status-23: All cancer incidence rates in Butte County, 2009-2013

Year	2009	2010	2011	2012	2013	5 Year Average
Population at Risk	219,777	219,914	219,913	221,016	222,090	220,542
Total Cases	1293	1307	1323	1301	1187	1282.2
Age-Adjusted Rate	490.86	494.06	498.16	479.03	433.43	478.86
California Age-Adjusted Rate	438.45	429.01	418.86	408.39	398.00	417.96

Sources: California Department of Public Health. Data accessed July 10, 2014. Based on December 2015 Extract. Note: All rates are per 100,000. Rates are age-adjusted to the 2000 U.S. Standard Population. Retrieved March 22, 2016 from: http://www.cancer-rates.info/ca/index.php

Between 2009 and 2013, the average number of people at risk for cancer annually in Butte County was 220,542. Over this time period a total of 6,411 cases of invasive cancer were diagnosed, with an average of 1,282 people diagnosed per year. The age-adjusted rate for all cancers in Butte County was 478.9 cases per 100,000 people, which was notably higher than for the state of California overall (see *Table Status-23*).

Breast Cancer Incidence

Breast cancer is a malignant tumor that starts in the cells of the breast and is the most common type of cancer in women of every race and ethnicity in California. The incidence rate of breast cancer in Butte County ranks as the 6th highest out of all 58 counties in California.

Table Status-24: Female Breast Cancer Incidence Rates in Butte County, 2009-2013

Year	2009	2010	2011	2012	2013	5 Year Average
Population at Risk	108,784	108,828	108,945	109,584	110,234	109,275
Total Cases	201	174	184	139	151	169.8
Age-Adjusted Rate	158.3	136.5	139.0	106.4	106.4	129.3
California Age-Adjusted Rate	135.4	132.3	127.2	105.5	98.0	119.7

Sources: California Department of Public Health. Data accessed July 10, 2014. Based on October 2013 Extract (Released December 13, 2013) Note: All rates are per 100,000. Rates are age-adjusted to the 2000 U.S. Standard Population.

Between 2009 and 2013, the average number of women at risk for breast cancer annually in Butte County was 109,275. Over this time period a total of 849 cases of invasive breast cancer were diagnosed, with an average of 170 people diagnosed per year. The age-adjusted rate for incidence of female breast cancer in Butte County was 129.3 per 100,000, which was slightly higher than for California overall (see *Table Status-24*).

Prostate Cancer Incidence

Prostate cancer is one of the most commonly diagnosed cancers in men, and the second leading cause of cancer related male deaths after skin cancer.

Table Status-25: Prostate Cancer Incidence Rates in Butte County, 2009-2013

Year	2009	2010	2011	2012	2013	5 Year Average
Population at Risk	107571	108319	108784	108866	109036	108515
Total Cases	196	197	199	170	185	189
Age-Adjusted Rate	162.12	162.30	156.77	133.31	139.55	150.8
California Age-Adjusted Rate	155.13	140.70	134.23	129.57	124.61	136.4

Sources: California Department of Public Health. Data accessed July 10, 2014. Based on October 2013 Extract (Released December 13, 2013)
Note: All rates are per 100,000. Rates are age-adjusted to the 2000 U.S. Standard Population.

Between 2009 and 2013, the average number of men at risk for prostate cancer annually in Butte County was 108,515. Over this time period a total of 947 cases of invasive prostate cancer were diagnosed, with an average of 189 people diagnosed per year. The age-adjusted rate for incidence of male prostate cancer in Butte County was 150.8 per 100,000, which was higher than for California overall (see *Table Status-25*).

Asthma

Asthma is a chronic, often lifelong condition in which inflammation of the airways to the lungs occurs, making breathing difficult. It is a rapidly increasing health problem and is a leading cause of school and workplace absences and hospitalization, especially among children.

Table Status-26: Adults ever diagnosed with asthma, 2011-2014

	Hispanic /Latino	White	African American /Black	American-Indian /Alaska Native	Asian	Native Hawaiian/ Pacific Islander	Two or More Races	All
Butte County	8.4%*	19.4%	-	-	13.6% *	-	40.2% *	17.2%
California	11.4%	15.5%	20.0%	29.3%	10.9%	2.5% *	25.8%	13.9%

Source: 2011 – 2014 (pooled) California Health Interview Survey.
* Statistically unstable: an unstable cell has not met the criteria for a minimum number of respondents needed AND/OR has exceeded an acceptable value for coefficient of variance.
(hyphen) = Estimate is less than 500 people.

According to the California Health Interview Survey, a higher percentage of adults in Butte County have been diagnosed with asthma than in California overall. This was true of all racial and ethnic groups for which data was available, except Hispanic/Latino (see *Table Status-26*).

Table Status-27: Asthma hospitalizations rates per 10,000 residents in 2012.

Age	Butte County	California
0-4 Years	24	22.1
5-17 Years	4.1	7.8
All Ages (children and adults)	8.3	8.6

Source: Office of State wide Health Planning and Development (OSHPD), 2012

Children without access to regular medical care are more likely to suffer from serious asthmatic attacks that may result in repeated absences from school, trips to the emergency room, and even hospitalization. In Butte County, the asthma related hospitalization rate for children from birth to four years old is 24 hospitalizations per 10,000 residents, which is slightly higher than the rate for California overall. For Butte County, children between the ages 5 and 17 the rate is about 4 hospitalizations per 10,000 residents, which is lower than the statewide rate for children in this age group (see *Table Status-27*).

Table Status-28: Expected Asthma ED Visits Payment Type for Butte County and California, 2010.

Payment Source	Butte County	California
Medicare	15.4%	12.6%
Medi-Cal	54.9%	37.1%
Private	18.1%	31.1%
Other	11.7%	19.3%

Source: Office of Statewide Health Planning and Development (OSHPD), 2010.

A much higher percentage of patients presenting with asthma related conditions in Butte County (54.9%) emergency departments are Medi-Cal beneficiaries than in California overall (37.1%). In order to qualify for Medi-Cal, a family or individual must earn less than 138% of the federal poverty level (see *Table Status-28*). This highlights the influence that socio-economic status may be playing in relation to asthma in Butte County. Furthermore, results of the most recent California Health Interview Study (CHIS) indicated a substantially higher percentage of Medi-Cal beneficiaries report being current smokers in Butte County (42.0%) than in California overall (19.0%), which is a major risk factor for the development of asthma in both the direct form and via second hand smoke.

Chronic Obstructive Pulmonary Disease

Chronic Obstructive Pulmonary Disease (COPD) is the third leading cause of death in the United States. It is a progressive disease and its symptoms frequently worsen across time[18]. The leading factor for the development of COPD is smoking. However, exposure to air pollution, chemical fumes, or dust over long periods of time may also lead to the development of COPD. It is an obstructive disease, meaning that air flow into and out of the lungs is diminished. This prevents oxygen from being exchanged for carbon dioxide waste in the lungs, causing less oxygenated blood and body tissues[19]. It is most frequently diagnosed in middle aged and older adults, and has no cure. However, progress of the disease may be diminished by lifestyle changes such as quitting smoking, and undergoing treatment for the condition.

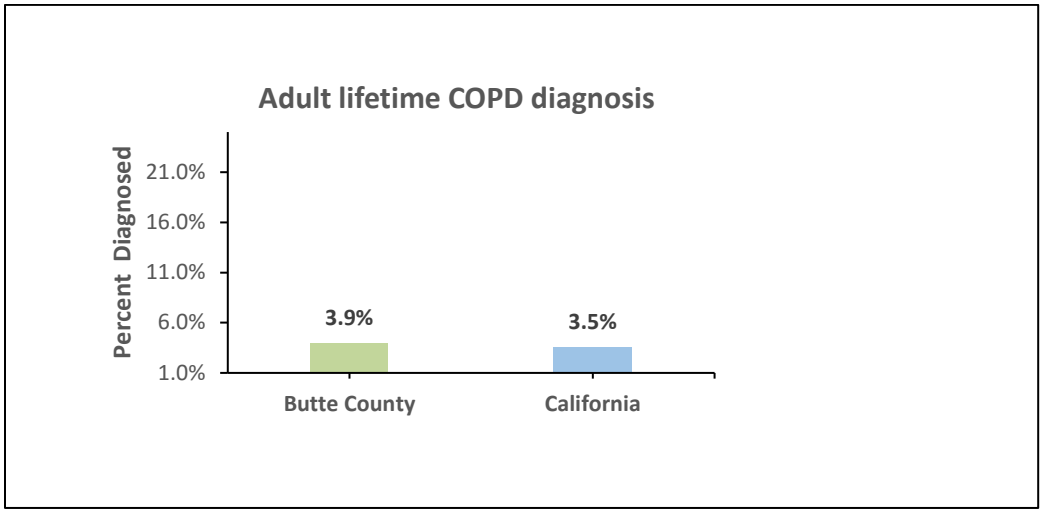


Figure Status-5: Percent of adults 18 and over diagnosed with COPD.

Source: Derived from Estimated Prevalence and Incidence of Lung Disease: American Lung Association: Epidemiology and Statistics Unit Research and Health Education, May 2014. Estimates based on 2012 BRFSS.

A slightly higher percentage of the adult population in Butte County than in California overall have been diagnosed with COPD, including chronic bronchitis and emphysema (see *Figure Status-5*).

Cardiovascular Disease

Cardiovascular diseases are diseases of the heart and the blood vessels throughout the body, including the blood vessels of the brain. Examples of cardiovascular disease include: coronary heart disease; heart failure; sudden cardiac death; hypertensive heart disease; irregular heartbeat (arrhythmia/atrial fibrillation); heart attack (myocardial infarction); and stroke (cerebrovascular disease).

[18] http://www.nhlbi.nih.gov/health/health-topics/topics/copd

[19] http://www.lung.org/lung-disease/copd/about-copd/understanding-copd.html

Table Status-29: Adults diagnosed with coronary heart disease or angina.

Report Area	Population Aged 18+	Adults with Heart Disease	Percent of Adults with Heart Disease
Butte County	229,609	15,603	6.8%
California	28,256,677	974,929	3.5%
United States	236,406,904	10,407,185	4.4%

Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County

Chronic morbidity and high mortality rates are associated with these diseases. In fact, coronary heart disease is the leading cause of death in the United States, and the second leading cause of death in Butte County. Lower socioeconomic status (SES) is associated with increased risk for cardiovascular disease including heart failure (cardiac arrest)[20]. In Butte County, approximately 7% of the total population is living with heart disease, which is higher than both California overall and the nation (see *Table Status-29*).

Heart Disease and Health Insurance

At-risk groups for heart disease and other chronic conditions have historically been uninsured and underinsured. These groups have historically faced considerable barriers to healthcare services, including the high costs associated with care for heart disease, and are less likely to seek preventive care or less intensive levels of care during less advanced stages of disease.

Table Status-30: Type of current health coverage for adults under age 65 in Butte County, 2014.

Ever diagnosed with heart disease	Uninsured	Medicaid	Employment-based	Privately purchased	Other public	All
Butte County						
Has heart disease	9.5%*	9.1%*	1.9%*	-	-	4.7%*
Doesn't have heart disease	90.5%* 18,000	90.9%* 34,000	98.1%* 75,000	100.0%* 7,000	100.0%* 1,000	95.3%* 134,000
California						
Has heart disease	3.1% 127,000	6.9% 322,000	2.2% 280,000	1.9%* 36,000	13.0%* 70,000	3.5% 835,000
Doesn't have heart disease	96.9% 3,951,000	93.1% 4,359,000	97.8% 12,275,000	98.1%* 1,815,000	87.0%* 470,000	96.5% 22,870,000

Source: California Health Interview Survey, 2014. * Statistically unstable: an unstable cell has not met the criteria for a minimum number of respondents needed AND/OR has exceeded an acceptable value for coefficient of variance. - (hyphen) = Estimate is less than 500 people.

[20] Reinier, K., Thomas, E., Andrusiekj, D.L., et al. (2011). Socioeconomic status and incidence of sudden cardiac arrest. Canadian Medical Association Journal. 183(15):1705–1712.

This has resulted in frequent failure to diagnose and treat potentially preventable chronic health conditions before they become more severe and also more expensive. In Butte County, nine percent of adults with heart disease under age 65 are Medicaid (e.g. Medi-Cal) recipients (see *Table Status-30*).

The 2010 Patient Protection and Affordable Care Act (ACA) has addressed some of the historical barriers to care for at-risk populations with chronic disease. The new law forbids health insurers from considering pre-existing health conditions during the practice of underwriting applicants for new health insurance policies. It also contains an individual mandate to purchase a health insurance policy or pay a fine for failing to do so; created a sliding scale health insurance purchasing system based on income; and expanded Medicaid (e.g. Medi-Cal) and Medicare eligibility to include more people. There has not been adequate time since the law went into effect to fully study the impact that this nationwide expansion of health insurance is having on access to healthcare services in historically high risk populations with chronic health conditions.

MENTAL HEALTH

The World Health Organization (WHO) defines mental health as "a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community". The WHO estimates that about half of the world's population is affected by a mental health disorder at some point in their lifetime. Mental health disorders can impact an individual's self-esteem, interpersonal and professional relationships, and ability to function in everyday life. An individual's mental health can also impact their physical health and patterns of behavior. For example, it is well known that individuals diagnosed with clinical depression experience more pain, and are at a higher risk of developing substance use disorders[21,22,23].

[21] Lépine, J. P., & Briley, M. (2004). The epidemiology of pain in depression. Human Psychopharmacology, Clinical and Experimental, 19: S3–S7.

[22] Davis L, Uezato A, Newell JM, Frazier E., (2008). Major depression and comorbid substance use disorders. Current Opinion in Psychiatry, 21: 14–18.

[23] Office of Applied Studies, Substance Abuse and Mental Health Services Administration. (2007). National Survey on Drug Use and Health (NSDUH)'s Report: Co-occurring Major Depressive Episode (MDE) and Alcohol Use Disorder among Adults. Rockville, MD: Substance Abuse and Mental Health Services Administration.

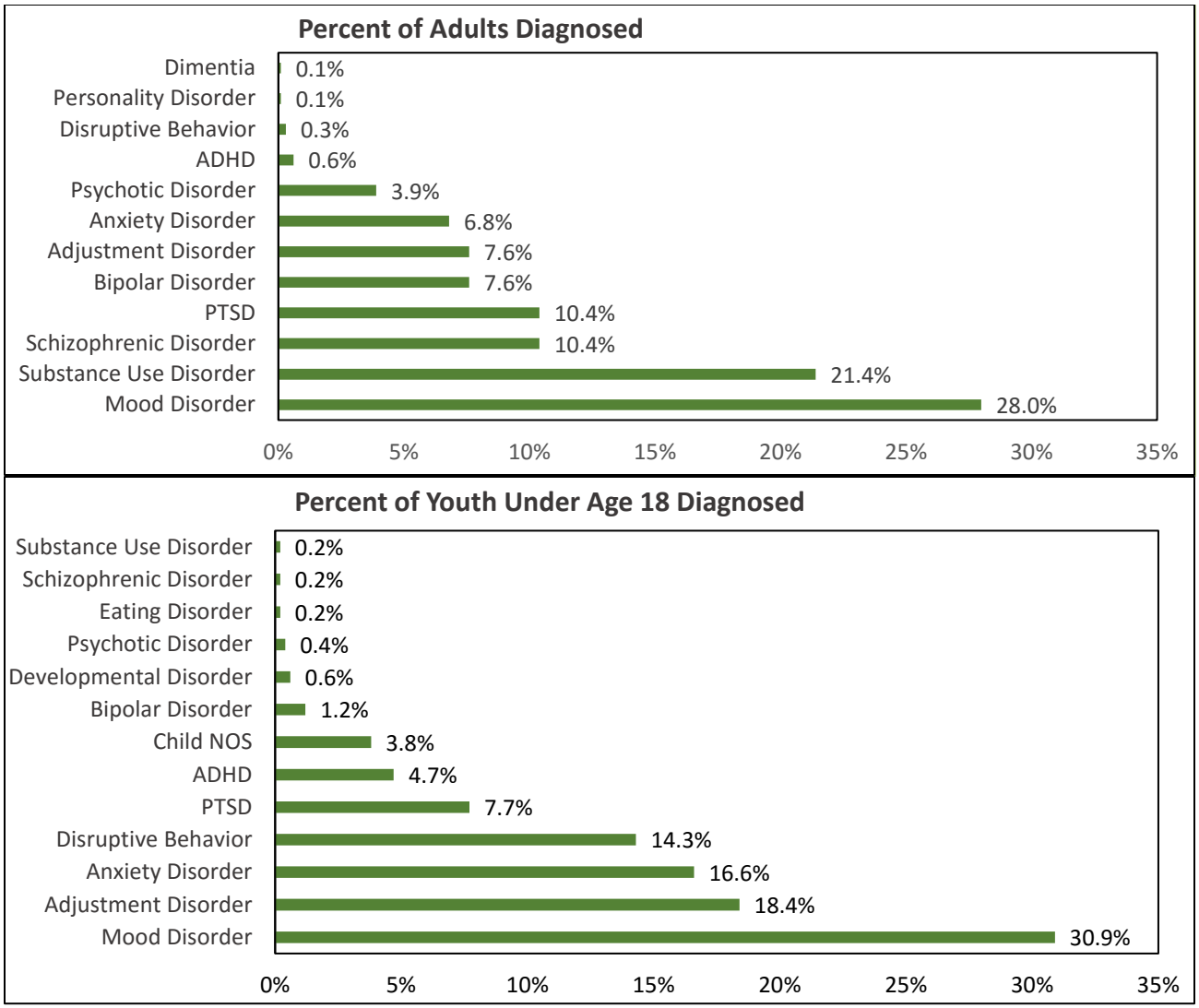


Figure Status-6: Mental Health Disorders for Adults and Youth under Age 18 Presenting at BCDBH, 2014-2015.
Source: Butte County Behavioral Health Systems Performance Data Report Fiscal Year 2014-2015.

The Butte County Department of Behavioral Health serves patients of all ages seeking treatment for mental health conditions. In 2014, the leading mental health diagnoses for both adults and youth (under age 18) receiving care at the Butte County Department of Behavioral Health were mood disorders, such as depression. The second leading diagnoses in adults were substance use disorders. When substance abuse is combined with a high rate of poverty, chances of suicide are increased. In contrast, adjustment disorders (poor coping in response to stressful events) were the second leading diagnosis for youth under the age of 18 in Butte County (see *Figure Status-6*). Of note, results of the Healthy Living in Butte County survey indicate that residents identifying as LGBT+ are significantly more likely to be concerned about mental health than residents identifying as exclusively heterosexual. Nationally, LGBT+

populations are more susceptible to depression and have a higher suicide rate than the general population[24].

Suicide

Suicide and suicidal behaviors affect people of all ages, ethnicities, religions, socioeconomic groups and geographic locations. Suicidal behavior is influenced by an array of biological, psychological, social, environmental and cultural risk factors. Suicide is the tenth leading cause of death in the nation[25].

Table Status-31: Suicide three-year average rates per 100,000 population, Butte County and California, 2012-2014.

County of residence	2013 Population	2012-2014 Deaths (3 year average)	Crude death rate	Age-adjusted death rate
Butte County	222,035	35.7	16.1	15.5
California	38,202,206	4,014.0	10.5	10.2

Source: California Department of Public Health, 2012-2014 Death Statistical Master Files.

Suicide rates in rural areas tend to be higher than in urban settings. It is likely that the number of suicides reported each year is lower than the actual number that occurs due to the negative social stigma associated with committing suicide. Between 2012 and 2014 there was an average of nearly 36 deaths attributed to suicide per year in Butte County. When this 3 year average is adjusted to calculate the crude death rate (e.g. the average number of suicides per year divided by the population, times 100,000), it is clear that suicide is roughly one and a half times as common per capita in Butte County as in California overall. This also holds true when these rates are adjusted for age (see *Table Status-32*).

Table Status-32: Age-adjusted suicide rates by gender in Butte County, California, and the U.S. per 100,000 population, 2009-2013.

Report Area	Male Suicide Rate	Female Suicide Rate
Butte County	29.0	8.3
California	16.3	4.6
United States	19.9	5.2

Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2009-13. Source geography: County

[24] Pandya, A., (2014). Mental health as an advocacy priority in the lesbian, gay, bisexual, and transgender communities. Journal of Psychiatric Practice, 20(3):225-7.

[25] http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_06.pdf

Males are significantly more likely to commit suicide, but females are more likely to report attempting suicide[26]. In Butte County, the suicide rate among men is significantly higher than women. However, both men and women in Butte County have higher suicide rates than California overall and the United States (see *Table Status-31*). Factors thought to underlie the gender specific difference in suicide rates include men being more likely to attempt suicide by gunshot which results in death more frequently, and that women are more likely to seek treatment for depression, a major risk factor for suicide.

Table Status-33: Five year suicide and nonfatal self-inflicted injury hospitalizations and emergency room visits[1] by method in Butte County, 2010 through 2014.

Method of Suicide/Self Inflicted Injury	Death attributed to Suicide, (2009 – 2013)		Self-inflicted injury resulting in Hospitalization		Self-inflicted injury resulting in Emergency Department visit	
	Number	Percent	Number	Percent	Number	Percent
Cut/Pierce	7	3.4%	74	9.1%	549	38.6%
Firearm	106	51.2%	8	1.0%	4	0.3%
Hanging/Suffocation	43	20.8%	6	0.7%	27	1.9%
Jump	6	2.9%	9	1.1%	2	0.1%
Poisoning	37	17.9%	699	85.7%	763	53.7%
Other	8	3.9%	20	2.5%	97	6.8%
Total	207	100.0%	816	100.0%	1,422	100.0%

Source: California Vital Statistics Death Files and California Office of Statewide Health Planning and Development, Patient Data. Report generated from http://epicenter.cdph.ca.gov on: June 1, 2016. California Department of Public Health, Safe and Active Communities Branch.

[1] Self-inflicted nonfatal injuries include many that are not necessarily "attempted suicides" (e.g., cut/pierce injuries and low-dose poisonings).

Additional risk factors for suicide include: a family history of suicide or past suicide attempts, mental or physical illness, substance abuse, stressful life events, and incarceration. According to the data collected by the California Vital Statistics Death Files and California Office of Statewide Health Planning and Development, poisoning is the most common form of intentional, self-inflicted, non-fatal injury resulting in hospitalization. Of all reported suicides, firearms were the most common method used, followed by hanging/suffocation and poisoning (see *Table Status-33*).

Veterans Mental Health

Men and women who have served in the U.S. military are at a higher risk than the general population for specific mental health issues. Between 2000 and 2007, a third of patients in the U.S. being treated at the Veterans Health Administration were diagnosed with a mental health

[26] Centers for Disease Control and Prevention. (2014). Suicide prevention. Retrieved from: http://www.cdc.gov/ViolencePrevention/pub/youth_suicide.html

disorder. Twenty percent were diagnosed with posttraumatic stress disorder (PTSD), and fourteen percent were diagnosed with depression. PTSD is thought to develop after a terrifying experience, or series of experiences, involving physical harm or the threat of physical harm. While it is frequently associated with veterans returning from combat, it may also occur in the general population due to traumatic experiences such as child abuse, car accidents, plane crashes, natural disasters, or rape. It is characterized by three categories of symptoms: re-experiencing (flashbacks, nightmares), avoidance (trouble remembering the event, avoiding places or objects that are reminders of the experience), and hyper-arousal (being on edge or easily startled[27]).

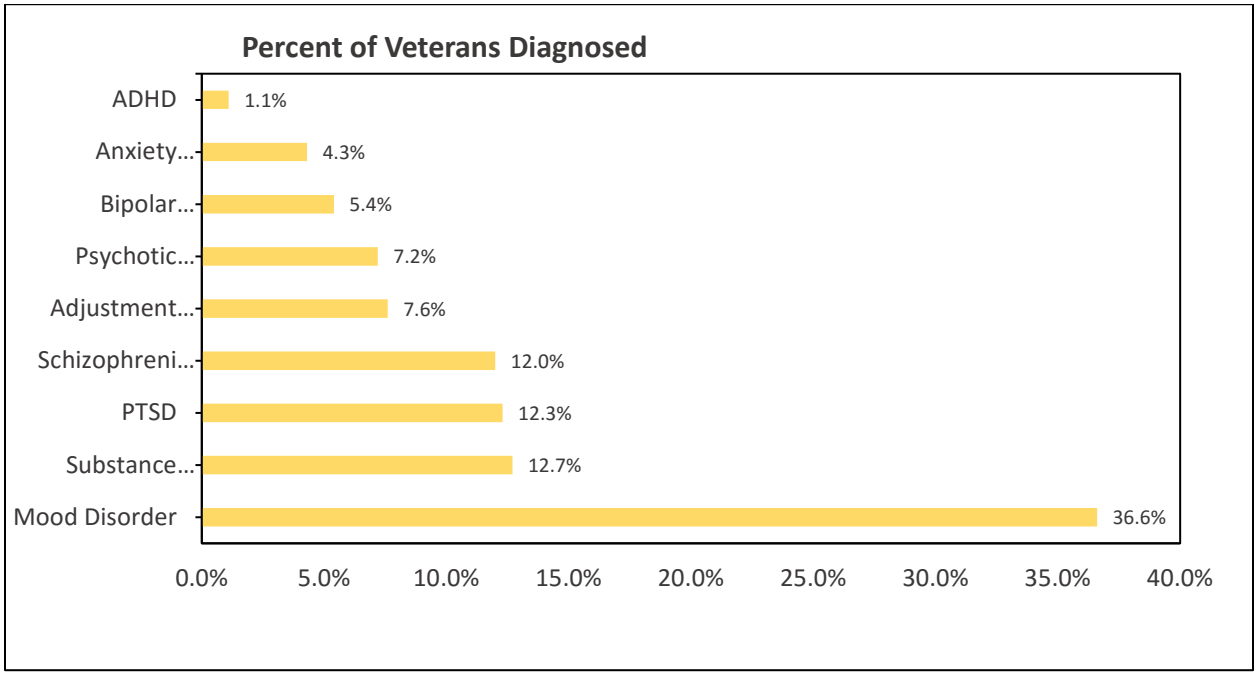


Figure Status-7: Mental Health Disorders for Veterans Presenting at BCDBH, 2014-2015.
Source: Butte County Behavioral Health Systems Performance Data Report Fiscal Year 2014-2015.

In 2015, the leading mental health diagnosis for veterans seeking care at the Butte County Department of Behavioral Health was mood disorders, such as depression, followed by substance use disorders, PTSD, and schizophrenia (see *Figure Status-7*). These are the leading mental health diagnoses among veterans nationally[28]. Roughly fifteen percent of patients identifying as veterans while seeking care at the Butte County Department of Behavioral Health indicated they were homeless at the time of treatment. This is considerably higher than the percent of adults seeking treatment overall that indicated they were homeless (8.6%), and is of particular concern as homeless veterans have been shown to be at a significantly higher risk of

[27] http://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd/index.shtml

[28] http://www.samhsa.gov/veterans-military-families

developing a substance use disorder[29]. Of note is that exposure to "theatre of combat" while serving increases the risk for developing mental health disorders, and there is a well-documented shortage of mental health care providers in the Veterans Health Administration, with less than half of veterans reporting adequate access to mental health care services. The level of rurality experienced by veterans in Butte County may also be a factor in their ability to obtain adequate mental health care services, as there are likely transportation and other geographic barriers to accessing care.

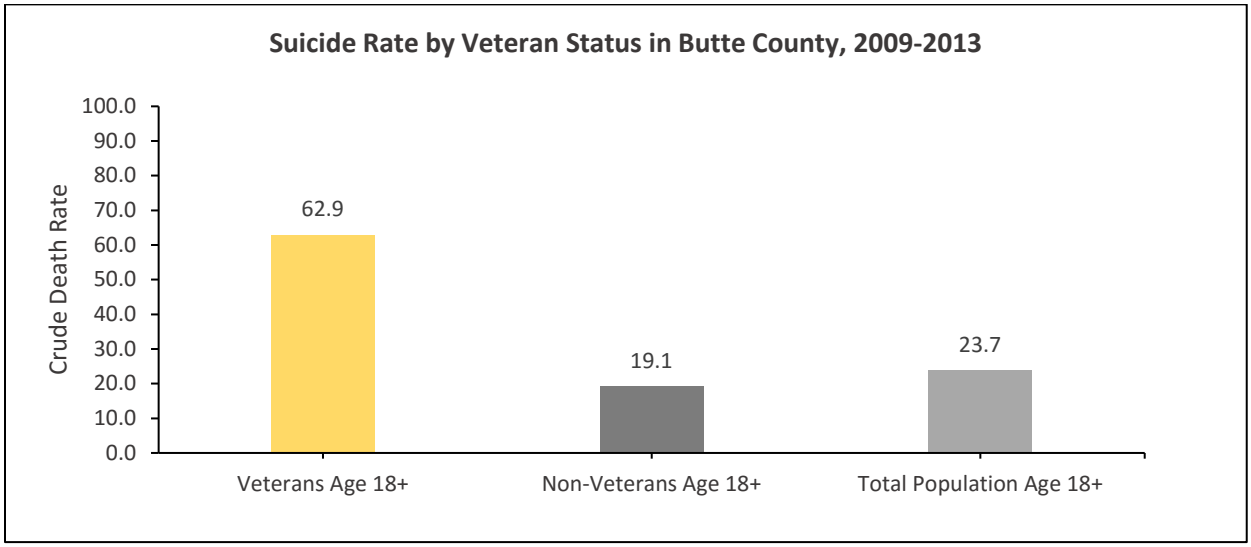


Figure Status-8: Suicide by Veteran Status, Age 18 Years and Over in Butte County, 2009-2013.
Adapted from: California Vital Statistics Death Files. Report generated from http://epicenter.cdph.ca.gov on: February 25, 2015; and U.S. Census Bureau, 2009-2013 5-Year American Community Survey.
Rates are calculated per 100,000 population.

There is increased concern for suicide risk in the veteran population. In the United States, an active duty military member commits suicide every 36 hours[30], and a veteran commits suicide every 80 minutes[31]. Suicide has accounted for significantly more deaths among active duty military and veterans of the Iraq / Afghanistan conflicts than deaths from combat, with suicide among active duty Army reaching the highest rate ever recorded in 2012[32]. Understanding and reducing deaths from suicide among veterans is a national priority. The American Psychiatric Association reports that veteran males in the U.S. have twice the risk for suicide than non-

[29] http://www.samhsa.gov/data/sites/default/files/spot121-homeless-veterans-2014.pdf

[30] Department of Defense, (2010). The Challenge and the Promise: Strengthening the Force, Preventing Suicide, and Saving Lives. Final Report of the DOD Task Force on Prevention of Suicide by Members of the Armed Forces.

[31] http://www.cnas.org/files/documents/publications/CNAS_LosingTheBattle_HarrellBerglass.pdf

[32] http://www.samhsa.gov/veterans-military-families.

veteran males. Veteran females are three times more likely to commit suicide than non-veteran females.

From 2009 to 2013, the suicide rate per 100,000 population among veterans was roughly three times as high as non-veterans age 18 and over in Butte County (see *Figure Status-8*).

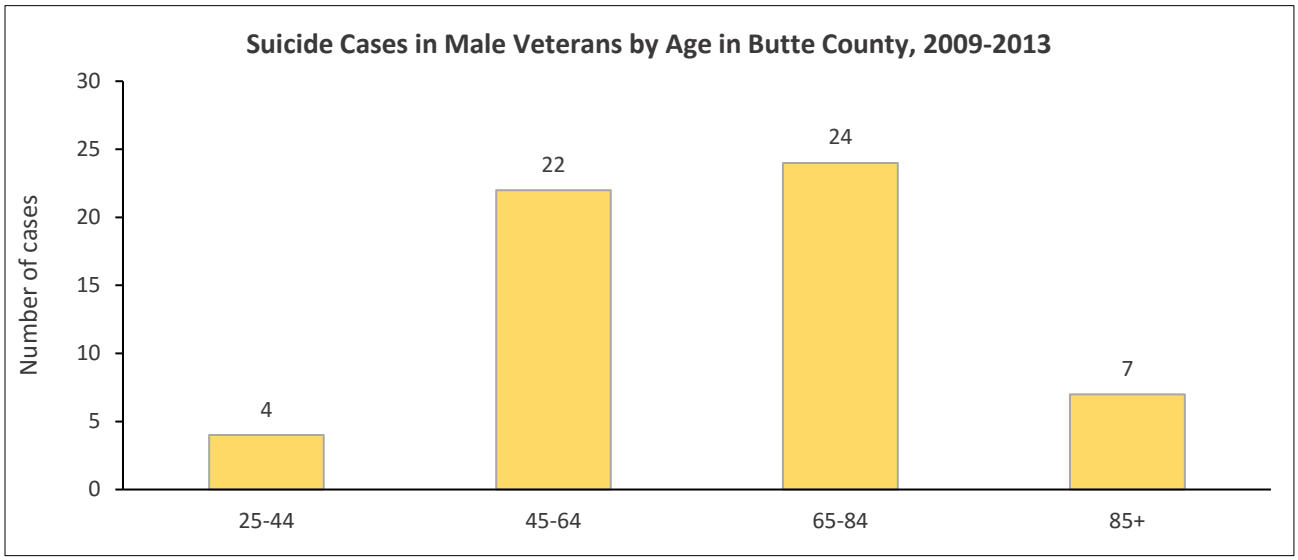


Figure Status-9: Veteran Suicide Cases by Age in Males Age 25 Years and Over in Butte County, 2009-2013.
Source: California Vital Statistics Death Files. Report generated from http://epicenter.cdph.ca.gov on: June 1, 2016. California Department of Public Health, Safe and Active Communities Branch.

Patterns of suicide risk across age groups differ among veterans, compared with risks in the general population. Older veterans are understood to have higher risks for suicide than younger veterans. In Butte County, veterans between the ages of 65-84 years have a higher risk for committing suicide than other veteran age groups (see *Figure Status-9*). This is observed on a national level as well, with approximately 7 out of 10 veteran suicides occurring in veterans over the age of 50[33]. Factors other than age that increase the risk for suicide among veterans include: being male, having access to guns, and living in a rural area.

Mental Health and Addiction Parity

In the U.S., the Department of Health and Human Services estimates that fewer than 1 out of 5 people are living completely free of any mental health concerns. People with both short term and chronic mental health conditions often go unrecognized and untreated. This is associated with shortened life span, lower rates of full time and steady employment, and higher rates of homelessness.

[33] http://www.va.gov/opa/docs/Suicide-Data-Report-2012-final.pdf

One reason that people with mental health concerns frequently go untreated is due to a negative stigma often associated with mental health disorders. Symptoms of both mental health and substance use disorders have frequently been viewed as failings of character rather than attributed to a medical condition. The stigma associated with mental health disorders remains a major barrier to treatment for people experiencing symptoms.

Table Status-34: Adults over age 18 reporting difficulties/delays obtaining care for mental health in Butte County and California, 2005.

Report Area	Had difficulties or delays		Didn't have difficulties or delays		Total	
	Number	Percent	Number	Percent	Number	Percent
Butte County	4,000	10.4%*	36,000	89.6%*	40,000	100%
California	357,000	6.5%	5,149,000	93.5%	5,507,000	100%

Source: 2005 California Health Interview Survey
* Statistically unstable: an unstable cell has not met the criteria for a minimum number of respondents needed AND/OR has exceeded an acceptable value for coefficient of variance; - (hyphen) = Estimate is less than 500 people.

Historically, there have also been financial barriers to treatment distinct from general medical conditions such that insurers were less likely to include coverage for mental health services. However, the federal Mental Health Parity and Addiction Equity Act of 2008 has required all group health insurance plans that offer mental health benefits to do so at a level equivalent to those offered for general medical care, including benefits for substance use disorder treatment. Among adults in Butte County who reported a need for assistance with mental health, slightly more than ten percent reported difficulties or delays in receiving care (see *Status-34*).

SUBSTANCE-RELATED AND ADDICTIVE DISORDERS

The most recently released edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) treats substance abuse and dependence as a continuum with mild to severe symptoms. Generally, substance abuse is less severe and thought of as the over consumption of an addictive substance such as alcohol (e.g. binge drinking), while substance dependence is more severe and is marked by the development of tolerance for the substance and symptoms of psychological and physiological withdrawal in its absence (e.g. delirium tremens). The American Society of Addiction Medicine defines addiction as "a primary, chronic disease of brain reward, motivation, memory and related circuitry" adding that "dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors[34]." Substance-related and addictive disorders impose an incredible cost to

[34] http://www.asam.org/for-the-public/definition-of-addiction

individuals, families, and society, with an estimated financial strain annually in the U.S. of over half a trillion dollars[35]. These disorders often occur simultaneously with other health problems (e.g. comorbid disorders), including mental health conditions and chronic pain among others.

Alcohol abuse

One of the most common forms of alcohol abuse is binge drinking. Binge drinking is defined as having had five or more drinks on a single occasion at least once in the past month. It is associated with health problems including: unintentional injuries; intentional injuries; alcohol poisoning; liver disease; sexually transmitted diseases; and cardiovascular diseases among others[36].

Table Status-35: Adult binge drinking in the past year; 2014

Binge drinking in the past year	Butte		California	
	Population	Percentage	Population	Percentage
No binge drinking in past year	111,000	63.8%	19,222,000	67.4%
Binge drinking in past year	63,000	36.2%	9,317,000	32.6%
Total	174,000	100.0%	28,539,000	100.0%

Source: 2014 California Health Interview Survey

In Butte County, adults age 18 and over reported binge drinking at a slightly higher rate than the statewide rate in 2014 (see *Table Status-35*). This is likely influenced by the percentage of young adults attending college and universities in Butte County, as statewide and national data suggest that binge drinking is a particular concern among college age adults, with over fifty percent of college students reporting binge drinking nationally[37].

Underage drinking is associated with a wide range of health, social, and academic challenges. Teen alcohol consumption has been linked to risky health behaviors such as unprotected sex and impaired driving, poor academic performance, physical and/or dating violence, motor vehicle accidents, crime, and suicide attempts[38].

[35] http://www.drugabuse.gov/related-topics/trends-statistics

[36] http://www.cdc.gov/alcohol/fact-sheets/ binge-drinking.htm

[37] http://www.niaaa.nih.gov/alcohol-health/special-populations-co-occurring-disorders/college-drinking

[38] Child Trends. (2012). Binge drinking. Retrieved from: http://www.childtrendsdatabank.org/?q=node/284

Table Status-36: Binge Drinking by Grade Level in Butte County and California, 2011 - 2013

	Percent of Teens Binge Drinking in Butte County by Number of Days in Last 30					
Grade	**0 days**	**1 day**	**2 days**	**3-9 days**	**10-19 days**	**20-30 days**
7th Grade	95.4%	1.6%	0.9%	0.7%	0.4%	1.1%
9th Grade	88.7%	3.1%	2.6%	2.9%	1.0%	1.7%
11th	77.8%	4.9%	5.3%	6.9%	2.3%	2.8%
All	87.6%	3.1%	2.9%	3.4%	1.2%	1.8%
	Percent of Teens Binge Drinking in California by Number of Days in Last 30					
Grade	**0 days**	**1 day**	**2 days**	**3-9 days**	**10-19 days**	**20-30 days**
7th Grade	94.8%	1.9%	0.9%	0.9%	0.5%	0.9%
9th Grade	88.7%	3.8%	2.3%	2.3%	1.0%	1.9%
11th	79.3%	6.3%	4.2%	6.0%	2.0%	2.2%
All	86.4%	4.3%	2.7%	3.4%	1.4%	1.9%

Source: 2011 - 2013 California Healthy Kids Survey (CHKS)

Excessive alcohol consumption that continues into adulthood can have long-term consequences. The rate of binge drinking among teenagers in Butte County is slightly lower than for the state of California overall (see *Table Status-36*).

Illicit substance abuse

The use of illicit substances (e.g. street drugs) is associated with adverse effects on both short and long term physiological, neurological, and behavioral health. These include cardiovascular disease, stroke, cancer, HIV/AIDS, hepatitis, and lung disease; as well as an increased risk for mood, anxiety, and other mental health disorders.

The use of marijuana by teens is associated with poor academic performance, delinquency and aggressive behavior[36]. Smoking marijuana can trigger anxiety attacks, memory impairment, coordination loss, increased heart rate, breathing problems, and/or cognitive deficits[39].

[39] National Institute on Drug Abuse. (2015). Marijuana Facts for Teens: National Institutes of Health; U.S. Department of Health and Human Services. NIH Pub. No. 15-4037.

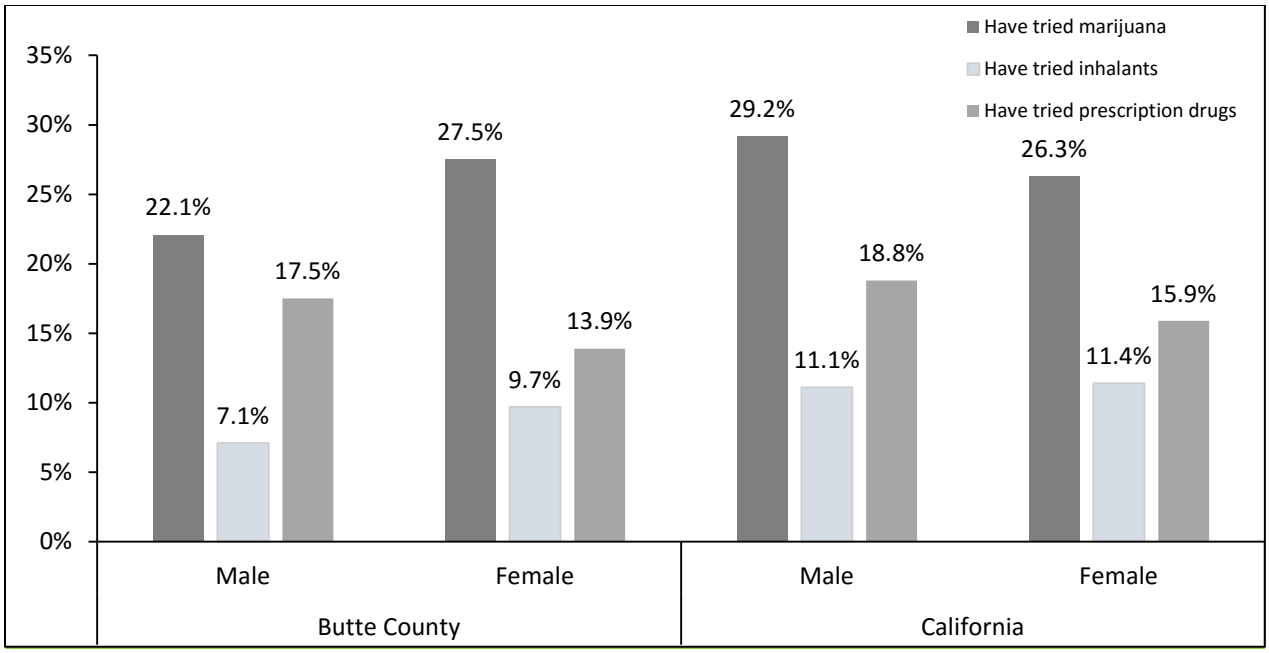


Figure Status-10: Percentages of teens who have ever tried marijuana, inhalants, or prescription drugs by gender.
Source: 2011 - 2013 California Healthy Kids Survey (CHKS)

The percentage of teens in Butte County who reported ever trying marijuana, inhalants, or the recreational use of prescription drugs was lower than in California overall, except for female marijuana use which was slightly higher for Butte County (see *Figure Status-10*).

Table Status-37: Health consequences[1] of alcohol and drug abuse, ED treat and release rates, 2014

Location	Alcohol		Drugs of Abuse	
	Number	Rate	Number	Rate
Butte County	2,270	1,011.1	1,854	825.8
California	294,430	763.8	248,713	645.2

Source: California Office of Statewide Health Planning and Development, Emergency Department Patient Data Report generated from http://epicenter.cdph.ca.gov on: http://epicenter.cdph.ca.gov on: June 03, 2016. Rates are per 100,000 people in the population.
[1] Health consequences include alcohol and drug (AOD) poisoning (overdoses), mental disorders, and physical diseases 100% attributable to AOD, but not indirect consequences of AOD (e.g., motor vehicle injuries due to AOD impairment).

Patients frequently present at hospital Emergency Departments (ED) seeking treatment for acute substance and alcohol related conditions such as an unintentional drug overdose or alcohol poisoning. The ED treatment and release rates for conditions related to both alcohol and drugs abuse were considerably higher for Butte County than for California overall (see *Table Status-37*).

Tobacco

Smoking and tobacco use are contributing risk factors for a number of adverse health conditions including heart disease, stroke and respiratory illnesses. Smoking and tobacco use during adolescence may lead to additional unhealthy behavior and substance abuse, and almost all smokers begin in adolescence[40]. Research demonstrates that the density of tobacco retailers located near schools is directly associated with adolescent smoking. Restricting access to retail tobacco sources for adolescent youth through local ordinances has been shown to reduce rates of smoking.

Table Status-38: Tobacco retail density

Local Lead Agency	2012 Census County Population Estimate	Tobacco Retailer Count	Retailers per 1,000 Population	Number Retailers w/in 1000 feet of a School	Percent Retailers w/in 1000 feet of a School
Butte	221,539	237	1.07	58	24.47%
California	38,016,323	36777	0.97	10066	27.37%

Source: California Board of Equalization (BOE) List of Licensed Tobacco Retailers, 11/30/2012
All retailers on the BOE list are included

In Butte County the tobacco retail density is one tobacco retailer location per 1,000 people, which is just slightly higher than for California overall. However, the percent of tobacco retailers within half a mile of a school is slightly lower for the state overall than for Butte County (see *Table Status-38*).

Table Status-39: Adult smoking prevalence, 2008.

Smoking prevalence	Butte		California	
	Sample Size	Percentage	Sample Size	Percentage
Current Smoker	3,643	18.7%	43,553	13.2%
Daily Smoker	3,645	14.1%	43,572	9.3%
Occasional Smoker	3,645	4.6%	43,572	3.9%

Source: http://www.cstats.info/

The national Healthy People 2020 objective is a target of fewer than 12.0% of adults using tobacco products. Tobacco use in Butte County is similar to the national average, but remains higher than for California overall as well as the Healthy People 2020 objective (see *Table Status-39*).

[40] Youth and Tobacco Use. (2013). *Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health*. Retrieved from: http://www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/

Table Status-40: Youth smoking prevalence, 2010

Smoking prevalence	Butte County		California	
	Sample Size	Percentage	Sample Size	Percentage
Current Smoker	1,133	10.8%	23,061	13.8%
Daily Smoker	1,133	2.0%	23,061	2.4%
Ever Smoked	1,132	30.3%	23,019	36.9%

Source: http://www.cstats.info/

According to the 2010 County and Statewide Tobacco Statistics data, tobacco use among youth in Butte County was lower than for California overall, with roughly 11.0% and 14.0% of youth using tobacco in Butte County and California, respectively (see *Table Status-40*).

Prescription Opioid Abuse

Abuse of prescription opioids such as hydrocodone and oxycodone have become one of the most serious national substance related problems over the past decade. According to the CDC, overdose from prescription opioids have reached epidemic levels, accounting for more unintentional deaths than motor vehicle crashes. In 2012, prescription opioids accounted for more than half of the 41,000 deaths in the U.S. attributed to a drug overdoses[41].

Abuse and dependence on prescription opioids have also been well documented as a pathway for addiction to street heroin, as in many instances street heroin may be more attainable for individuals who have become physiologically dependent on prescription opioids but lack a current prescription[42,43]. This has also created a black market for prescription opioids in recent years, which has increased their street value such that it exceeds their value in a pharmacy. In California, deaths involving prescription opioid medications have increased 16.5% since 2006. In 2012, roughly 7 in 10 deaths from opioids of all types (e.g. street heroin and prescription) were attributed to prescription opioids.

Table Status-41: Drug induced death rates in Butte County and California, 2011-2013.

Drug Induced Deaths	Butte County (age adjusted death rates)	California Current (age adjusted death rates)	National Objective
3 Year Average	32.6	11.1	11.3

Source: California Department of Public Health: 2011-2013 Death Statistical Master Files
http://www.cdph.ca.gov/programs/ohir/Documents/OHIRProfiles2016.pdf

[41] http://www.cdph.ca.gov/Pages/OpioidMisuseWorkgroup.aspx

[42] http://newsatjama.jama.com/2014/02/03/pain-medication-abuse-likely-driving-heroin-resurgence/

[43] United States Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. Office of Applied Studies. National Survey on Drug Use and Health, 2012.

In 2013, Butte County ranked 56th out of 58 counties in California for drug induced deaths, meaning 55 counties had a lower age adjusted death rate (AADR). The AADR for drug induced deaths in Butte County was also nearly three times as high as for California overall (see *Table Status-41*). Given the recent rise of deaths involving opioids, it can be assumed that a significant portion of these drug induced deaths in Butte County were due to the misuse of prescription opioids.

SEXUALLY TRANSMITTED INFECTIONS

Sexually transmitted infections (STIs) are some of the most widespread infections worldwide. STIs affect both men and women. Exposure to STIs may increase if you have more than one sex partner or do not use condoms. More than 25 diseases can be transmitted sexually. According to the Center for Disease Control and Prevention (CDC), gonorrhea, chlamydia, and syphilis are the most common sexually transmitted diseases and almost half occur among young people between the ages of 15 and 24 years.

Chlamydia

Chlamydia is a common sexually transmitted disease (STD) caused by a bacterium, infecting both men and women. In female cases, it can cause serious, permanent damage to a woman's reproductive organs. Chlamydia can also be spread from an infected woman to her baby during childbirth. Chlamydia is known as a silent infection because most people infected have no symptoms. If symptoms do occur, they may not appear until several weeks after exposure. Even when no symptoms are present, chlamydial infections can lead to serious health problems.

Table Status-42: Chlamydia Cases and Rates by Gender and Age Group, 2014

	Butte County				California			
	Male		Female		Male		Female	
Age Group	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*
0 - 9	0	0.0	0	0.0	19	0.7	40	1.6
10 - 14	0	0.0	4	64.2	100	7.8	630	51.3
15 - 17	8	205.2	39	1,037.6	2,520	319.6	9,679	1,281.3
18 - 19	28	605.1	164	3,743.4	4,727	827.0	17,703	3,279.2
20 - 24	164	1,452.9	359	3,383.0	18,908	1,253.8	46,447	3,343.0
25 - 29	69	816.5	109	1,475.6	13,655	961.2	20,814	1,575.4
30 - 34	29	384.3	42	627.6	7,785	551.5	9,283	688.5
35 - 44	19	162.4	28	247.6	7,236	279.5	6,731	262.5
45 - 54	4	30.9	6	44.9	3,566	137.0	1,859	71.0
55 - 64	3	20.5	0	0.0	973	44.2	447	19.1
65+	0	0.0	0	0.0	215	9.7	99	3.6
Not Specified	1	-	0	-	330	-	511	-
Total	**325**	**292.1**	**751**	**666.7**	**60,034**	**313.4**	**114,243**	**590.6**

Source: California Department of Public Health, STD Control Branch; *Incidence per 100,000 population.

Chlamydia is most common in adults between the ages of 18 and 29. Younger females between the ages of 20 and 24 have the highest number of reported cases, likely due to increased screening efforts in women younger than 26. It is also likely that a considerable number of male cases are not reported because men with the infection typically don't have symptoms. In 2012, the rates of reported cases in Butte County were slightly lower than for California overall for both men and women (see *Table Status-42*). The higher rate of chlamydia in women for both Butte County and California overall is most likely due to differences in best clinical screening practices for male and female patients.

Gonorrhea

Gonorrhea is an STD that is also caused by a bacterium. Gonorrhea can grow easily in the warm, moist areas of the female reproductive tract, including the cervix (opening to the womb), uterus (womb), and fallopian tubes (egg canals); and in the male and female the urethra (urine canal). The bacterium can also grow in the mouth, throat, eyes, and anus. Gonorrhea is a very common infectious disease and it can be spread from an untreated mother to her baby during childbirth. People infected with gonorrhea are at risk of developing serious complications from the disease, even if symptoms are not present or are mild.

Table Status-43: Gonorrhea, Cases and Rates by Gender and Age Group, 2014

	Butte County				California			
	Male		Female		Male		Female	
Age Group	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
0 - 9	0	0.0	1	8.4	7	0.3	15	0.6
10 - 14	1	15.5	2	32.1	37	2.9	113	9.2
15 - 17	3	77.0	2	53.2	691	87.6	1,298	171.8
18 - 19	10	216.1	22	502.2	1,670	292.2	1,984	367.5
20 - 24	30	265.8	41	386.4	6,899	457.5	5,145	370.3
25 - 29	41	485.2	35	473.8	6,372	448.5	3,228	244.3
30 - 34	27	357.8	23	343.7	4,666	330.5	1,739	129.0
35 - 44	22	188.1	16	141.5	4,787	184.9	1,507	58.8
45 - 54	16	123.6	5	37.4	2,820	108.3	578	22.1
55 - 64	3	20.5	0	0.0	783	35.6	147	6.3
65+	0	0.0	0	0.0	132	6.0	25	0.9
Not Specified	1	-	0	-	162	-	85	-
Total	154	138.4	147	130.5	29,026	151.5	15,864	82.0

Source: California Department of Public Health, STD Control Branch; *Incidence per 100,000 population.

In 2014, a total of 154 male and 147 female cases of gonorrhea were reported in Butte County. The reported gonorrhea case rates were highest in both males and females between the ages of 25-29 years. In Butte County, the rates of reported cases were lower than for California overall in men, but considerably higher than California overall in women (see *Table Status-43)*.

STI's caused by bacterium are treatable and in many instances can be cured with antibiotics. However, this does not reverse the damage caused prior to treatment, and some strains of gonorrhea have developed resistance to the cephalosporin antibiotic drugs prescribed to treat it. The CDC predicts that these strains of gonorrhea may soon become untreatable with *any* currently available antibiotics, and has advocated for the rapid research and development of new treatment options[44].

MATERNAL AND CHILD DATA

The wellbeing of mothers, infants, and children helps to determine the health outcomes of future generations. It predicts public health challenges for families, communities, and the healthcare system. Healthy birth outcomes, early identification of health conditions, and proper treatment among infants/children can prevent illness and provide positive growth experiences.

Breastfeeding

Breastfeeding provides the most complete form of nutrition for infants, as breast milk strengthens the immune system and facilitates proper growth. Breastfeeding for the first three months significantly lowers the risk of ear, respiratory tract, and gastrointestinal tract infections.

Table Status-44: Breast feeding trend in Butte County, 2010 to 2013

Year	2010	2011	2012	2013
Butte County	76.2%	76.2%	77.6%	79.7%
California	56.8%	60.6%	62.6%	64.8%

Source: Kidsdata.org. Accessed July 8, 2016 from:
http://www.kidsdata.org/topic/243/breastfeedingstatus/trend#fmt=299&loc=2&tf=46,67&ch=491&pdist=16

The percent of Butte County newborns being fed breast milk during their birth hospitalization period has recently increased. In fact, mothers in Butte County are more likely to breastfeed than mothers in California overall (see *Table Status-44*).

[44] http://www.cdc.gov/Std/Gonorrhea/arg/default.htm

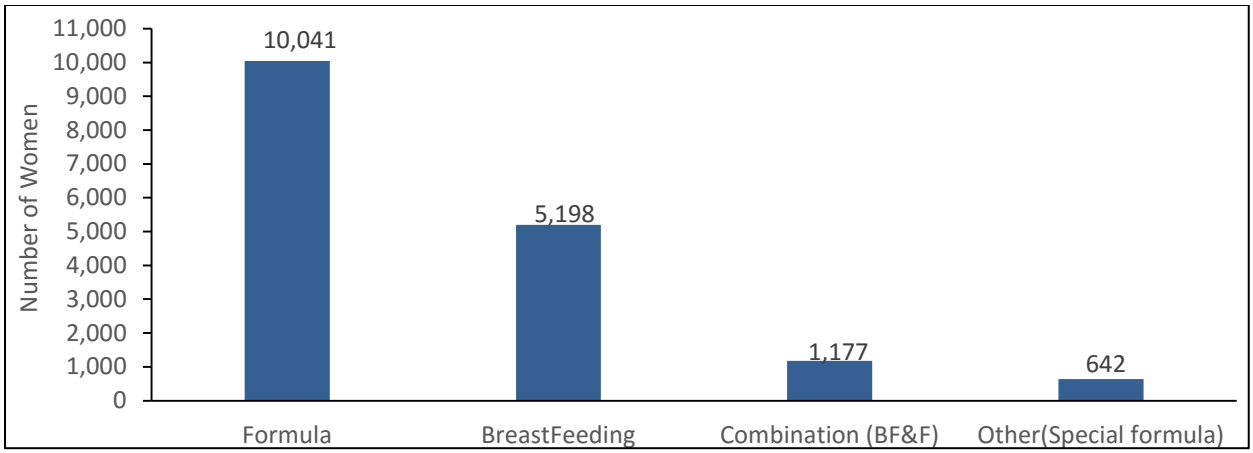


Figure Status-11: Total numbers of women breastfeeding in Butte County for the year 2014; WIC data
Source: Butte County WIC

According to the annual California Breastfeeding and Hospital Performance Review produced by the California Women Infants and Children Association (WIC), many mothers give up on their breastfeeding goals. Nearly two-thirds of women plan to breastfeed exclusively, but less than half report doing so one month after giving birth. This suggests that many women are not prepared for the demands of a new baby and may find the task of breastfeeding their infant to be overwhelming. In 2014, nearly twice as many women reported using formula as women who reported breastfeeding their children (see *Figure Status-11*).

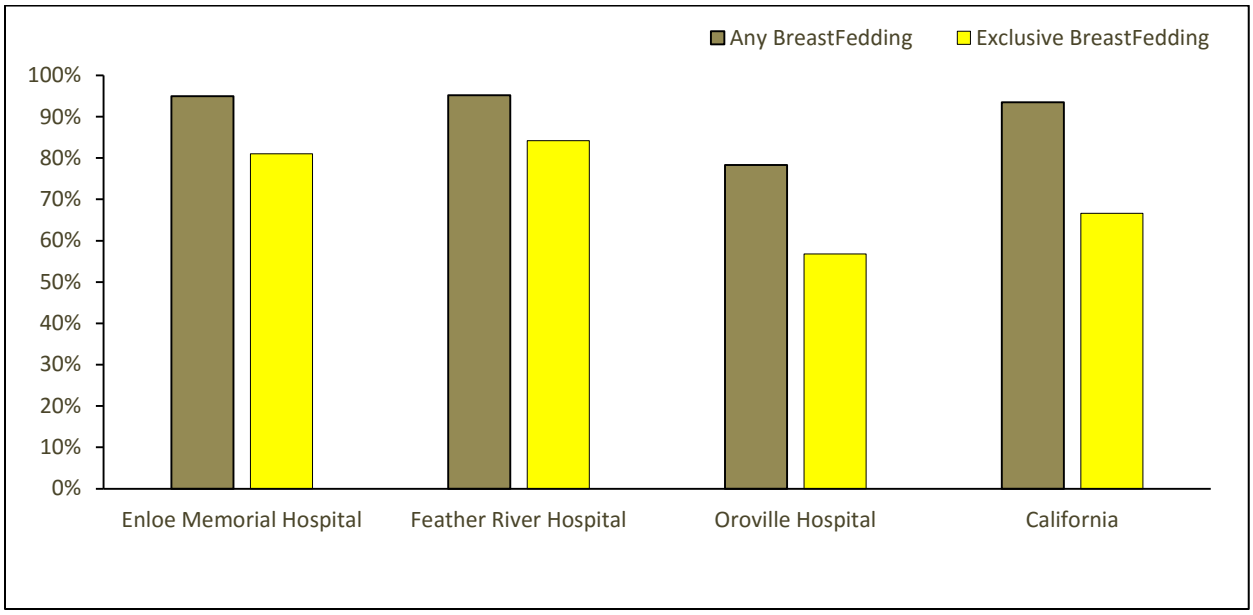


Figure Status-12: In-hospital breastfeeding rates in Butte County and California hospitals, 2014
Source: California WIC Association, 2015. Accessed July 8, 2016 from:
http://www.calwic.org/storage/documents/factsheets2015/Butte.pdf

A hospital's health policies and procedures have a significant impact on breastfeeding. While breastfeeding is a natural process, studies indicate that a mother's experience in the hospital may influence the mothers' willingness to breastfeed their infant. Cooperation between hospitals, health care providers, public health agencies, and support groups is essential to ensure that all new mothers have the resources needed to breastfeed in the hospital and in their homes. According to California Breastfeeding and Hospital Performance Review, Butte County ranked 21st statewide for exclusive breastfeeding in hospitals among new mothers in 2014. However there was some variation between local hospitals (see *Figure Status-12*).

Teen Pregnancy

Infants of teen mothers are at a greater risk for physical, social, and emotional challenges than infants of mothers in their 20s and early 30s[45]. Teen mothers are more likely to have babies born prematurely or with low birth-weight, and their infants are at a much greater risk of death[12]. Children born to teen mothers are also at greater risk for academic and behavioral problems later in their lives, such as math and reading comprehension, poor motor skills, communication skills, and social skills[46]. In addition, children born to teen mothers are at greater risk of becoming part of the foster care system.

Table Status-45: Teen birth rates in Butte County and California, 3 Year Averages, 2012-2014.

	Population	Number of births	Rates per 1000
Butte			
Teens (Ages 15 -19)	8,244	166.3	20.2
California			
Teen (Ages 15 -19)	1,314,431	30,817.5	23.4

Source: (California Department of Public Health 2012-2014 Birth Records)

Giving birth as a teenager can create disadvantages for both the mother and the father. Teen mothers are more likely to become dependent on public welfare programs than other teens[1]. Both teen mothers and fathers are more likely to attain lower levels of education, as well as lower income levels. However, it is important to note that some teen parents are able to manage these challenges successfully and reach their educational or career goals later in life. Between 2012 and 2014, the Butte County birth rate for teens was just slightly lower than for the state of California overall (see *Table Status-45*).

[45] Child Trends. (2013). Teen births. Retrieved from: http://www.childtrends.org/?indicators=teen-births

[46] The National Campaign to Prevent Teen Pregnancy. (2007). Why it matters: Teen pregnancy and overall child well-being. Retrieved from: http://thenationalcampaign.org/resource/why-it-matters-teen-pregnancy-and-overall-child-wellbeing

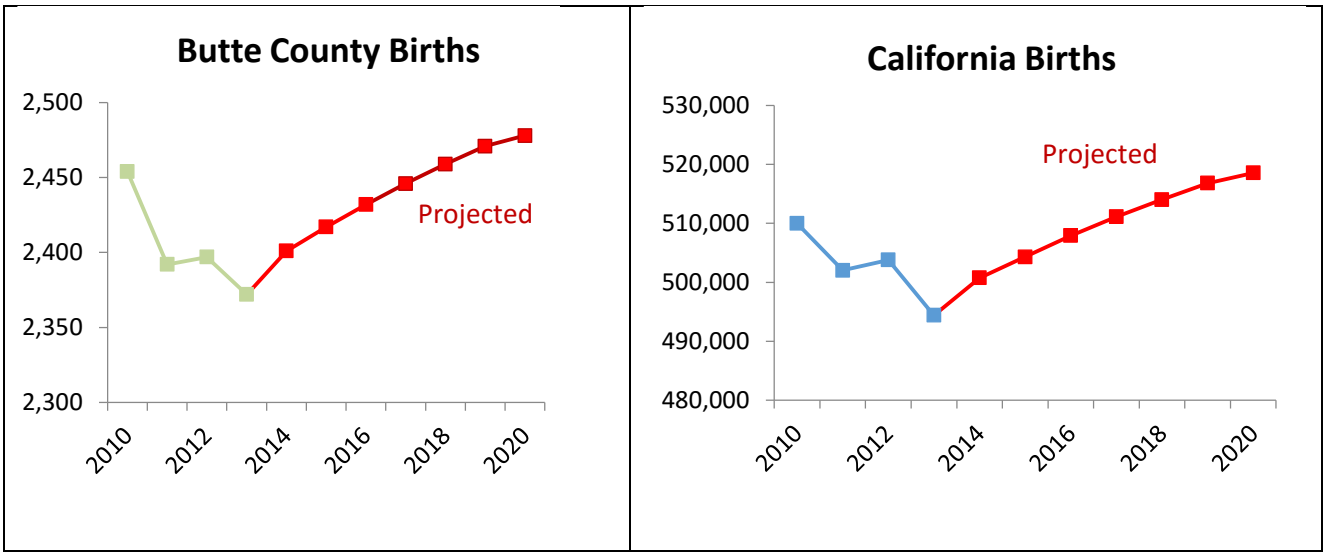


Figure Status-13: Projected births by year: 2010-2020
Source: (California Department of Public Health, 2014)

Birthrates

Trends in the population of children provide a clear understanding of the need for education, child care, health care, and other services for children. The child population in Butte County as well as the state are projected to grow steadily from now through 2020 (see *Figure Status-13*).

Table Status-46: Births to mothers between the ages 15 and 19 in Butte County, 2008 – 2013.

Butte County	2008	2009	2010	2011	2012	2013
Total Births	284	234	209	205	191	157
Delivery Payment Source						
Medi-Cal	87.3%	89.7%	82.8%	84.4%	90.1%	87.9%
Private Insurance	9.9%	8.5%	13.4%	12.7%	8.4%	10.8%
Self-Pay	1.4%	1.3%	2.4%	1.5%	1.0%	0.6%
Other	1.4%	0.4%	1.4%	1.5%	0.5%	0.6%

Source: (California Department of Public Health, 2013)

Information on payment sources related to labor and delivery is helpful in projecting the need for public medical assistance related to pregnancy and childbirth. From 2008 to 2013, the number of total deliveries to teen mothers in Butte County declined dramatically. However, the percentage of Medi-Cal payments for delivery services in teen mothers was drastically higher than that of private insurance and other payment sources throughout this time period, indicating that being of lower socioeconomic status is a considerable risk factor for teen pregnancy in Butte County (see *Table Status-46*).

Adverse Birth Outcomes and Infant Mortality

Adverse birth outcomes include low birth weight, pre-term birth, stillborn and miscarriage after the 4th month of pregnancy. Factors that contribute to adverse birth outcomes include: smoking; inadequate folic acid (vitamin B); consumption of alcohol; a prior history of an adverse birth outcome; length of time between subsequent deliveries after an adverse birth outcome; and chronic health conditions such diabetes, hypertension, and obesity. Low birth weight infants (less than 5.5 pounds) have a greater risk of dying within the first year of life. They are also at greater risk for long-term disabilities, developmental delays, learning disabilities, chronic respiratory problems, cerebral palsy, hearing and vision impairments, and autism[47,48].

Table Status-47: Low birth weight in Butte County and California, 3 Year Averages, 2012-2014.

Prenatal Data	Butte County		California	
	Number	Percent	Number	Percent
Low birth weight infants	149.7	6.2%	33,725.3	6.7%

Source: (California Department of Public Health, 2016)

Note: Low Birth weight is less than 2,500 grams (5.5 pounds).

Studies have shown that women are more likely to give birth to low birth weight babies if they are low income, have smoking habits, have had a prior adverse birth outcome, or have chronic health conditions[49,50]. Moreover, these demographic and behavioral factors can increase the risk of pre-term birth. From 2012 to 2014, the percentage of low birth weight babies in Butte County was slightly lower than for California overall (see *Table Status-47*).

Pre-term birth is defined as live birth with less than 37 weeks gestation. Over the last months and weeks of pregnancy a developing infant's organ systems go through very important steps in healthy development, including the liver, the lungs, and the brain. Pre-term birth is a leading cause of long-term neurological disabilities in children, and accounts for more infant deaths than any other individual cause. The care for premature infants is significantly more intensive in terms of both the cost and level of care than that of full-term infants. In 2013, the rate of pre-term births in Butte County was 7.3 per 1,000 live births, which was slightly lower than that of California overall (8.8).

[47] March of Dimes. (2008). Low birth weight. Retrieved from: http://www.marchofdimes.com/baby/low-birthweight.aspx

[48] Pinto-Martin, J. A., et al. (2011). Prevalence of Autism Spectrum Disorder in adolescents born weighing <2000 grams. Pediatrics, 2010-2846. Retrieved from: http://pediatrics.aappublications.org/content/early/2011/10/14/peds.2010-2846.abstract

[49] Goldenburg R. L., Culhane J. F., (2007). Low Birthweight in the United States. American Journal of Clinical Nutrition, (85): 584S-590S

[50] MacDorman, M. F., et al. (2013). Recent declines in infant mortality in the United States, 2005-2011. NCHS Data Brief, 120. Hyattsville, MD: National Center for Health Statistics. Retrieved from: http://www.cdc.gov/nchs/data/databriefs/db120.htm

Infant mortality is one of the most important indicators of a population's health. It is defined as death prior to an infant's first birthday. Factors contributing to infant mortality include but are not limited to: maternal health; access to medical care; quality of medical care; socioeconomic conditions; and public health practices[51]. Major causes of infant mortality include: preterm births; birth defects; sudden unexpected infant death / sudden infant death syndrome (SUID/SIDS); maternal complications of pregnancy and complications of the placenta, cord and membranes[52,53].

The Collaborative Improvement and Innovation Network (CoIIN) is an effort to reduce infant mortality that partners public and private organizations including the Centers for Disease Control and Prevention, Health Resources and Services Administration, Center for Medicaid and Medicare Services, the March of Dimes, and others. In 2012, CoIIN identified key priorities to improve birth outcomes and reduce infant mortality including: promotion of smoking cessation among pregnant women; expanding access to care in between pregnancies through Medicaid (e.g. interconception care); reducing elective deliveries at less than 39 weeks gestation; promotion of safe sleeping practices to reduce the SUID/SIDS; and expanding regional perinatal services for high risk infants in need of level-III neonatal intensive care[54].

Table Status-48: Infant Mortality Rates by Race: 3 Year Averages, 2011-2013.

Infant Mortality Rates	Butte County	Per 1000 Live Births	California	Per 1000 Live Births	National Objective Per 1000 Live Births
All Races/Ethnicities	13.3	5.6 *	2,365.7	4.7	6.0
Asian/Pacific Islander	1.3	7.6 *	243.3	3.6	6.0
African American/Black	0.0	-	256	9.7	6.0
Hispanic/Latino	2.3	5.2 *	1,134.3	4.6	6.0
White	8.0	5.0 *	538	3.9	6.0

Source: California Department of Public Health, Death Statistical Master Files, 2011-2013. * Rates are deemed unreliable based on fewer than 20 data elements.

The U.S. Department of Health and Human Services 2020 Healthy Living objective is an infant mortality rate of less than 6 per 1,000 live births. In California and Butte County, this objective

[51] MacDorman, M. F., et al. (2013). Recent declines in infant mortality in the United States, 2005-2011. NCHS Data Brief, 120. Hyattsville, MD: National Center for Health Statistics. Retrieved from: http://www.cdc.gov/nchs/data/databriefs/db120.htm

[52] MacDorman, M. F., & Mathews, T. J. (2009). Behind international rankings of infant mortality: How the United States compares with Europe. NCHS Data Brief, 23. Hyattsville, MD: National Center for Health Statistics. Retrieved from: http://www.cdc.gov/nchs/data/databriefs/db23.htm

[53] Division of Birth Defects, National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention (CDC). (2011). Birth defects: Leading causes of infant death. Retrieved from: http://www.cdc.gov/Features/dsInfantDeaths/

[54] Barfield, W., et al., (2013). CDC Grand Rounds: Public Health Approaches to Reducing U.S. Infant Mortality. *Morbidity and Mortality Weekly Report* 62(31): 625-628.

has been reached. However, this goal has not been reached for African American/Black infants, who have the highest rate of infant mortality in California overall (see *Table Status-48).*

The higher level of infant mortality among African American/Black infants observed in the state is also observed nationwide, with pre-term related causes of infant mortality accounting for the majority of African American/Black infant deaths[55]. In California as a whole, the rate of pre-term birth is also highest for African American/Black infants, highlighting the relationship between pre-term birth and infant mortality. It is likely that economic hardship plays a considerable role in factors contributing to pre-term birth such as smoking, chronic health conditions, and previous adverse birth outcomes. Of concern is that more African American/Black residents in Butte County live below the federal poverty line than any other racial or ethnic group, and this may be influencing factors known to be associated with adverse birth outcomes.

Child Immunizations

Immunizations are among the most successful and cost-effective preventive health care measures. They can protect children from contracting contagious and life ending diseases which in turn leads to a healthier population. Current immunization schedules recommend that children and adolescents should be immunized to protect against 16 diseases including: polio; diphtheria, tetanus, whooping cough; measles, mumps, rubella; chickenpox; hepatitis A and B; the flu; haemophilus influenza type b; pneumococcal and meningococcal diseases; rotavirus; and human papillomavirus as it is associated with cervical and other cancers later in life[56].

Unfortunately, in recent years there has been an increase in the number of outbreaks of measles (a disease once declared eradicated in the U.S.) throughout the country. This is in large part due to the recent trend of parents refusing the measles, mumps, rubella (MMR) vaccine for their children.

In California, a recent law (SB-277) that became effective on July 1, 2016, abolishes the personal belief exemption from State statute mandated vaccines prerequisite for enrollment in public and private elementary, middle and high school schools; child care centers, day nurseries, and nursery schools. Compliance with the law will be required of California students enrolling in the 2016 – 2017 academic school year. The law does still permit medical exemptions from statute

[55] MacDorman, M.F., Mathews, T.J., (2011). Understanding racial and ethnic disparities in U.S. infant mortality rates. NCHS data brief, no 74. Hyattsville, MD: National Center for Health Statistics.

[56] U. S. Department of Health and Human Services, Centers for Disease Control and Prevention, Vaccines & Immunizations. (2012). Parent's guide to childhood immunizations. Retrieved from: http://www.cdc.gov/vaccines/pubs/parents-guide/default.htm.

mandated vaccines defined as written statements by licensed physicians to the effect that physical conditions or medical circumstances of a children are such that immunization is not considered safe.

Table Status-49: California Child Care Immunization Assessment, 2015-2016*.

	All	Public	Private	Head Start
Number of Schools	9,335	2,732	5,273	1,330
Number of Students	484,979	131,751	282,986	70,242
All Required Immunizations	90.5%	91.9%	88.5%	96.3%
Conditional Entrants	6.7%	6.5%	7.6%	3.1%
Permanent Medical Exemptions	0.48%	0.30%	0.65%	0.12%
Personal Belief Exemptions	2.31%	1.27%	3.23%	0.55%
4 doses of DTP Diphtheria and Tetanus Toxoids and Pertussis Vaccine (DTP)	94.7%	95.3%	93.8%	97.5%
3 doses of Polio Vaccine	96.4%	97.2%	95.5%	98.7%
1 dose of Combination measles-mumps-rubella-varicella vaccine (MMRV)	97.0%	97.5%	96.4%	99.0%
1 dose of Haemophilus influenzae type b vaccines (Hib)	97.5%	97.4%	97.2%	97.5%
3 dose of vaccines containing hepatitis B (Hep B)	94.9%	96.3%	93.4%	98.5%
1 dose of Varicella vaccine (Vari)	96.3%	97.2%	95.3%	99.0%

Source: CDPH; http://www.cdph.ca.gov/programs/immunize/Pages/ImmunizationLevels.aspx

*Individual antigen status is unavailable for students with Personal Beliefs Exemptions. Therefore, individual antigen immunization coverage may be underestimated; anecdotal evidence suggests a small percentage of students may have some but not all required immunizations.

It is estimated that 33,000 lives are saved per annual birth cohort that is immunized in a timely manner nationwide, and that direct health care costs to society are reduced by nearly 10 billion dollars[57]. The majority of students enrolled in California schools during the 2015 - 2016 academic year had received all recommended immunizations, although roughly ten percent did not receive them regardless of their documented benefits to both individual and population health (see *Table Status-49*).

[57] U. S. Department of Health and Human Services, Healthy People 2020. (2014). Immunizations and infectious diseases. Retrieved from: http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicId=23.

Table Status-50: Immunization Status of Kindergarten Students in Schools with 10 or more kindergarten students enrolled, 2015-2016 in Butte County

School District	Enrollment	All Required Immunizations	Conditional Entrants	Permanent Medical Exemptions	Personal Belief Exemptions
California School Totals	551,123	92.8 %	4.4 %	0.2%	2.4 %
Butte County School Totals	2,936	90.4%	4.0%	0.2%	5.3 %
Butte County Public Schools					
Bangor Union Elementary	11	90.9%	9.1%	0.0%	0.0%
Biggs Unified	62	87.1%	11.3%	0.0%	1.6%
Butte County Office of Education	77	68.8%	5.2%	1.3%	23.4%
Chico Unified	1267	90.1%	3.2%	0.2%	6.6%
Durham Unified	85	87.1%	0.0%	0.0%	12.9%
Golden Feather Union Elementary	12	83.3%	8.3%	0.0%	0.0%
Gridley Unified	190	98.9%	0.0%	0.0%	1.1%
Manzanita Elementary	37	94.6%	2.7%	0.0%	2.7%
Oroville City Elementary	351	94.6%	1.4%	0.3%	3.7%
Palermo Union Elementary	135	96.3%	2.2%	0.0%	1.5%
Paradise Unified	372	82.5%	13.4%	0.5%	3.5%
Thermalito Union Elementary	186	96.8%	1.6%	0.0%	1.6%
Butte County Private Schools					
Private (Chico)	60	100%	0.0%	0.0%	0.0%
Private (Oroville)	34	88.2%	0.0%	0.0%	11.8%

Source: CDPH; http://www.cdph.ca.gov/programs/immunize/Pages/ImmunizationLevels.aspx

*Conditional entrants are students who were admitted into school/child care, but need more vaccines before the school year is over. These are children who are in the middle of a series of shots or who have a temporary medical exemption. **A Permanent Medical Exemption (PME): granted upon the filing with the school of a written statement from a licensed physician to the effect that the physical condition of the student or medical circumstances relating to the student are such that immunization is permanently not indicated. § A Personal Belief Exemption (PBE), whereby a parent signs an affidavit requesting an exemption from the immunization requirements for school entry because all or some immunizations are contrary to the parent's beliefs. †Vaccines up to date including: Four or more doses of any diphtheria and tetanus toxoids and pertussis vaccines including diphtheria and tetanus toxoids, and any acellular pertussis vaccine (DTaP/DTP/DT). Three or more doses of polio vaccine; Oral polio vaccine (OPV) or inactivated polio vaccine (IPV) or any combination of these. Two doses of measles-mumps-rubella vaccine. Three or more doses of Hepatitis B vaccine. One or more doses of varicella at or after child's first birthday, unadjusted for history of varicella illness.

In Butte County, kindergarteners had higher rates of all required immunizations than the statewide average for California at the following public elementary school districts: Gridley Unified; Manzanita Elementary; Oroville City; Palermo Union; and Thermalito Union. The rates for Butte County private schools in Oroville (88.2%) was lower than the statewide average (92.8%), higher than the statewide average in Chico private schools (100%), (see *Table Status-50*).

Child Abuse and Neglect

Children who are abused and/or neglected are at significantly higher risk for developing emotional, cognitive, and behavioral problems. These include but are not limited to: anxiety; depression; suicidal behavior; difficulty in school; substance use and/or abuse; and early sexual activity[58,59]. Abuse and/or neglect can cause severe stress that is known to disrupt neurological and physical development. Because the brain is developing much more rapidly early in childhood, young children are especially susceptible to disruptions in healthy neurological development. This places mistreated young children at significantly higher risk for health problems as adults[25]. Children who are abused or neglected are more likely to repeat the cycle of violence by entering into violent relationships as teens and adults or abusing their own children[24]. Child abuse and neglect are underreported and occur in families of all socioeconomic levels and ethnic groups. Major risk factors for child abuse/neglect victims include being under 4 years old and having special needs. Family and community risk factors include parental substance abuse, parental mental illness, major stress (e.g. poverty, social isolation), domestic violence, and unsafe neighborhoods[60].

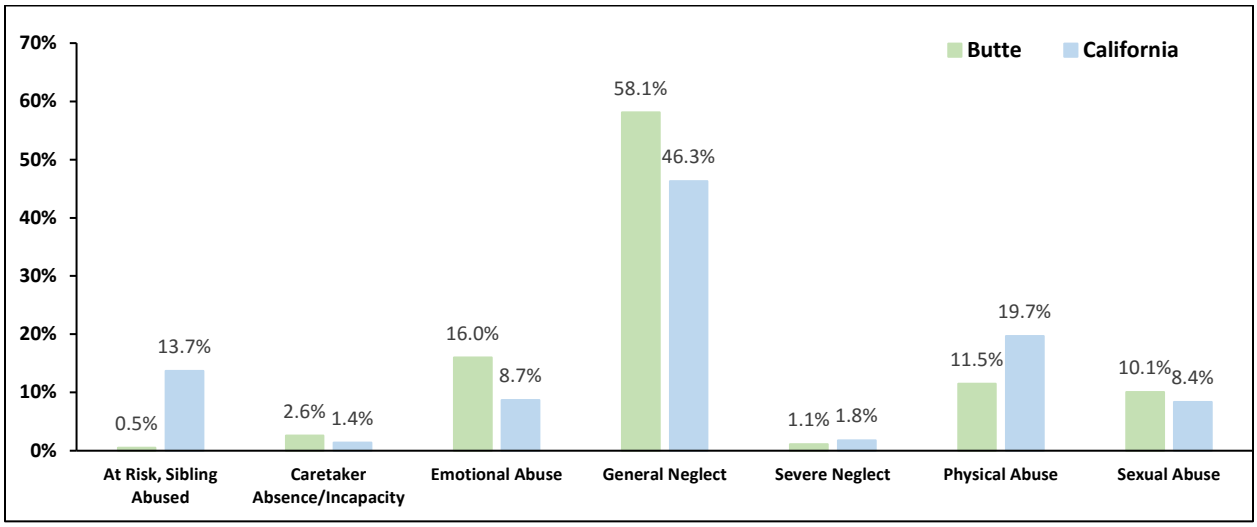


Figure Status-14: Child abuse/neglect reports to Child Protective Services by type, 2015

Source: Webster, et al., (2016). Child Welfare Services Reports for California.

General neglect and physical abuse were the most frequently reported types of abuse in both Butte County and California overall, with a considerably higher percentage of general neglect occurring in Butte County, but more physical abuse on a statewide level (see *Figure Status-14*).

[58] Child Welfare Information Gateway. (2013). Long-term consequences of child abuse and neglect. U.S. Department of Health and Human Services.

[59] Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention. (2014). Child maltreatment: Consequences.

[60] Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention. (2014). Child maltreatment: Risk and protective factors.

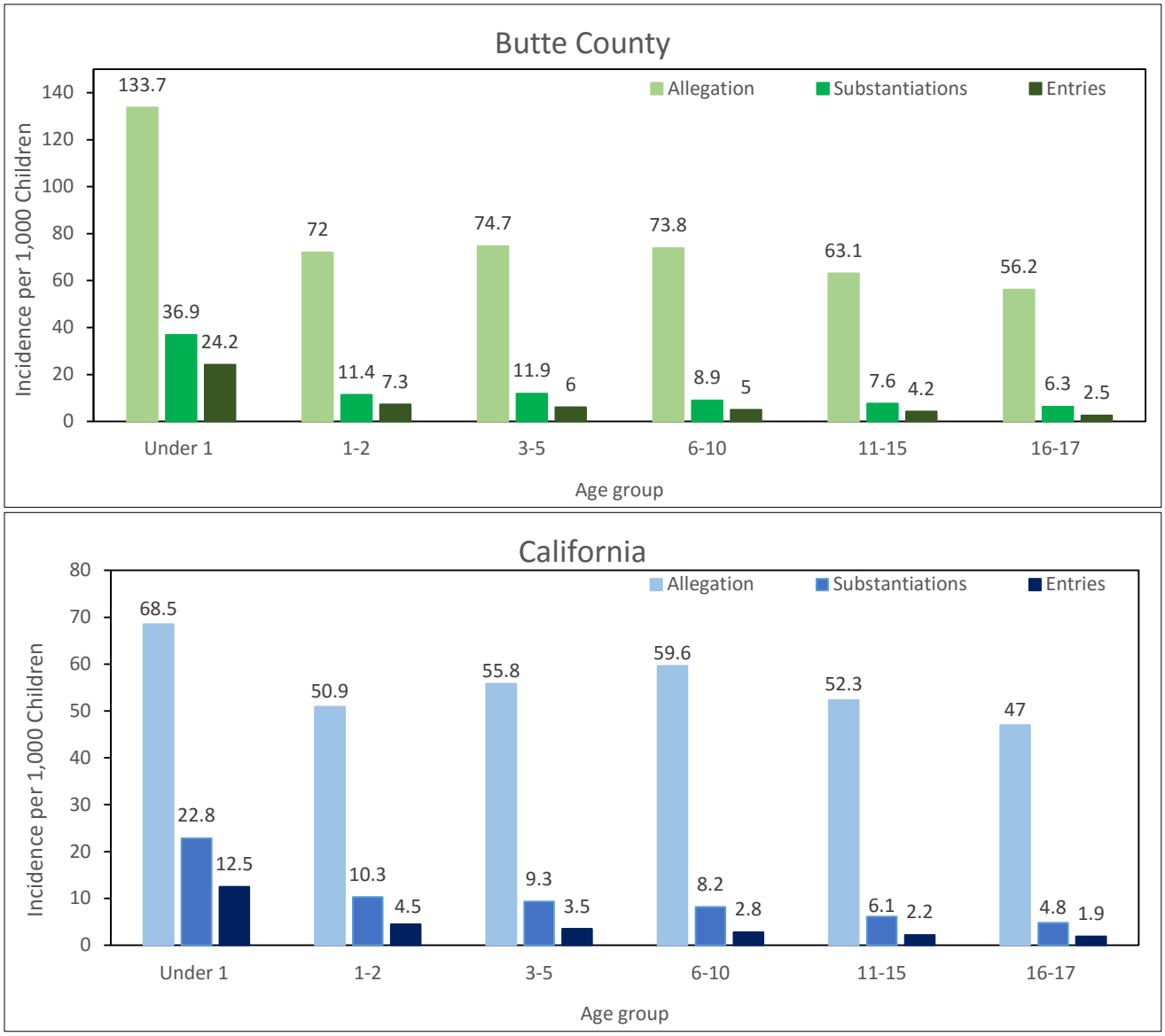


Figure Status-15: Maltreatment allegations, substantiations, and entries Incidence per 1,000 Children, 2015.
Source: Webster, et al., (2016). *CCWIP reports*. Retrieved 7/09/2016, from University of California at Berkeley California Child Welfare Indicators Project website. URL: http://cssr.berkeley.edu/ucb_childwelfare
Note: A child is counted only once (per year); if a child has more than one allegation in a year, they are counted in the category considered most severe. Reports include substantiated, inconclusive, unfounded, and assessment-only referrals, as well as those "not yet determined."

The chances of being a victim of abuse/neglect in children decreases as children get older. Young children under the age of one year are much more likely to be victimized than children of any other age group. In 2015, the number of cases of maltreatment that occurred in Butte County overall was much higher than the statewide rate across all age groups (see *Figure Status-15*).

AGING AND SENIOR RELATED HEALTH

Falls in Older Adults

The danger and effect of falls is a major factor influencing the health and independence of California's aging and senior population. Annually, approximately one third of California's seniors will fall. These falls result in 213,000 visits to the emergency room, and more than 60,000 hospital admissions[61]. More than 40.0% of seniors who are hospitalized with a hip fracture are unable to continue living independently, and 25.0% die within a year of sustaining the injury[43]. The high level of medical expenses associated with falls also place a considerable financial burden on those involved with both care and treatment of the patient. Research indicates that preventive efforts for seniors, specifically multi-factorial fall risk assessments and individually tailored interventions, can result in fewer hospitalizations and reduced medical costs.

Table Status-51: Fall related injury and death rates among seniors in Butte County, 2014

Age group	Non-Fatal Emergency department visits		Non-Fatal Hospitalizations		Deaths Due to Fall	
	Butte County	California	Butte County	California	Butte County	California
50-64	2,385.6	1,642.8	595.3	263.3	*	4.2
65-84	3,545.9	3,209.0	1,647.1	1,031.2	*	19.1
85+	10,781.3	10,198.8	6,041.7	4,422.2	*	139.1
Total (age 50+)	3,423.9	2,680.8	1,387.1	770.1	30.8	17.1

Source: California Vital Statistics Death Files and California Office of Statewide Health Planning and Development
Report generated from http://epicenter.cdph.ca.gov on: July 19, 2016.
* Rates are not displayed if they are based on fewer than 20 cases because they are not reliable.
Rates are calculated per 100,000 population.

In 2014, the rates of both fall related injuries and deaths among adults age 50 and over in Butte County were considerably higher than those of California overall. The rates for both Butte County and California were highest for non-fatal emergency department visits, followed by non-fatal hospitalizations and death (see *Table Status-51*).

[61] California Department of Health Services, Epidemiology and Prevention for Injury Control Branch

Alzheimer's Disease and Dementia

Of particular relevance to the aging/senior population is the recent rise in the rate of dementia due to Alzheimer's disease. Alzheimer's is a progressive disease, meaning that the severity of symptoms increase over time. While it is not yet possible to reverse the symptoms and there is no cure, detection of early stage Alzheimer's disease permits treatments that may significantly slow the progression of symptoms.

The term dementia is generally used to describe conditions in which a decline in memory or other thinking skills occur, and is severe enough to reduce a person's ability to perform everyday activities[62]. Dementia can also be caused by Parkinson's disease, Huntington's disease, vascular dementia (stroke), HIV/AIDS, substance use, exposure to toxins, or traumatic brain injury. However, dementia caused by Alzheimer's disease is the most common type and accounts for up to 80.0% of cases[63].

While the underlying neurological changes that are thought to be responsible for Alzheimer's are not fully understood, the greatest risk factor for developing dementia due to Alzheimer's disease is age. The chances of developing symptoms of Alzheimer's double roughly every five years for people age 65 and over, reaching an almost fifty percent chance by age 85.

Table Status-52: Deaths attributed to Alzheimer's disease in Butte County and California, 2012-2014

Deaths Due to Alzheimer's Disease	Butte County	California
Age Adjusted Death Rates	42.8	30.1
Crude Death Rates	62.2	31.5
Deaths (3 Year Avgs)	138.0	12,043.3
Population (2013)	222,035	38,202,206

Sources: California Department of Public Health, 2012-2014 Death Statistical Master Files
www.cdph.ca.gov/data/statistics/Pages?DeathStatisicalDataTables.aspx

Alzheimer's disease is the seventh leading cause of death in Butte County with an age adjusted death rate (AADR) of 43 deaths per 100,000 people, and the sixth leading cause of death in California overall with an AADR of 30 deaths per 100,000 people (see Causes of Death, pg. 53). Between 2012 and 2014, an average of 138 people in Butte County and 12,043 people in California died from Alzheimer's disease each year (see *Table Status-52*).

[62] http://www.cdc.gov/mentalhealth/basics/mental-illness/dementia.htm

[63] http://www.alz.org/what-is-dementia.asp

HEALTH CARE AND PREVENTIVE SERVICES

Health insurance is important at every age and provides access to healthcare including opportunities for screenings, vaccinations, and testing for chronic diseases. Having access to primary and preventative care through health insurance helps to prevent the development of health issues and provide treatment at their onset. This can slow the progress of symptoms and minimize the development of chronic disease. Lack of access to health services leads to poor health outcomes and results in substantial economic costs.

Health Insurance Status

Health equity is reached when all people have the opportunity to make choices that allow them to live a long, healthy life, regardless of their income, education or ethnic background. Access to high quality health care services is essential for achieving health equity. In order to improve quality of life in Butte County, residents must have access to care and be well informed about their treatment choices. People without health insurance face considerable financial barriers to high quality and appropriate medical care. This often results in forgoing routine checkups, preventative care, and medical treatments during initial stages of disease until symptoms become more advanced and are more costly to treat.

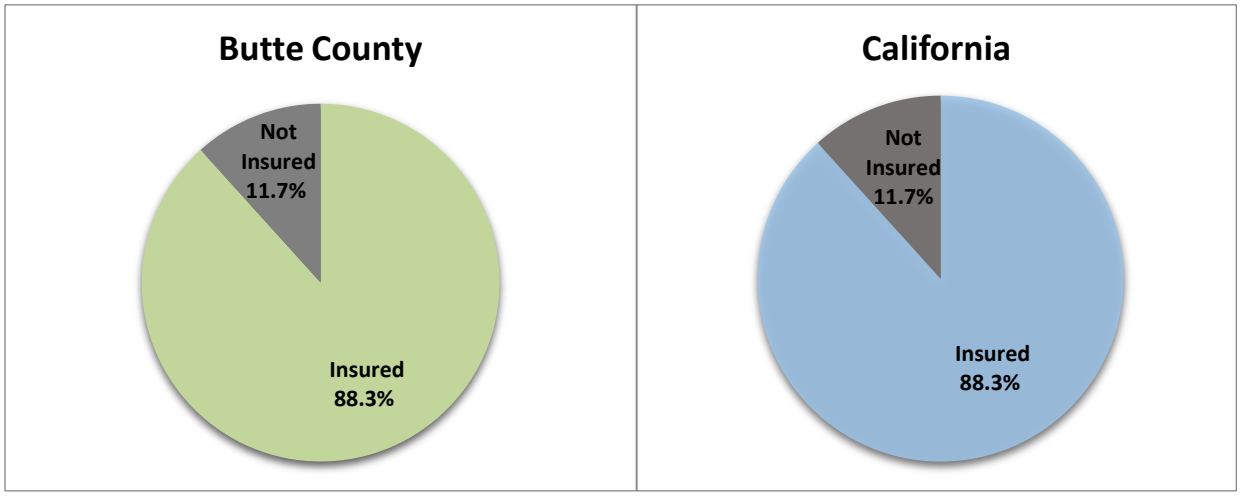


Figure Status-16: Percentage of people with and without Health Insurance Coverage in 2014
Source: U.S. Census Bureau, 2014 American Community Survey 1-Year Estimates

The Healthy People 2020 objective is for one hundred percent of people to have health insurance. In 2014, percentages of those with and without health insurance were equivalent in both Butte County and California overall (see *Figure Status-16*).

CAUSES OF DEATH

All deaths that occur in Butte County are reported with detailed information including: age; race/ethnicity of the deceased person; place of residence at the time of death; cause of death; and other characteristics. Butte County's population varies regionally across several key demographics, including age. That is, in different geographic areas of the county, there are considerable differences in the percentage of people representing specific age groups. For instance, there are likely more young adults between the ages 18 and 25 residing in the downtown Chico area (near the CSU Chico campus) than living in Paradise. When comparing across geographic areas, the Age Adjusted Death Rate (AADR), is typically used to control for the influence that different age distributions might have on the frequency of causes of death.

Table Status-53: Mortality rates in Butte County and California, 2011-2013.

Cause of Death	Butte County (age adjusted death rates)	California Current (age adjusted death rates)	National Objective
All causes	791.3	641.1	a
All Cancers	179.0	151.0	161.4
Coronary Heart Disease	103.3	103.8	103.4
Accidents (un-intentional injuries)	60.4	27.9	36.4
Chronic Lower Respiratory Disease	55.7	35.9	a
Lung Cancer	45.7	33.6	45.5
Cerebrovascular Disease (stroke)	44.1	35.9	34.8
Alzheimer's Disease	41.3	30.8	a
Drug-induced Deaths	32.6	11.1	11.3
Prostate Cancer	25.0	20.2	21.8
Female Breast Cancer	19.4	20.7	20.7
Diabetes	17.5	20.8	b
Suicide	16.8	10.2	10.2
Influenza/ Pneumonia	15.6	16.3	a
Chronic Liver Disease	14.9	11.7	8.2
Colorectal Cancer	13.3	13.9	14.5
Firearm-Related Deaths	12.0	7.8	9.3
Motor Vehicle Accidents	10.6	7.6	12.4
Homicide	4.4*	5.1	5.5

Sources: California Department of Public Health, 2011-2013 Death Statistical Master Files.
a. Healthy People 2020 (HP 2020) National Objective has not been established.
b. National Objective is based on both underlying and contributing cause of death which requires use of multiple cause of death files.

The leading cause of death in Butte County between 2011 and 2013 was cancer, with an AADR of 179.3 deaths per 100,000 people. Other causes of death, in order of greatest to least frequent AADR's were coronary heart disease, accidents (un-intentional injuries), chronic lower respiratory disease, stroke (cerebral vascular disease), and Alzheimer's disease. Cancer was also the leading cause of death for California overall, followed by coronary heart disease, stroke, chronic lower respiratory disease, Alzheimer's disease, and accidents (*see Table Status-53*).

CHAPTER 4: LOCAL COMMUNITY HEALTH SYSTEM ASSESSMENT

PURPOSE

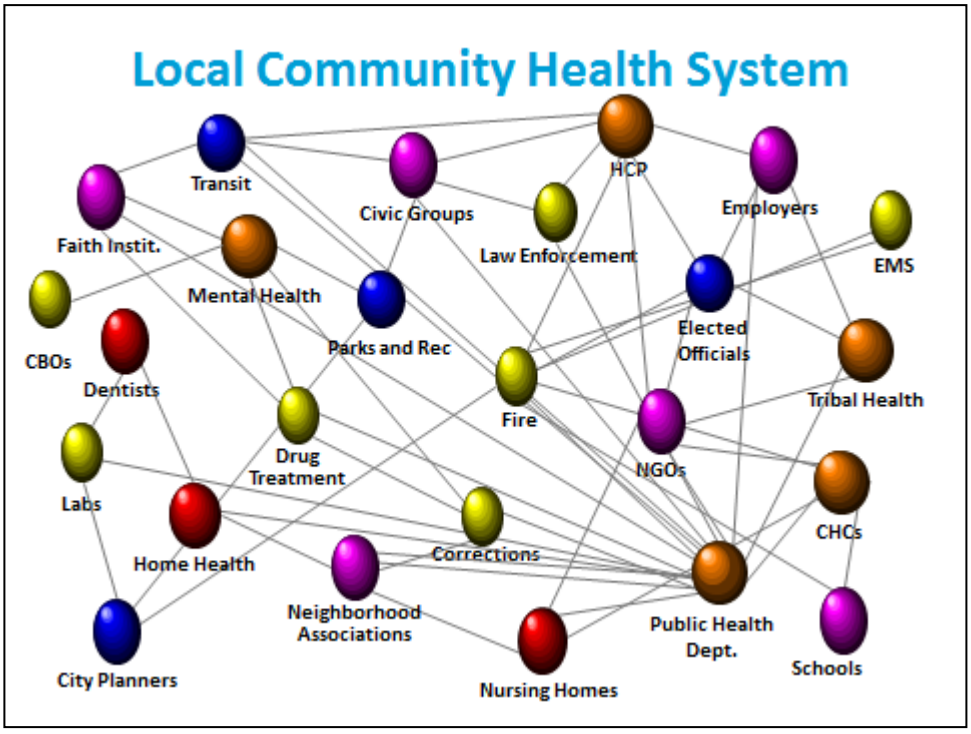


Figure System-1: A community's health system is made up of many interconnected organizations.

The Local Community Health System Assessment defines health broadly and involves all of the organizations and groups that contribute to the health of a community (see *Figure System-1*). The goal of performing this assessment is to obtain the information necessary to improve the performance and capabilities of Butte County's local community health system.

METHODOLOGY

Approximately 50 people who represent members of Butte County's community health system met (see *Appendix System-1* for a listing of represented organizations) to answer the following questions:

- What makes up our community health system?
- What services does our community health system provide? What is our capacity?
- What are our community health system's strong points and where do we need to improve?
- How well does our community health system provide the 10 Essential Health Services (see *Figure System-2*)?

The expected results from the session were:

- Assessing services and capacities of our local community health system
- Determining how well we are providing the Essential Health Services in Butte County
- Identifying strengths and areas for improvement
- Strengthening the diverse group of partners within the county's health system
- Identifying topics and/or indicators that can be addressed in the upcoming community health improvement planning (CHIP) process

Figure System-2: The 10 Essential Public Health Services

Attendees formed five groups to discuss two Essential Health Services each. Using the standardized National Public Health Performance Standards Local Assessment Tool (NPHPS), facilitators guided participants through a series of discussion-based questions for their assigned Essential Health Services.

Participants then voted on the current level of activity (ranging from no activity to optimal activity) for each Essential Health Service using colored voting cards (see *Figure System-3*).

Optimal Activity (76-100%)	Greater than 75% of the activity described within the question is met.
Significant Activity (51-75%)	Greater than 50% but no more than 75% of the activity described within the question is met.
Moderate Activity (26-50%)	Greater than 25% but no more than 50% of the activity described within the question is met.
Minimal Activity (1-25%)	Greater than zero but no more than 25% of the activity described within the question is met.
No Activity (0%)	0% or absolutely no activity.

Figure System-3: The scoring system used in conjunction with the NPHFS Tool.

The groups also analyzed the strengths, weaknesses, and short and long-term opportunities for their assigned Essential Services. A note taker for each group captured discussion points on a summary sheet.

Finally, participants ranked the Essential Health Services to identify their top priorities. These rankings will identify areas that the Community Health Improvement Planning (CHIP) process might address.

RESULTS

Butte County has significant activity (51 – 75%) in seven of the 10 Essential Health Services, moderate activity (26 – 50%) in two of the 10 Essential Health Services, and minimal activity (1 – 25%) in one of the 10 Essential Health Services. The overall performance score was 54.5%, which indicates significant activity (see *Table System-1*).

Table System-1: Overall Essential Health System Performance for Butte County, 2014

Overall Essential Health Service Performance		
Essential Service Number	**Essential Service Description**	**Performance Score %**
1	Monitor health status to identify community health	41.7%
2	Diagnose and investigate health problems and health hazards	75.0%
3	Inform, educate and empower people about health issues	69.4%
4	Mobilize community partnerships to identify and solve health problems	53.1%
5	Develop policies and plans that support individual and community health efforts	56.3%
6	Enforce Laws and Regulations that protect health and ensure safety	67.4%
7	Link people to needed personal health services and assure the provision of health care when otherwise unavailable	46.9%
8	Assure a competent public and personal health care workforce	63.1%
9	Evaluate effectiveness, accessibility, and quality of personal and population-based health services	19.6%
10	Research for new insights and innovative solutions to health problems	52.8%
	Overall Performance Score	54.5%

The Essential Health Services that showed the highest levels of activity were:

- **Essential Health Service 2:** Diagnose and investigate health problems and health hazards (performance score: 75%[64], significant activity)
- **Essential Health Service 3:** Inform, educate and empower people about health issues (performance score: 69.4%, significant activity)
- **Essential Health Service 6:** Enforce Laws and Regulations that protect health and ensure safety (performance score: 67.4%, significant activity)

[64] The performance score was obtained by averaging results for the questions that the group felt they were able to answer accurately. The group did not report a score for one question because they felt it was subjective.

The Essential Health Services that showed the lowest levels of activity were:

- **Essential Health Service 9:** Evaluate effectiveness, accessibility, and quality of personal and population-based health services (performance score 19.6%, minimal activity)
- **Essential Health Service 1:** Monitor health status to identify community health problems (performance score 41.7%, moderate activity)
- **Essential Health Service 7:** Link people to needed personal health services and assure the provision of health care when otherwise unavailable (performance score 46.9%, moderate activity)

Butte County's activities, capacity, and performance for each of the Essential Health Services are included as *Appendix System-2*; and *Table System-2* shows how the groups ranked the Essential Services in terms of priority.

Table System-2: Overall Essential Health Service Priority Ranking for Butte County, 2014

Overall Essential Health Service Priority Ranking		
Essential Service Number	**Essential Service Description**	**Priority Ranking (raw score)**
3	Inform, educate and empower people about health issues	1 (59)
4	Mobilize community partnerships to identify and solve health problems	2 (39)
2	Diagnose and investigate health problems and health hazards	3* (33)
8	Assure a competent public and personal health care workforce	3* (33)
9	Evaluate effectiveness, accessibility, and quality of personal and population-based health services	4 (30)
7	Link people to needed personal health services and assure the provision of health care when otherwise unavailable	5 (26)
1	Monitor health status to identify community health problems	6* (21)
10	Research for new insights and innovative solutions to health problems	6* (21)
5	Develop policies and plans that support individual and community health efforts	7* (20)
6	Enforce Laws and Regulations that protect health and ensure safety	7* (20)

** Tied scores are marked with an asterisk*

The Essential Health Services that participants ranked as the highest priority were:

- **Essential Health Service 3:** Inform, educate and empower people about health issues (raw score: 59)
- **Essential Health Service 4:** Mobilize community partnerships to identify and solve health problems (raw score: 39)
- **Essential Health Services 2 & 8 (tied for 3rd):** Diagnose and investigate health problems and health hazards; Assure a competent public and personal health care workforce (raw score: 33)
- **Essential Health Service 9:** Evaluate effectiveness, accessibility, and quality of personal and population-based health services (raw score: 30)

Overarching Themes

Three overarching themes recurred in both small and large group conversations throughout the assessment:

1. Much of the work in community health (outreach, health assessments, data collection and sharing, planning) occurs within the local community health system, and opportunities exist for better coordination and collaboration.

2. There is a strong need for community engagement and improved diversity in the local community health system, which should strive for greater cultural competency, participation and inclusiveness.

3. Lack of coordinated funding, staffing, and other resources present challenges and limitations for accomplishing desired goals within the local community health system.

CONCLUSION: NEXT STEPS

The assessment results have identified areas of strength and opportunities for improvement in Butte County's community health system. The Community Health Improvement Plan (CHIP) can incorporate relevant findings resulting in better local partnerships.

CHAPTER 5: FORCES OF CHANGE ASSESSMENT

PURPOSE

The Forces of Change Assessment examines the various forces or changes – events, trends, and other factors about Butte County – that are likely to affect the health of the community and its local health systems. These forces of change, most of which are beyond anyone's control, and the potential threats and opportunities that come with them, must be given careful consideration while moving toward improving the health of our community.

METHODOLOGY

The Forces of Change assessment was conducted on November 4, 2014 during two community meetings. Participants included community members, college students, health care providers, tribal health clinics, nonprofit organizations, and representatives from various government agencies (see Appendix Change-1). The first meeting was held in Oroville with a group of 24 participants (*see Figure 6-1*). The second meeting took place in Chico with 15 participants.

Attendees were asked to consider this question:

> *What is occurring or might occur that could affect the health of Butte County or the community health system?*

Participants were requested to think in terms of trends or patterns of change, events, or other factors and conditions that are characteristic of Butte County.

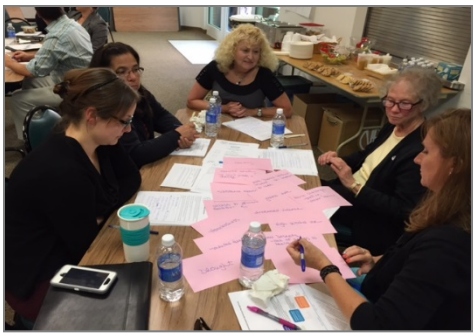


Figure Change-1: Forces of Change session in Oroville.

Individuals brainstormed their own ideas about the forces of change they see in the community. They then identified the specific threats and opportunities that could be generated from each of the recognized forces of change.

At a Policy Council meeting on November 5, 2014, members received a summary of the work that was completed by the two Forces of Change Assessment groups. Council members discussed the forces of change and the potential challenges and opportunities associated with them.

RESULTS

The ideas and perspectives generated by the Forces of Change Assessment groups and the Policy Council were sorted and grouped together by topic. The following is an overview of the forces of change identified in common by participants. For full results, refer to Appendix Change-2.

Increased Need for Mental Health Services

Challenges:
The need for mental health services in Butte County is a critical issue because mental health problems have such a wide impact on other aspects of community health. Untreated mental health problems cause a significant drain on law enforcement services, the judicial system, and school resources. Increases in homelessness, substance abuse, suicide, and domestic violence are all linked to the lack of access to adequate mental health services. In addition, untreated mental health issues often end up in hospital emergency rooms, resulting in increased costs to the health care system. The continued stigma of mental illness not being a true medical disorder works against mental health services being seen as a community priority.

Opportunities:
As this problem becomes a concern that is more widely acknowledged, opportunities for improvement may develop such as standardized approaches for treatment among various public agencies, hospitals, homeless shelters, law enforcement, and social service agencies. With improved access to treatment, community services, and other support, more people who suffer from mental illness will be able to access treatment.

Increasing Homeless and Transient Population

Challenges:
The number of homeless and transient people in Butte County has increased and become more visible, particularly in downtown Chico.

Future challenges may include:

- Increased crime and pollution from unsanitary living conditions in areas where homeless people congregate
- Untreated mental health issues
- Pressure on the resources of law enforcement and the criminal justice system
- Decreased use of certain downtown business areas and parks
- An increase in crimes perpetuated on homeless people
- Reinforcement of a stereotype that all homeless people are dangerous

Opportunities:
A heightened awareness of the homeless and transient population may lead to opportunities for new and different resources and community partnerships to address the problem. New priorities may be set to bring social services, medical care, food, and shelter closer to areas where homeless people congregate. Downtown business areas once considered unattractive may experience a renewal.

Substance Abuse

Challenges:
The abuse of drugs and alcohol, including prescription drugs, continues to increase in Butte County. In general, this trend poses threats to public safety and the health and wellbeing of children in particular. Substance abuse can compound mental health issues and make it difficult to manage chronic diseases, adding to poor patient outcomes and increased costs of care. There is a need for detoxification centers that would provide more effective treatment in lieu of the psychiatric emergency system. The legalization of medical marijuana in California has increased the social acceptance of the drug. In some areas, environmental degradation may result from a lack of control over marijuana growers.

Opportunities:
Opportunities to address problems related to substance abuse may develop over time. New funding for access to treatment may become available along with increased education for children on substance abuse. In some areas, the problem may demonstrate a need for dedicated local detoxification centers and "wet shelters" where homeless individuals who are still "using" can receive meals and a safe place to sleep. Along with changes in the laws concerning marijuana, additional medicinal benefits from the drug may be identified. Increased tax revenue from marijuana sales could help support community health infrastructure. Finally, the potential future legalization of marijuana for recreational use may reduce some strain on law enforcement services and the judicial system.

Retiring "Baby Boomer" Workforce

Challenges:
In Butte County, it may be difficult to replace retiring health care workers who have advanced education, training, and experience. And, as the population ages, the community will likely experience an increased need for health care workers, especially for in-home care. Currently, education and training opportunities to develop a new health care workforce are inadequate to keep up with the need. A lack of access to quality health care and increasing costs due to inadequate or delayed treatment may result if the trend continues.

Opportunities:
Market forces in health care may help overcome potential threats in this area. As "baby boomers" retire, more opportunities will be available for new health care graduates. Increased demand in the areas of elder care and in-home care may spawn new business opportunities in the health care industry. As well-qualified health professionals retire, they may take up volunteer opportunities and possibly serve as mentors or guides for new health care workers. New scholarship funds and loan forgiveness programs may become available for recent graduates.

Increasing Pressure on the Judicial System and Prisons
Challenges:
Forced release of county jail inmates to accommodate the shift of inmates from state facilities to county jails coupled with a lack of resources needed to accommodate these new prisoners will present challenges on many levels. It may create increased pressure on county jails and law enforcement resources stressing local government budgets. As a result of over-crowding, some prisoners may have to be released prematurely to make room for more dangerous felons. More individuals without jobs to support them will put a strain on all social services.

Opportunities:
This issue may yield new opportunities to share resources among local jurisdictions and possibly outsourcing to other communities. It may also spur an increased emphasis on juvenile justice services and an effort to treat drug-related offenders as having a medical or mental problem rather than a criminal problem. Another opportunity may be to place nonviolent prisoners near their home communities so they can receive local services and stay connected with their families.

Continuing Drought and Water Scarcity
Challenges:
In Butte County, as in much of California, the ongoing drought and resulting water shortage will have a significant impact on the health of the community. The agriculture, recreation, and tourism industries are likely to suffer from shorter growing seasons, low lake levels, and a loss of jobs. All of this will have a negative impact on the local economy which will impact the community's health. Other threats presented by water shortage include: dry wells, lack of sanitation, loss of crops and livestock, and an increased risk of wildfires with resultant air quality problems. Agricultural production may decrease, while water costs and food prices may increase.

Opportunities:
The water shortage could offer opportunities to change people's behavior through education around water-use that could have future benefits. People could become more conservation-conscious. This could stimulate efforts to upgrade existing equipment and infrastructure that is water-dependent. The problem may also attract new policy-makers with expertise in water resources.

Reduced Access to Health Care
Challenges:
Reduced or limited access to health care poses several threats to those who live in Butte County. Inadequate access may increase the risk of communicable disease outbreaks and create an increased burden on emergency rooms when they serve as primary care facilities. Unplanned pregnancies among young people and a lack of home support may become a larger issue without adequate care facilities. If the number of community health care providers decreases, it may be difficult to recruit and retain new health care professionals. Some providers may leave the area, and others may quit their practices permanently. The lack of a provider network for managed care plans treating mild and moderate mental health issues will affect the health of the community in numerous ways.

Opportunities:
As problems with health care access become acute, it may stimulate more community outreach and intensified efforts to attract new clinicians to Butte County. Federally Qualified Health Clinics (FQHCs), and tribal and rural health clinics may see opportunities to fill gaps in community health care services. Other opportunities may be created to redesign a health care infrastructure guided by "livable community" principles. The public may show a greater interest in prevention and self-care. Finally, provisions of the Affordable Care Act may improve preventive care and help those previously uninsured gain access to health care services.

Increased Poverty and a High Jobless Rate
Challenges:
Economic recovery in Butte County, as in many parts of the nation, has been much slower than expected. Many of the forces that affect change in our community are interrelated. This is also true for the increase in poverty and unemployment in Butte County. Left unchecked, possible outcomes may include:

- The institutionalization of poverty where, for some people, it becomes their new norm
- An increase in crime directed by inadequate income
- An increase in school dropout rates because of the lack of job opportunities for graduates

- An out-migration of skilled people from the community
- An increase in mental health and substance abuse problems due to stress and inadequate personal resources to seek care
- A lack of affordable housing and food
- A decreased tax base because of reduced incomes and consumer spending

All of these negative effects of poverty and unemployment have a direct impact on the health of the community.

Opportunities:
Opportunities may emerge to address this issue including

- New programs to retrain workers through colleges and trade schools
- Concentrated efforts by government authorities to attract and incentivize new businesses to locate in Butte County

Increased Presence of Social Media
Challenges:
It is impossible to ignore the rapidly increasing presence of social media in everyday life. With this may come changes that could affect the community's health. As people rely more on texting, Twitter, Facebook and email to keep in touch with others, there is a loss of in-person connections that impacts all age groups. It is unknown how social media may impact social development in children through isolation, cyber-bullying, game addiction, and information overload. Regardless of age, as people rely more on the Internet, they may struggle to sort out valid information from misinformation.

Opportunities:
Social media are here to stay for the foreseeable future, and the benefits may outweigh the risks posed by this trend. New and more specialized networking connections are being created that put people in touch with resources. Web-based technology provides an opportunity to communicate with segments of the population that may have previously been difficult to reach. The Internet and social media can "level the playing field," providing almost immediate access to information and the ability to communicate to broad audiences. It allows people to promote themselves, their businesses, and new ideas. New apps and wearable technology may provide breakthroughs in such areas such as chronic disease management, weight loss, and sleep management.

Changing Cultural Norms and Social Beliefs

Challenges:

Continuing trends that shift cultural norms and social beliefs are influenced by many things, including (but not limited to): print and broadcast media, music, movies, events, legislation, and technology. Concerns arise when these changes cause apathy or a sense of powerlessness, discrimination, and increased social stratification. All of these can have a negative effect on the mental and physical health of our community, sense of wellbeing, and quality of life.

Opportunities:

Opportunities can be created for broader education, interaction to promote common understanding, and outreach to potentially marginalized parts of the community.

Increasing Presence of Communicable Diseases

Challenges:

Threats from communicable diseases are on the rise (aside from the international attention to the Ebola outbreak in West Africa). This will create additional pressure on the community's health systems, including public agencies and care providers. Attention must be focused on both prevention and treatment, along with clear information to ensure a well-informed community.

Opportunities:

As trends or possible disease outbreaks occur, it will create "teachable moments" for educating the public. It may also stimulate increases in funding for broader public health concerns, research, and collaborative opportunities among health agencies, educators, and providers.

Emerging Medical Technology

Challenges:

New medical technology is reaching Butte County and will have an impact on the health of the community. Initially, the new technology may be more available to those with higher economic means, causing additional disparities in health care. Reimbursement and privacy issues will have to be resolved. The use of new technology could also compromise the quality of medical services for the sake of cost effectiveness and efficiency.

Opportunities:

The opportunities inherent in using new technology, however, may outweigh the potential challenges. Emerging medical technology could bring specialty services to Butte County that would be otherwise unavailable. In some situations, medical technology services might be employed in jails and prisons to address some of the mental health issues of detainees.

Advances in medical technology could lower costs, decrease errors, improve medical decisions, and increase the potential for effective self-management.

CONCLUSION: NEXT STEPS

Each of the identified Forces of Change has both inherent challenges that could threaten health as well as potential opportunities to support better health for the community. The Community Health Improvement Plan (CHIP) can incorporate relevant findings resulting in improvement and measured change.

CHAPTER 6: ACCESS TO CARE ASSESSMENT

INTRODUCTION AND BACKGROUND

In December of 2015, the Butte County Health Collaborative (BCHC) selected "Access to Care" as its priority focus area for 2016-2017. In partnership with the BCHC, Butte County Public Health (BCPH) formed a sub-committee to assess factors influencing access to care specific to Butte County, with a particular emphasis on how expansion of both public and private health insurance under the Patient Protection and Affordable Care Act (ACA) has impacted access to care at the local level. In February of 2016, the sub-committee met to begin the assessment and identify gaps in Butte County resident's access to primary and specialty health care services. Existing literature was reviewed, secondary data was analyzed; surveys were administered to area health care providers and clients of their services; and focus groups targeting under-represented groups were conducted at the Hmong Cultural Center of Butte County, the Esplanade House transitional housing facility, and a Butte County PEP Senior Housing facility. The results of each assessment were then compared for areas of overlap between primary, secondary, and qualitative data; and their level of agreement with existing literature. Results of these assessments and the gaps in care discovered through their analysis were then reported back to the BCHC and other community stakeholders; and will be used by the sub-committee to develop both short and long term goals for improving access to care in Butte County.

METHODS

To identify gaps in health care services and barriers to accessing them several methods were employed. Initially, existing literature pertinent to accessing health care services in Butte County was reviewed. Specifically, a report published by the California Healthcare Foundation titled *On the Frontier: Medi-Cal Brings Managed Care to California's Rural Counties* (Kemper, 2015), that documented the expansion of Medicaid (Medi-Cal in California) and the simultaneous transition from Fee for Service to Managed Medi-Cal in 28 rural California counties, including Butte, was used as a starting point.

Next, Secondary data was then obtained the California Health Interview Study (CHIS) and analyzed at a more granular level permitting data on access to primary and specialty care specific to Butte County to be compared with data for the State overall, as well as with findings from the *On the Frontier* report. In addition, data was obtained from the California Department of Healthcare Services Monthly Enrollment Reports, U.S. Department of Health and Human Services Data Warehouse for Healthcare Provider Shortage Areas, and the Area Health

Resource File via County Health Rankings ratio of population to provider reports in order to analyze gaps between the supply of and demand for health care services in Butte County.

Subsequently, BCPH developed three surveys targeting Providers, Administrators and Clients of Health Care facilities in Butte County, respectively. BCPH then partnered with the BCHC and other key community stakeholders to distribute the surveys to health care facilities throughout Butte County. In addition, focus groups targeting under-represented groups were conducted at a transitional housing facility serving, a PEP senior housing facility, and a Hmong Cultural center facility.

Results of the secondary data analysis and the surveys were next stratified across multiple factors such as insurance type (e.g. Private vs. Medi-Cal), gender, race and ethnicity, provider type (e.g. Physician, Nurse Practitioner, Physician's Assistant, ect…), facility type (Urgent Care, Federally Qualified Health Center, Small Group Practice, ect…).

Findings from these primary, secondary, and qualitative data analyses were then cross referenced for areas of overlap and contrasted with findings in existing literature. Several barriers to accessing care in Butte County were detected including an overall lack of primary care providers in the area, socio-economic barriers, language and cultural barriers, and transportation barriers.

RESULTS

Demand for Primary and Specialty Care Provider Services Exceeds Supply in Butte County

Public and private health insurance reform under the ACA has placed an overwhelming demand on primary and specialty care providers in Butte County.

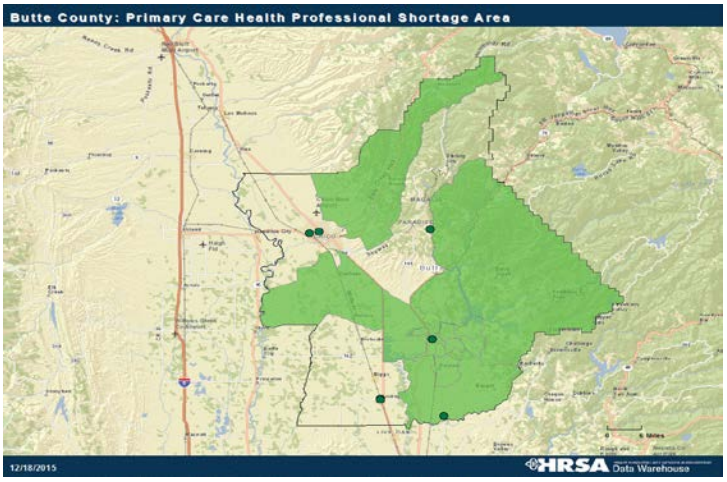


Figure Access - 1: Primary Care Health Professional Shortage Areas in Butte County
Source: U.S. Department of Health and Human Services. Retrieved from: http://datawarehouse.hrsa.gov

A large portion of Butte County meets the Health Resources and Services Administration (HRSA) criteria for a Primary Care Health Professional Shortage Area (HPSA), (see *Figure Access - 1*).

In 2012, the ratio of persons to Primary Care Physicians in Butte County was roughly 1500:1, while it was roughly 1300:1 for California overall, indicating that there were fewer Primary Care Physicians practicing per capita in Butte County. The same ratios were observed for Dental Providers in Butte County and California, respectively, indicating that there is a shorter supply per capita of Dental Care in Butte County than in the state overall However, Butte County had a better ratio of Non-Physician Primary Care Providers (e.g. Physician's Assistants, Advanced Registered Nurse Practitioners, ect.) per capita than the State overall. This was also true for Mental Health providers (see *Table – Access 1*).

Table – Access 1: Providers to Population Ratios for Butte County and California, 2012.

Providers Ratios to Population by Type	Butte County	California
Primary Care	1497:1	1,294:1
Other Primary Care (Non Physician)	1,227:1	2,369:1
Dental	1,461:1	1,291:1
Mental Health	235:1	376:1

Source: 2012 Area Health Resource Data File via County Health Rankings. Retrieved From: http://www.countyhealthrankings.org/app/california/2015/rankings/butte/county/outcomes/overall/snapshot

In addition to the short supply of Primary Care Physicians per capita relative to the State overall, Medi-Cal (e.g. California's Medicaid program) expansion under the ACA increased the number of Medi-Cal beneficiaries in Butte County by 123% between 2013 and 2015, (see *Figure – Access 2*).

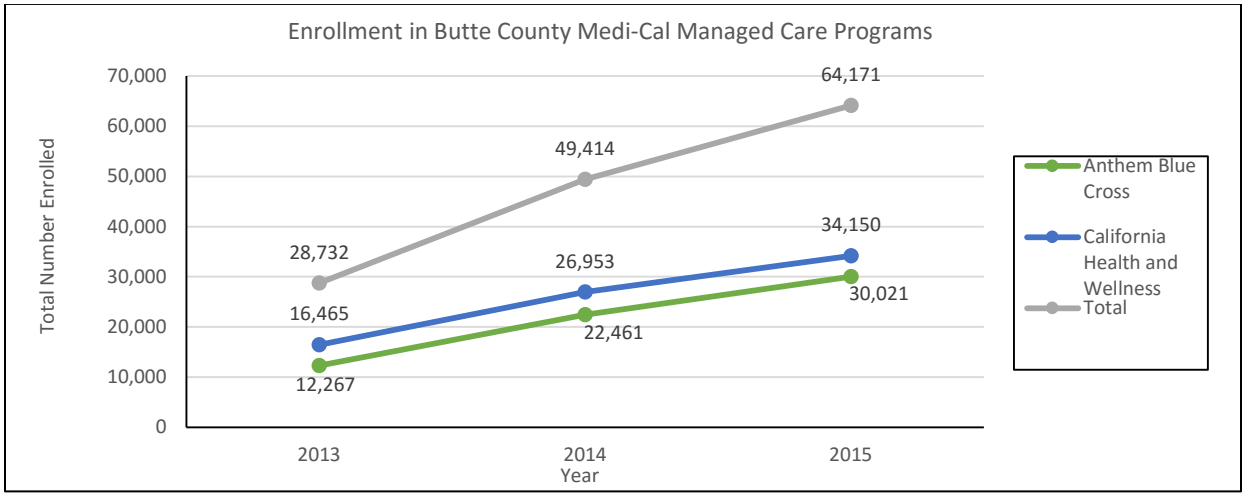


Figure - Access 2: Medi-Cal Managed Care Enrollment
Source: 2013-2015 Medi-Cal Managed Care Enrollment Reports

The massive increase in Medi-Cal beneficiaries, combined with an increase in individual and group health insurance policies purchased through California's Health Insurance Exchange/Marketplace (Covered CA) in compliance with the "Individual Mandate" provision of the ACA; has placed an overwhelming demand on the already limited supply of practicing Primary Care Physicians in Butte County. This has resulted in diminished access to care for the population of Butte County overall, as there are simply too few Physicians in the region to meet

the needs of these new public and private health insurance beneficiaries seeking both Primary and Specialty Care.

Secondary data from the CHIS demonstrated that in 2014 residents of Butte County experienced greater difficulty obtaining Primary Care than during the previous year; and that they experienced significantly greater difficulty relative to California overall after Medi-Cal expansion and the "Individual Mandate" had been implemented. Importantly, this difference in access to care between Butte County and the State overall was not apparent the previous year before Medi-Cal expansion occurred and the "Individual Mandate" provision of the ACA that went into effect; suggesting that while access to care for the State overall increased slightly due to these provisions of the ACA, it decreased considerably in Butte County due to these same provisions. Similar trends were observed for Specialty Care in Butte County and California overall during this time frame (see *Table – Access 2*).

Table – Access 2: Adult Population Reporting Difficulty Finding Primary and Specialty Care in Butte County and California, 2013 -2014.

Year	**2013**		**2014**	
Difficulty Finding Primary Care	**Butte County**	**California**	**Butte County**	**California**
Percent	**5.2%***	**4.7%**	**19.8%**	**4.6%**
Estimated Population Experience Difficulty Finding Primary Healthcare Services	9,000	1,320,000	34,000	1,315,000
Estimated Total Population Needing Primary Healthcare Services	171,000	28,162,000	174,000	28,539,000
Difficulty Finding Needed Specialty Care	**Butte County**	**California**	**Butte County**	**California**
Percent	**17.5%***	**11.0%**	**29.8%**	**10.8%**
Estimated Population Experience Difficulty Finding Specialty Healthcare Services	14,000	1,146,000	27,000	1,116,000
Estimated Total Population Needing Specialty Healthcare Services	80,000	10,424,000	92,000	10,373,000

Source: 2013-2014 California Health Interview Survey. Primary Care: Questions AJ133, AJ134. *Statistically unstable for a minimum number of respondents needed AND/OR has exceeded an acceptable value for coefficient of variance. - Estimate is less than 500 people.

Medi-Cal Beneficiaries Experience Greater Barriers Accessing Primary Care in Butte County

While all socioeconomic levels reported increased difficulty accessing Primary Care in Butte County relative to California overall; this was especially pronounced in the population enrolled in Medi-Cal, which serves a proxy for the population living in or near poverty as living below 138% of the federal poverty level (FPL) is a criteria for enrollment for most Medi-Cal beneficiaries.

In 2014, 42% of Medi-Cal beneficiaries who responded to the CHIS in Butte County experienced difficultly obtaining Primary Care, while roughly 20% of total respondents in Butte County

experienced difficulty. Further, the magnitude of increased difficulty experienced by Medi-Cal beneficiaries relative to the previous year was considerably greater than for the County overall; as well as significantly greater relative to Medi-Cal beneficiaries who responded to the CHIS for California overall (see *Table – Access 3*).

Table – Access 3: Difficulty Finding Primary Care by Insurance Type in Butte County and California, 2013 -2014

Year	2013		2014	
Type of Current Health Insurance Coverage	**Butte County**	**California**	**Butte County**	**California**
Uninsured	5.3%*	5.7%	12.1%*	5.5%
Medicare & Medicaid	17.3%*	9.5%	20.9%*	4.3%
Medicare & Others	3.2%*	1.6%	8.2%*	1.6%
Medicare only	-	3.1%*	-	7.1%*
Medicaid (e.g. Medi-Cal)	6.8*	9.5%	41.8%	9.0%
Healthy Families/CHIP	-	-	-	-
Employment-based	3.4*	3.8%	18.4*	2.9%
Privately purchased	-	1.7%	-	8.4%
Other public	89.3*	8.3%	-	4.1*
Total	**5.2***	**4.7%**	**19.8%**	**4.6%**

Source: 2013-2014 California Health Interview Survey. Primary Care: Questions AJ133, AJ134. *Statistically unstable for a minimum number of respondents needed AND/OR has exceeded an acceptable value for coefficient of variance. - Estimate is less than 500 people.

Language Barriers Exist to Accessing Care in Butte County for the Hmong Population

Survey and focus group results demonstrated that members of the Hmong community, which is a considerable sub-population of Butte County, are experiencing difficulty with translation services while interfacing with the healthcare system. Patient survey results demonstrated that while nearly 90% of respondents whose primary language was Spanish had translation services available to them at Health Care facilities in Butte County, only 40% of respondents whose primary language was Hmong had translation services available, (see *Table – Access 4*).

Table – Access 4: Patients Reporting the Availability of Translation Services by Primary Language in Butte County, 2015 – 2016.

Translation Services Available	Primary Language	
	Hmong, (n=48)	**Spanish, (n=33)**
Yes	39.6%	87.9%
No	60.4%	12.1%

Source: 2015-2016 BCHC Patient Access to Care Survey.

Similarly, nearly 70% of clinician survey respondents reported having staff at their Health Care facilities that spoke Spanish, while roughly 10% reported having staff that spoke Hmong, (see *Table – Access 5*).

Table – Access 5: Clinicians with Staff that Speak Language Other than English in Butte County, 2015 – 2016.

Percent of Clinician Respondents with Staff that Speak Language (n=31)	Hmong, (n=12)	Spanish, (n=21)
Yes	11.1%	67.7%
No	88.9%	32.3%

Source: 2015-2016 BCHC Clinician Access to Care Survey.

The gap in language and translation services being experienced by Butte County's Hmong population was also expressed by participants of the Focus Group conducted at the Hmong Cultural Center. The following statements were made by participants at this Focus Group:

> "*We don't know how to explain our symptom to the nurse/doctor. We only point to the area of our pain, which the doctor don't know what exactly the illness is."*
>
> *"There is no Hmong translator to come visit or translate for me. The nurse will give me a phone to call a translator. The Hmong translator in from North Carolina."*
>
> *"The doctor gives me a variety of medicines and I don't know which one to eat for my symptom. I would like the label on the medication to be in Hmong."*
>
> *"Our Hmong elderly don't understand anything, such as when asking for our date of birth or addresses. We would hand our ID card to the front desk person because we don't know what they are saying."*

In addition, participants also expressed that cultural norms requiring Hmong elders to "save face" while in the presence of younger members of their family, friends, and other social support networks further complicates the ability of friends or family to assist in translating information related to medical symptoms and associated treatments for Hmong elders while interacting with the local health care system.

Transportation Barriers Exist to Accessing Care for the Medi-Cal and Medicare Population

More Medi-Cal (26%) and Medicare (19%) beneficiaries that responded to the patient survey reported difficulty getting to appointments at Health Care facilities than respondents with Employment-Based or Private insurance (6%).

Table – Access 6: Patient Survey Respondents Reporting Difficulty Getting to Medical Appointments and Type of Transportation Utilized by Insurance Type, 2015-2016

Percent Reporting Difficulty Getting to Medical Appointments and Type of Transportation Utilized	Insurance Type			
	Medi-Cal (n=393)	Medicare (n=170)	Employment Based / Private Insurance (n=283)	Total (n=846)
Had Trouble Getting to an Appointment	25.6%	18.6%	6.3%	17.8%
Transportation Type*				
Drive Myself	62.3%	56.7%	90.6%	70.7%
Friend or Family Member Drives	23.4%	24.0%	5.9%	17.6%
Public Transportation	8.9%	10.5%	0.7%	6.5%

Source: 2015-2016 BCHC Patient Access to Care Survey.

* = A Global Chi Square Test was Significant at the p <0.05 alpha level for this variable.

Medi-Cal and Medicare beneficiaries also reported significantly higher use of public transportation and/or relying on friends and relatives to get to Health Care facilities than respondents with Employment-Based or Private insurance, (see *Table – Access 6*).

Medi-Cal beneficiaries also expressed difficulty accessing transportation to Health Care facilities during the Focus Group held at the Esplanade House, a transitional housing facility serving Butte County's indigent population. The following statements were made by participants at this Focus Group:

> "One thing that's tough is getting the transportation. With my insurance I can't see two providers in one day, which makes it hard. My physicians are in Oroville and I can't schedule my General Practitioner and my Orthopedic appointments on the same day. So I have to find two rides to Oroville, I have to take two days off of work and it's hard. My doctor wants to refer me to a Physical Therapist in Oroville, for three times a week and I told him that's impossible, but I can't find anyone in Chico willing to take my insurance"

> "Transportation is a huge issue for me. I don't have a car. Luckily my case manager will take me to the doctor, and I'm so grateful to her because without that help there is a lot about my health that wouldn't get addressed. Otherwise I'd have to take the bus from Chico to Oroville and with my limited mobility and a 3 and 4 year old in tow that's a challenge."

Similarly, a Medicare beneficiary participant of the Focus Group held at the PEP Senior Housing facility made the following statement:

> "I have to take the bus to get to the hospital. If it's raining I do have trouble. I should save money for a taxi but that's hard to put my wheelchair in the back. I can call the Para-Taxi, but I haven't gotten the forms signed by my doctor yet."

CONCLUSIONS

Taken together, these data indicate that in Butte County there exists significant hurdles to connecting the population overall with both Primary and Specialty Health Care services. Further, public and private health insurance expansion under the ACA has not improved access to care in Butte County. The magnitude of these hurdles is far greater for the Medi-Cal population. Results from analysis of secondary CHIS data on access to Primary Care clearly demonstrate that after implementation of public and private health insurance reform, Medi-Cal beneficiaries in Butte County were experiencing significantly greater difficulty accessing Primary Care services than Medi-Cal beneficiaries in California overall, and experiencing significantly greater difficulty the general population of the County. The data presented here are in agreement with the 2015 California Healthcare Foundation report *On the Frontier* – which found that the introduction of Managed Medi-Cal plan models as the mechanism of Medi-Cal expansion had an adverse impact on access to care in 28 rural CA counties, including Butte County. Other factors impacting access to care included language, cultural, and geographic barriers. Specifically, our survey and focus group results demonstrate that the Hmong community, which is a considerable sub-population of Butte County, are experiencing difficulty with translation services while interfacing with the healthcare system. Also of note was that many Medi-Cal and Medicare patients expressed difficulty accessing transportation to healthcare facilities; and reported higher use of public transportation and/or relying on friends or relatives to get to appointments at Healthcare facilities.

FUTURE DIRECTIONS

In March of 2016, preliminary findings from the assessment were presented as part of a symposium titled *Reforming a Broken Healthcare System* at Enloe Medical Center sponsored by the local chapter of Theta Tau (International Honor Society of Nursing) in collaboration with Chico State University's School of Nursing. In April of 2016, the full findings from the analysis were reported back to the BCHC; and in May of 2016, the Access to Care sub-committee re-convened to discuss feedback obtained from the BCHC and other community stakeholders. In the summer months of 2016, the access to care sub-committee will begin developing both short and long term goals aimed at closing the gaps in access to care identified in the assessment, and corresponding strategies and action plans.

CHAPTER 7: CONCLUSION

CLOSING SUMMARY

The findings in this Community Health Assessment (CHA) are similar to many communities and counties of similar size and demographic characteristics to Butte County. This assessment highlights many of Butte County's notable strengths, including a strong healthcare infrastructure, affordable cost of living, numerous parks and recreational opportunities. However, far too many Butte County residents struggle to maintain healthy lifestyles. Poor socio-economic conditions, such as high poverty and unemployment levels, greatly influence our community's capability to achieve good health and high quality of life. When combined with poverty, mental health and substance abuse concerns are magnified.

NOTABLE HEALTH DISPARITIES IN OUR COMMUNITY

Although the term "disparities" is often interpreted to mean racial or ethnic disparities, many types of disparity exist in Butte County, particularly in relation to health status. If a health outcome is seen to a greater or lesser extent between subpopulations, there is a disparity. The following provides a summary of key health issues and descriptions of specific population groups who are experiencing an inequitable share of poor health outcomes in our community.

Disparities Related to Substance Abuse and Addictive Disorders:

- Male teenagers in Butte County were much more likely to have tried illicit drugs than female teenagers in Butte County, as well as male teenagers in California overall. However, female teenagers in Butte County were less likely to have tried illicit drugs than female teenagers in California overall (see pg. 84).

- A much higher percentage of Medi-Cal beneficiaries in Butte County were identified as current smokers than Medi-Cal beneficiaries in California overall, which mirrored and may be related to the percentage of Medi-Cal emergency room asthma visits (see pg. 71).

- African American / Black respondents indicated substance related and addictive disorders to be a top health concern (see pg. 34).

- The Age Adjusted Death Rate (AADR) for drug induced deaths in Butte County was roughly 3 times greater than the AADR for California overall, with Butte County ranking 3rd out of California's 58 counties for drug induced deaths (see pg. 87).

Disparities Related to Socio Economic Conditions:

- A higher percentage of African American/Black residents were living below the federal poverty line (38.9%) than any other race/ethnicity in Butte County, which may be cause for concern as poverty is highly associated with poorer health and diminished access to healthcare. Similarly, the infant mortality rate was higher among African American/Black residents (42.1 per 1000 live births) than any other race/ethnicity in Butte County. This should be interpreted with caution as this difference was statistically unstable; however it is consistent with statewide and national trends concerning ethnic / racial disparities in infant mortality rates (see pgs. 49, 95).

- More Asian residents (25.8%) were receiving Supplemental Nutrition Assistance Program (SNAP) benefits than any other race in Butte County, which was not reflected in the data for California overall (see pg. 60).

- A higher percentage of American Indian/Alaska Native residents were unemployed (19.0%) than any other racial/ethnic group in Butte County, with Hispanic/Latino's having the second highest percentage of unemployment (16.7%). Both American Indian/Alaska Natives and Hispanic/Latinos had higher rates of unemployment in Butte County than in California overall (see pg. 52).

- Labor and delivery services for teenage females in Butte County were substantially more likely to be paid for by Medi-Cal than private insurance, self-pay, or other third party payer sources, indicating that socio-economic factors are associated with teenage pregnancy rates in Butte County (see pg. 92).

- Consistent with statewide and national trends, there were close to twice as many homeless males as females in Butte County; however, there was some indication that homeless women were more likely to inhabit the rural areas of the county (see pg. 62).

- Children attending private kindergarten in Butte County were considerably less likely to be up to date on their immunizations than children attending public kindergarten; implying that parents with greater financial means may be less likely to follow recommended guidelines for childhood immunizations (see pg. 97).

Disparities Related to Chronic Disease:

- Racial/ethnic minority children were more likely to be overweight/obese. Hispanic/Latino children (48.8%) and African American/Black children (41.1%) had higher rates than that of White children (37.1%) and Asian children (33.5%). Interestingly, while Asian children in Butte County were the least overweight/obese, they were more overweight/obese than Asian children in California overall (26.5%), (see pg. 66).

- Consistent with statewide and national trends, people age 65 and older were much more likely to be diagnosed as diabetic (see pg. 68).

- A higher percentage of Asians in Butte County had a lifetime asthma diagnosis than any other racial/ethnic group, which was inconsistent with trends for California. However, this should be interpreted with caution as this difference was statistically unstable (see pg. 70).

- Visits to Butte County Emergency Departments for asthma related symptoms were much more likely to be paid for by Medi-Cal than by any other payment source; and a considerably higher percentage of asthma related Emergency Department visits in Butte County were paid for by Medi-Cal than in California overall, indicating that socio-economic factors are associated with asthma in Butte County (see pg. 71).

Disparities Related to Sexually Transmitted Disease Infections:

- Rates of chlamydia and gonorrhea were higher for women in Butte County than for men (chlamydia: 539.8 to 226.7; gonorrhea: 33.1 to 28.3 per 100,000 population,); and rates of chlamydia and gonorrhea were much higher for young adults (18-29). These trends were consistent with both statewide and national data (see pg. 88).

Disparities Related to Mental Health:

- Men in Butte County were much more likely to commit suicide than women (32.2 to 7.2 per 100,000 population). This was consistent with statewide and national trends; however the difference in suicide rates between men and women was considerably greater in Butte County than in both California overall and the United States (see pg. 77).

- Veterans presenting for mental health services at the Butte County Behavioral Health Department had a higher percentage of Mood Disorders (36.7% vs. 30.1%), and PTSD (13.1% vs. 8.5%) than non-veterans. These trends were consistent with statewide and national data (see pg. 78).

- Veterans age 18 and over in Butte County had a suicide rate more than 3 times higher than non-veterans age 18 and over (62.9 vs. 19.1 per 100,000 population). The highest number of suicide cases among veterans in Butte County occurred in males age 65 and over. Both of these trends were consistent with statewide and national data (see pg. 79, 80).

Health Priority Determination Methodology:

Together We Can! Healthy Living in Butte County solicited communities and partnering agencies throughout the county in order to identify health topics of concern to its residents. The top 10 most commonly referenced **health topics** were:

1. Socio-Economic Factors
2. Public Safety/Violence
3. Mental Health
4. Substance Abuse
5. Access to Healthcare
6. Chronic Disease
7. Environment
8. Senior/Aging
9. Vaccinations
10. Transportation

Policy Council and Working Group members were administered an online survey to provide feedback and prioritize which health topics to include as strategic priorities within the Community Health Improvement Plan (CHIP). Each health topic was rated for agreement or disagreement (strongly disagree, disagree, neutral, agree, strongly agree) on the following **statements**:

1. This health topic impacts a large number or a high percentage of people in our community.
2. Health disparities or inequities exist for this health topic (sub-populations are more affected than the general public).
3. There is a good chance that this health topic could be improved if local organizations and agencies address it.

4. Community support to address this health topic exists, including political will.
5. My organization (or myself) would be willing to serve on a CHIP sub-committee to address this health topic.
6. My organization (or myself) would be willing to serve in a CHIP sub-committee leadership role to address this health topic.
7. Sufficient local resources (funding, staff, and expertise) are available or obtainable to address this health topic.

Survey Analysis:
The average ratings for each statement were determined for both the Policy Council and the Working Group, with 16 members of the Policy Council and 59 members of the Working Group completing the entire survey. The Policy Council's ratings carried more weight than the Working Group's, due to the Policy Council's charge of directing resources and offering final approval of the CHA. The average weighted ratings of both groups were combined to select the top 3 health topics. For a detailed methodology of weights assigned and the scoring process, see Appendix Conclusion-1.

Results:
The health topics selected as strategic priorities to be addressed in the CHIP are:

1. Substance Abuse
2. Chronic Disease
3. Socio-Economic Factors

The CHIP will outline the agreed upon action steps to address these priority health topics and the parties responsible for implementing those steps.

APPENDIX INTRO - 1

TOGETHER WE CAN! HEALTHY LIVING IN BUTTE COUNTY
POLICY COUNCIL MEMBER ORGANIZATIONS

Butte County Behavioral Health Department
Butte County Board of Supervisors
Butte County Department of Employment and Social Services (DESS)
Butte College
Butte County First Five Commission
Butte County Hmong Cultural Center
Butte County Inter-Tribal Task Force
Butte County Office of Education
Butte County Public Health Department
California State University, Chico
Chico Interfaith Council- United Church of Christ/New Vision Church
City of Oroville
Enloe Medical Center
Feather River Hospital
Southside Vanguard
Oroville Hospital
United Way of Northern California

WORKING GROUP MEMBER AGENCIES/ORGANIZATIONS/PROGRAMS

American Association of University Women (AAUW) Oroville
American Red Cross
Ampla Health Clinics
Anthem Blue Cross
BCPHD Child Health Disability Program
Boys and Girls Club of the North Valley
Butte College Foster Kinship Program
Butte County Administration – Economic and Community Development
Butte County Air Quality Management District
Butte County Animal Control
Butte County Behavioral Health Department – Community Services Programs
Butte County Behavioral Health Department – Paradise Adult Services
Butte County Behavioral Health Department –Prevention Unit
Butte County Cal Fire
Butte County Cattlewomen's Association
Butte County Child Abuse Prevention Council

Butte County Department of Development Services
Butte County Department of Employment and Social Services (DESS)
Butte County Farm, Home and 4H Office
Butte County First Five Commission
Butte County Head Start
Butte County Hmong Women's Group
Butte County Housing Authority
Butte County League of Women Voters
Butte County Office of Education: Butte Schools Self-Funded Programs
Butte County Office of Education: Child Development Programs and Services
Butte County Office of Emergency Management
Butte County Public Health – Administration
Butte County Public Health – Communicable Disease/Community Health Division
Butte County Public Health – Emergency Response Program
Butte County Public Health – Environmental Health Division
Butte County Public Health – Maternal Child and Adolescent Health
Butte County Public Health – Nursing Division
Butte County Resident/Sacramento Environmental Health Department
Butte County Residents/Community Activists (Gridley Area)
Butte County Sherriff's Department
Butte County Wastewater Advisory Committee
Butte-Glenn Medical Society
California Fish and Wildlife
California Health and Wellness
California Health Collaborative
California Hospital Association
California Water Service
Celebration Foundation
Chico Area Recreation District (CARD)
Chico Unified School District
Chico VA Clinic
City of Chico Chamber of Commerce
Community Action Agency of Butte County
Community Housing Improvement Program
Companions Animal Hospital
Cooperating Christian Churches of Oroville (CCCO)
CSU Chico Center for Nutrition and Activity Promotion (CNAP)
CSU Chico College of Agriculture (Organic Dairy Program)
Downtown Chico Business Association (DCBA)

Enloe Medical Center
Far Northern Regional Center
Feather River Senior Citizens Association
Feather River Tribal Health
Handi-Riders Inc.
Hospital Council of Northern and Central California
Lake Oroville Bicyclists Association
Mountain Circle Family Services
Nevada County Health and Human Services Agency
Northern California Youth and Family Programs
Northern Valley Catholic Social Services
Northern Valley Indian Health – Chico Facility
Northern Valley Indian Health – Children's Health Center
NorthStar Engineering
Orchard Hospital
Oroville City Elementary School District
Oroville Hospital
Oroville Union High School District
Padres Migratorios (Migrant Education)
Paradise Community Wellness Connection
Paradise Parks and Recreation District
Passages (CSU Chico)
Placer County Health and Human Services
Skyway House
Social Security Offices (Chico / Oroville)
Stonewall Alliance of Chico
Susan G. Komen Sacramento Valley
Tehama County Health and Human Services Agency
The Growing Place/Butte College
Thermalito Irrigation & Sewer District
Think Pink Butte County
Town of Paradise Sanitation Division
Valley Oak Children's Services
Work Training Center
Youth for Change – 6th Street Center for Youth
Youth for Change – African American Family & Cultural Center
Youth for Change – Behavioral Health Programs
Youth for Change – Social Service Programs
Youth for Change – Strong Starts Program

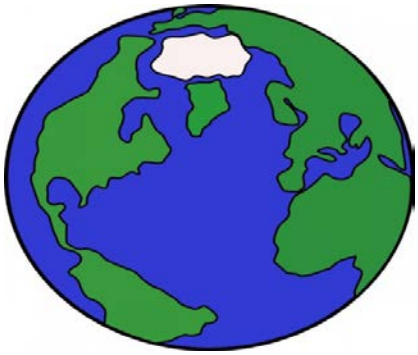
APPENDIX INTRO - 2

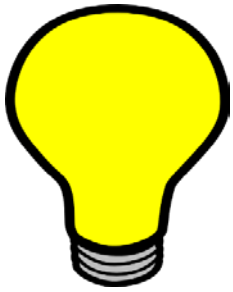
Butte County Asset Inventory

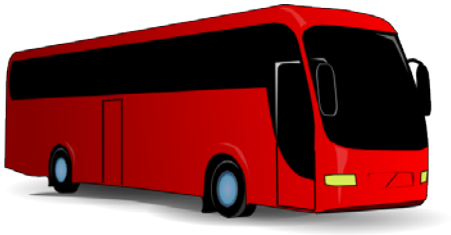
This local asset inventory was compiled throughout the community health assessment process. This inventory will be used as part of the community health improvement planning process to explore the breadth and depth of community assets and resources that may be mobilized to address community health needs. This is a working document, with additional community assets and resources being continually added.

What is an asset? – An asset is anything that improves the quality of community life. It may be a person, group of people, place or institution.

Health Care System Assets	
	- Alternative Medicine Providers - University/College Student Health Centers - Community Health Centers - Dentists and Dental Clinics - Disease-based Support Groups - Emergency Medical Services - Eye & Ear Care Providers - Free Clinics - Health Insurance Plans - Health Professions Schools/Programs - Hospitals - Mental Health Providers - Nursing Homes - Pharmacies - Physical and Occupational Therapists - Private Physicians - Public Health Department - Rehabilitation, Home Health & Hospice Providers - School Nurses, Counselors, Psychologists - Substance Abuse Treatment and Recovery - Urgent Care Centers

Recreational Assets 	- 4H and the County Fair - Bicycle Courses (BMX) - Bicycling Clubs - Community Centers - Community Dances - Community Education Programs - Conservation Activities/Programs - Golf Courses - Horseback Riding/Stables - Parks and Recreation Districts - Private Membership Fitness Clubs - Riverboat - School Based Athletics - Swimming Locations - Walking/biking Trails & Sidewalks - Recreation and Fitness Organizations
Food System Assets 	- Agriculture - Community Gardens - Farmers Markets - Food Pantry/Bank/Commodities - Food Policy and System Groups - Food Purchasing Programs - Full Service Grocery Stores - Garden Supply Centers - Home Delivered Meal Services - Nutrition Education Programs/Services - School Lunch Programs
Cultural Assets 	- Agencies That Provide Cultural Support, Education and Advocacy - Community Events and Festivals - Crafts and Enrichments Classes/Resources - Family and Cultural Centers - Historical Organizations - Media Organizations - Museums - Nature Centers - Performing Arts Organizations - Public Spaces

Education Assets 	- Charter and Private Schools - Childcare and Preschool Providers (0-5) - Community Centers - Community College and University - Homeschool Organizations - K-12 School Districts - Nature Centers - Public Libraries - Senior Centers - Tutoring/Mentoring Organizations - Virtual & Online Learning - Vocational/Trade Schools
Organizational Assets 	- 12-Step Organizations - Crisis Intervention - Chambers of Commerce - Economic Development Organizations - Faith-Based Organizations - Human Service Organizations - Informal Groups and Meetings - Local Charities, Grant-Makers, & Foundations - Multi-Sector Coalitions - Service Organizations
Public Safety Assets 	- Alternative Custody Programs - Anti Bullying Programs - Domestic Violence & Crisis Response Organizations - Emergency Operations Centers - Emergency Preparedness Coalitions - Environmental Protection Organizations - Jail - Law Enforcement Training Centers - National Guard - Neighborhood Watch Programs - Police and Fire Departments - Probation and Fire Departments

Housing Assets 	- Affordable Housing Programs - Aging in Place Efforts - Assisted Living Facilities - Foster Care Homes (Adult/Child) - Home Building Charities - Homeless Coalitions - Homeless Shelters - Rehab Programs - Subsidized Housing Developments - Rental Housing Landlords and Developments - Weatherization, Home Improvement, and Home Safety Programs
Transportation Assets 	- Airports - Ambulances - Bicycle Infrastructure - Long Distance Bus Services - Mobility Managers - Public Transportation Providers - Safe Streets Initiatives/Polices - Taxi's - Train Service
Employment Assets 	- Business Associations - Development and Social Service Department - Economic Development Organizations - Farmers and Rural Employers - Labor Organizations - Major Employers - Public Employers - Self-Employed and Startups - Unemployment and Job-Placement Services - Volunteer Organizations

APPENDIX THEMES - 1

Healthy Living in Butte County
Community Health Survey

Please take 15-20 minutes to complete the survey below. **The purpose of this survey is to get your opinions about community health issues in Butte County.** Healthy Living in Butte County (HLBC) will use the results of this survey and other information to determine the most often identified problems that can be addressed through community action.

All survey answers are strictly confidential; the results will be reported in a summarized manner in such a way that individual information cannot be identified. You can skip any question that you do not feel comfortable answering.

Your opinion is important! If you have already completed a survey, please don't fill out another one. Thank you, and if you have any questions, please contact us (*see contact information at the end of the survey*).

1. Where do you live? Please **check one (1)** from the following list:

☐ Bangor	☐ Clipper Mills	☐ Gridley	☐ Thermalito
☐ Berry Creek	☐ Cohasset	☐ Magalia	☐ Palermo
☐ Biggs	☐ Concow	☐ Oroville	☐ Yankee Hill
☐ Butte Meadows	☐ Durham	☐ Paradise	☐ Nord
☐ Cherokee	☐ Forbestown	☐ South Oroville	☐ Stirling City
☐ Chico	☐ Forest Ranch	☐ Richvale	☐ Honcut
☐ Other_____			

2. Where do you work? Please **check one (1)** from the following list:

☐ Biggs	☐ Chico	☐ Gridley	☐ Paradise
☐ Magalia	☐ Durham	☐ Richvale	☐ Thermalito
☐ Palermo	☐ Oroville	☐ Work outside Butte County	☐ Do not work
☐ Other_____			

3. In the list below, what do you think are the **three** most important factors that make Butte County a good place to live?

Please check only three (3) from the following list:

- ☐ Community involvement
- ☐ Healthy behaviors and lifestyles
- ☐ Low crime/safe neighborhoods/ strong law enforcement services
- ☐ Low death and disease rates
- ☐ Good schools
- ☐ Religious or spiritual values
- ☐ Access to health care/ health care is available when needed
- ☐ Arts and cultural events
- ☐ Parks and recreation (includes bike paths, hiking trails)
- ☐ Values diversity, tolerance and inclusiveness
- ☐ Clean environment
- ☐ Good jobs and healthy economy
- ☐ Affordable housing
- ☐ Good hospitals
- ☐ Strong family life
- ☐ Dedicated residents/volunteerism
- ☐ Sense of community
- ☐ Many effective community-based and non-profit organizations
- ☐ Culturally appropriate services and opportunities
- ☐ Support networks for individuals and families
- ☐ Many health care providers
- ☐ Specialized health care
- ☐ Dental vans
- ☐ Good transportation services
- ☐ Access to healthy food
- ☐ Support for seniors/elderly
- ☐ Quality child care/afterschool care
- ☐ Quality early childhood education
- ☐ Other_____

_____

Please turn to the next page

4. In the list below, what do you think are the **three** most important health issues in Butte County? *The most important health issues are those that you feel have the greatest impact on overall community health in Butte County.*

Please check only three (3) from the following list:

- ☐ Vaccinations
- ☐ Violence/crime (e.g., gangs, firearm-related injuries)
- ☐ Mental health issues (e.g., depression or emotional problems, suicide)
- ☐ Sexually transmitted diseases (e.g., Syphilis, gonorrhea, chlamydia)
- ☐ Teenage pregnancy
- ☐ Domestic violence
- ☐ Child abuse / Child neglect
- ☐ Poverty
- ☐ Healthy food access/ poor diet
- ☐ Inactivity/ Lack of exercise
- ☐ Unsafe roads
- ☐ Walkability/bike-ability (sidewalk conditions, bike lanes, etc.)
- ☐ Lack of Transportation
- ☐ Lack of affordable childcare
- ☐ Lack of dental/oral health
- ☐ HIV/AIDS
- ☐ Obesity (being overweight)
- ☐ Homelessness
- ☐ Tobacco use
- ☐ Alcohol and drug abuse (substance abuse)
- ☐ Lack of access to health care
- ☐ Chronic diseases (e.g., cancer, diabetes, high blood pressure)
- ☐ Aging related health issues (e.g., arthritis, hearing, vision loss, etc.)
- ☐ Agricultural pesticide exposure
- ☐ Air quality
- ☐ Water quality
- ☐ Motor vehicle crashes
- ☐ Unsafe/distracted driving
- ☐ Lack of safe and affordable housing
- ☐ Lack of senior services/aging
- ☐ Other_____

_____

Please turn to the next page

5. I think Butte County is a _____ community to live in.

Check one (1) to fill in the blank in the above statement:

☐ Very Unhealthy ☐ Unhealthy ☐ Moderately Healthy ☐ Healthy ☐ Very Healthy

6. I think Butte County is a _____ place to grow up or raise children.

Check one (1) to fill in the blank in the above statement:

☐ Very Unsafe ☐ Unsafe ☐ Moderately Safe ☐ Safe ☐ Very Safe

7. What would you like to see improved in the physical environment of Butte County?

Please let us know how important each of the following items is to you:

	Very Unimportant	Unimportant	Moderately Important	Important	Very important
Transportation					
Sidewalks					
Bikeways bike lanes?					
Park safety					
Park amenities, including toddler playground area					
Other:_____					

8. Are you satisfied with your current housing situation? ☐ Yes ☐ No

8.1 **If no, why not? Check all numbers that apply:**

☐ Too small

☐ Too many people living in the same home (i.e., over-crowded)

☐ Problems with other people, such as neighbors

☐ Too run down, unsafe, or unhealthy

☐ Too expensive

☐ Too far from town/services

☐ Other_____

_____

Please turn to the next page

9. A group of community members has been working together to help Butte County build a vision and a set of values for a healthy community. They identified the following items as part of that vision and the values that would support it.

9.1 .Please check the box that describes how important you feel each item is as a part of a vision for community health. *A vision provides a goal for the future, a statement of where we want the health of our community to be in 5-10 years.*

	Very Unimportant	Unimportant	Moderately Important	Important	Very important
All of our communities have a safe and reliable transportation system.					
Residents receive a high quality education from pre-school through high school.					
Everyone has information and access to quality, integrated health care services with a focus on health education, prevention, and healthy lifestyles.					
Our community values the mental health and well-being of each individual and provides clear information and readily available mental health services.					
We support a positive environment with opportunities for creativity, exercise, and outdoor recreation.					
We promote a smoke and drug-free environment with access to effective substance abuse treatment.					
Our community attracts a variety of desirable employment opportunities.					
Community members have access to nourishing and affordable food, including fresh fruits and vegetables.					
Our children are born healthy into a safe and supportive environment that promotes responsive parenting and breastfeeding.					
Our air and water are clean, and we have safe, designated outdoor spaces for physical activity.					
All residents live in safe, affordable housing that meets their needs.					
Our community supports the diversity and dignity of each person.					

What other ideas would you like to elaborate on or add to this vision? Please write your suggestions here:

_____

_____

Please turn to the next page

9.2. Please check the box that describes how important you feel each item is as a value that supports achieving a vision of community health. *Values are the beliefs we act upon and support how we work together to achieve our vision.*

	Very Unimportant	Unimportant	Moderately Important	Important	Very important
Dignity and respect					
Honesty and integrity					
Compassion					
Open communication and transparency					
Collaboration					
Environmentally sensitive					
Results-oriented					
Cultural Diversity					
Broad representation					
Recognizing that people are our highest value					

What other values would you like to elaborate on or add? Please write your suggestions here:

_____

_____

10. Where do you go most often to access health care services for yourself and your family?

Check one (1) that best applies:

- ☐ Butte County hospitals including emergency services
- ☐ Clinics/ health centers
- ☐ Private Doctor's Office
- ☐ Veterans Affairs (VA)
- ☐ Schools/university based health centers
- ☐ Mobile health vans
- ☐ Alcohol or drug dependency programs
- ☐ Other_____

_____

Please turn to the next page

11. If you got health care services outside of your home city, which **one** reason below best matches why?

Check one (1) reason that best matches why:

- ☐ My doctor of choice is in another city
- ☐ No doctors accept Medicare or Medi-Cal
- ☐ No providers for services I need
- ☐ My insurance only covers doctors in another area
- ☐ Other_____

12. Within the past year, what types of mental health services did you or anyone in your family use?

Check all that apply:

- ☐ None
- ☐ Counseling/therapy
- ☐ Crisis care/emergency mental health services
- ☐ Residential treatment
- ☐ Hospitalization
- ☐ Needed services, but did not use because_____
- ☐ Psychiatric Medication Management
_____

13. If you needed mental health care services in the past year, were you able to get these services in Butte County?

Check one (1) that best applies:

- ☐ Yes
- ☐ I was able to get some services in Butte County but not all the services that I needed.
- ☐ No
- ☐ I did not need any mental health care services.

If no, please explain why you were not able to get mental health care services in Butte County: _____

_____

Please turn to the next page

14. How do you pay for your health care?

Check all that apply:

- ☐ No insurance (pay cash)
- ☐ Health Insurance (e.g., private insurance, Blue Shield, HMO)
- ☐ Covered California
- ☐ Medicare
- ☐ Free services
- ☐ Medicare Supplemental Insurance
- ☐ Veterans Administration
- ☐ Indian Health Services
- ☐ Other_____
  _____

15. Within the past year, what types of social service benefits did you or anyone in your family receive?

Check all that apply:

- ☐ None
- ☐ Food stamps (SNAP/CalFresh)
- ☐ Respite care
- ☐ CalWORKS
- ☐ Housing assistance
- ☐ Medi-Cal/Medicare
- ☐ Veterans Affairs (VA) benefits
- ☐ Subsidized child care
- ☐ Child welfare services
- ☐ Unemployment services
- ☐ Legal Aid
- ☐ Social Security (including SSI and SSDI)
- ☐ Other_____
  _____

16. If you received benefits, were you able to get them in Butte County? **(Check one)**

☐ Yes ☐ No, if no please explain:_____
_____

17. Do you think there are enough jobs in Butte County?

For adults? Aged 18 years and over	☐ Yes	☐ No
For youth? Under 18 years of age	☐ Yes	☐ No

18. Are you currently employed? **(Check one)**

☐ Not employed ☐ Self-employed ☐ Employed part-time ☐ Employed full time

19. If not working, what is the main reason you are not working? **(Check one)**

☐ Medically ill or disabled
☐ Taking care of family
☐ Cannot find work
☐ Need training
☐ Retired
☐ Student
☐ Other_____

20. How much stress do you feel at your job on a regular basis? **(Check one)**

☐ No stress ☐ Some stress ☐ A lot of stress ☐ Too much stress ☐ Not working

21. In Butte County, the places where I go for recreation most often are:

Check only three (3) boxes from the list below:

☐ Parks/rivers/lakes/beaches/woods
☐ Restaurants
☐ Movie theaters
☐ Centers for yoga, tai-chi, etc.
☐ Live theater/performances
☐ Church
☐ Social club/service club
☐ Senior center
☐ Sports fields
☐ Library
☐ Swimming pools
☐ Neighborhood (walking/biking)
☐ Health/fitness clubs
☐ Bars
☐ Casinos
☐ Other_____

22. Recreation activities that I would use if they were available in Butte County are:

_____

_____

23. Approximately how many hours <u>per month</u> do you participate in volunteer activities (for example, in schools, hospitals, non-profit organizations and churches)? **(Check one)**

☐ None ☐ 1 to 5 hours ☐ 6 to 10 hours ☐ Over 10 hours

24. Type of volunteer activities that most interest you (**check all that apply**):

☐ Fundraising
☐ General office services
☐ Collect, prepare, distribute or serve food
☐ Tutoring or teaching
☐ Collect, make, or distribute clothing, crafts, or goods
☐ Coach, referee, or supervise sport teams
☐ Mentor youth
☐ Emergency services volunteer
☐ Music performance, or other artistic activities
☐ Be an usher, greeter, or minister
☐ Other_____

25. Do you use the following substances?

Substances	**Every Day**	**Some Days**	**Not At All**	**Do Others Within Your household Use?**
Alcohol	☐	☐	☐	☐
Cigarettes	☐	☐	☐	☐
Electronic Cigarettes	☐	☐	☐	☐
Chew, Snus or Snuff	☐	☐	☐	☐
Cigars and Cigarillos	☐	☐	☐	☐
Cocaine	☐	☐	☐	☐
Crystal Methamphetamine (Meth)	☐	☐	☐	☐
Heroin	☐	☐	☐	☐
Marijuana	☐	☐	☐	☐
Synthetic Marijuana (also called K2, Spice, Fake, King Kong, Yucatan Fire, Skunk, or Moon Rocks)	☐	☐	☐	☐

Please answer the following questions about yourself so we can see how different types of people feel about these local health issues.

26. Zip code where you live: _____

27. How would you classify your gender identity?

- ☐ Male
- ☐ Female
- ☐ Transgender male (assigned female at birth, identifies as male)
- ☐ Transgender female (assigned male at birth, identifies as female)
- ☐ If your identity is not listed above, please self-identify:_____
  _____

28. How do you identify your sexual orientation?

- ☐ Heterosexual
- ☐ LGBQ+ (Lesbian, Gay, Bisexual, Queer, Questioning, Pansexual, Asexual, 2-Spirit)
- ☐ If your identity is not listed above, please self-identify:_____
  _____

29. Your age (*birth month and year*):

- ☐ Under 18 years
- ☐ 18-25 Years
- ☐ 26-39 Years
- ☐ 40-54 Years
- ☐ 55-64 Years
- ☐ 65-80 Years
- ☐ Over 80 years

30. Ethnic group(s) you most identify with:

Check one (1) that applies.

- ☐ Hispanic/Latino
- ☐ Non-Hispanic/Non-Latino
- ☐ Unknown

Please turn to the next page

31. What is your race? **(Check all that apply)**

- ☐ African-American/Black
- ☐ American Indian/Alaska Native
- ☐ White
- ☐ Asian
- ☐ Asian Indian
- ☐ Hmong
- ☐ Chinese
- ☐ Filipino
- ☐ Laotian
- ☐ Pacific Islander
- ☐ Native Hawaiian
- ☐ Other *(specify)*: _____

32. Your highest educational level: **(Check one)**

- ☐ Less than high school
- ☐ Associate or Technical Degree
- ☐ College degree (4 year)
- ☐ High school Diploma
- ☐ GED
- ☐ Graduate or professional degree or higher
- ☐ Other_____

33. Annual household income: **(Check one)**

- ☐ Less than $20,000
- ☐ $20,000 to $34,999
- ☐ $35,000 to $49,999
- ☐ $50,000 to $64,999
- ☐ $65,000 to $79,999
- ☐ $80,000 to $100,000
- ☐ Over $100,000

34. Number of people in your household*: _____
**Household means the number of family and non-family members living in the same house together.*

Please turn to the next page

35. How many children aged 5 years or younger live within the household?

☐ 0 ☐ 1-2 ☐ 3-4 ☐ 5 or more

36. How did you find this survey? **(Check one)**

☐ Church ☐ Post Office

☐ Community meeting/ Event ☐ Electronic mail

☐ Grocery store/ Shopping Mall ☐ Other_____

Thank you very much for your response!

Please return completed surveys to the address below by October 17, 2014. You can drop off completed surveys at any of the following **Butte County Library Locations**:

Chico Branch	**Gridley Branch**	**Oroville Branch**	**Paradise Branch**
1108 Sherman Ave.	299 Spruce St.	1820 Mitchell Ave.	5922 Clark Rd.
Chico, CA 95926	Gridley, CA 95948	Oroville, CA 95966	Paradise, CA 95969
530-891-2762	530-846-3323	530-538-7641	530-872-6320

You can also scan and fax or email the completed surveys. If you would like more information about this project, please contact us at the number below.

Mail completed surveys to:
Attn: Gene Azparren
Butte County Public Health Department
202 Mira Loma Drive
Oroville, CA 95965
Phone: 530-538-7009 - Fax: 530-538-2164
Email: gazparren@buttecounty.net

APPENDIX SYSTEM – 1

PARTNERS WHO PARTICIPATED AT THE LOCAL COMMUNITY HEALTH SYSTEM ASSESSMENT SESSION (10/21/2014)

Ampla Health
Butte County Office of Education
Butte County
Butte College
Butte County Air Quality Management District
Butte County Child Abuse Prevention Council
Butte County League of Women Voter's
Butte Glenn Medical Society
California Health and Wellness
California Health Collaborative
California State University, Chico
City of Oroville
Enloe Medical Center
Feather River Hospital
Northern Valley Catholic Social Services
Northern Valley Indian Health
Oroville Hospital
Sierra Sacramento Valley EMS
The Growing Place (Chico)

APPENDIX SYSTEM – 2

THE LOCAL COMMUNITY HEALTH SYSTEM ASSESSMENT RESULTS BY ESSENTIAL SERVICE

The assessment results indicate areas of strength and opportunities for improvement for each of the Essential Health Services. Information about Butte County's activities, capacity, and performance for each of the Essential Health Services is described below. Each section explores the content of each Essential Health Service and the corresponding activities that comprise each service. Also included are highlights from small group discussions regarding Butte County's community health system's strengths, weaknesses, and opportunities for improvement.

ESSENTIAL COMMUNITY HEALTH SERVICE 1
MONITOR HEALTH STATUS TO IDENTIFY COMMUNITY HEALTH PROBLEMS

This service addresses the following questions: What's going on in our community? Do we know how healthy we are?

It includes the following activities:

- ✓ Assessing the community's health status and identifying threats to health.
- ✓ Determining health service needs, particularly those of vulnerable populations.
- ✓ Identifying community assets and resources to support the local health system.
- ✓ Engaging local health system stakeholders to utilize appropriate methods and technology to interpret, collect, and communicate health data to diverse audiences.

Strengths:

- Strong collaboration among local agencies already exists and will continue to improve.
- There are individual agency assessments, which can contribute to a broader community assessment to help to track trends and health inequities.
- Technology is used in many local agencies and affordability is improving.
- Procedures exist for data collection for health registries.

Weaknesses:

- Collaboration, data collection, and registries are not at their full potential yet because the community health assessment (CHA) process has just started.
- Varying agency capacity to collect and report data and to utilize technology.

Opportunities for improvement:

- Establish baseline data.
- Gather data in one centralized location (e.g., a website).
- Create a standardized and coordinated data collection system.

ESSENTIAL COMMUNITY HEALTH SERVICE 2
DIAGNOSE AND INVESTIGATE HEALTH PROBLEMS AND HEALTH HAZARDS IN THE COMMUNITY

This service addresses the following questions: Are we ready to respond to health problems or health hazards in our county? How quickly do we find out about problems? How effective is our response?

It includes the following activities:

- ✓ Accessing a public health laboratory capable of conducting rapid screening and high-volume testing.
- ✓ Establishing active infectious disease epidemiology programs.
- ✓ Creating technical capacity for epidemiological investigations of disease outbreaks and patterns (e.g., infectious and chronic diseases, injuries).

Strengths:

- There are existing surveillance systems that work well.
- Strong collaboration and referral systems within the county help share expertise.
- There are skilled staff and disaster response teams, with many emergency plans in place that work well.
- There are effective laboratory systems.

Weaknesses:

- There is a lack of microbiologists and other specialists.
- Surveillance systems do not exist for all issues (e.g., disaster, some infectious diseases).
- There is a lack of resources for comprehensive investigations and disaster response.

Opportunities for improvement:

- Create a comprehensive surveillance system.
- Improve emergency and health threat response plans.
- Improve laboratory collection systems.

ESSENTIAL COMMUNITY HEALTH SERVICE 3
INFORM, EDUCATE, AND EMPOWER PEOPLE ABOUT HEALTH ISSUES

This service addresses the following question: How well do we keep all segments of our community informed about health issues?

It includes the following activities:

- ✓ Creating community development activities.
- ✓ Establishing social marketing and targeted media public communication.
- ✓ Providing health information resources that are accessible for all populations.
- ✓ Working collaboratively with schools, faith groups, work sites, health care providers and others to reinforce health promotion messages and programs.

Strengths:

- Strong emergency communication system.
- Diverse exhibitors at health and community outreach events.
- High quality health messages and health promotion.
- Interactive applications exist for many health topics ("There's an app for that!").

Weaknesses:

- Community engagement strategies need to be more effective, facilitate involvement, and utilize proper media channels.
- Health messages are often focused at the individual level, rather than the community level.
- Lack of coordinated health messaging.
- Barriers to accessing stakeholders and policymakers.
- Lack of back-up communication plans.

Opportunities for improvement:

- Establish regular meetings for public information officers and create a listserv to share information.
- Make health a priority for policymakers.
- Continue to develop relationships with media.
- Expand health messaging through social media and other technology.
- Work to engage the community as stakeholders (e.g., make meetings accessible, offer incentives to attract volunteers).
- Look for and engage non-traditional partners (e.g., grocery stores).

ESSENTIAL HEALTH SERVICE 4
MOBILIZE COMMUNITY PARTNERSHIPS TO IDENTIFY AND SOLVE HEALTH PROBLEMS

This service addresses the following question: How well do we truly engage people in local health issues?

It includes the following activities:

- ✓ Convening and facilitating partnerships among groups and associations, including those not typically considered to be health-related.
- ✓ Undertaking defined health improvement planning processes and health projects, including preventive, screening, rehabilitation, and support programs.
- ✓ Building a coalition to draw on the full range of potential human and material resources to improve community health.

Strengths:

- A broad-based community health improvement council made up of decision-makers.
- 211 information referral system.
- Strong coalitions and issue-focused partnerships (e.g., child abuse prevention, health care, volunteer bank).
- Local colleges – Butte College and California State University, Chico.

Weaknesses:

- 211 service needs more funding and advertising.
- Low business involvement in health.
- Siloed funding and work.
- Funding often has strings attached.
- Lack of a broad-based community health coalition.

Opportunities for improvement:

- Identify and engage health champions (e.g., passionate community members, college students, and others) in health improvement.
- Create an evaluation process for health collaboration effectiveness to determine if efforts are improving health status.
- Look outside the health community for partnerships (e.g., Chico Natural Foods, Parks and Recreation Departments).
- Create opportunities for family activity.
- Improve visibility of 211.
- Create a directory of volunteer opportunities.

- Establish a long-term broad-based health council.
- Use the community health assessment process to engage the community.

ESSENTIAL COMMUNITY HEALTH SERVICE 5
DEVELOP POLICIES AND PLANS THAT SUPPORT INDIVIDUAL AND COMMUNITY HEALTH EFFORTS

This service addresses the following questions: What local policies in both the government and private sector promote health in our community? How well are we setting healthy local priorities?

It includes the following activities:

- ✓ Ensuring leadership development at all levels of community health.
- ✓ Ensuring systematic community-level and state-level planning for health improvement in all jurisdictions.
- ✓ Developing and tracking measurable health objectives from the community health improvement plan (CHIP) as a part of a continuous quality improvement plan.
- ✓ Establishing joint evaluation with the medical health care system to define consistent policies regarding prevention and treatment services.
- ✓ Developing policy and legislation to guide the practice of public health.

Strengths:

- Accreditation process is underway.
- Community and other agencies are included the in planning process.
- Supportive partnerships, strong committees, boards, and community based organizations.
- Agencies use culturally and linguistically appropriate approaches and services.
- There are numerous organizational community health assessments to build on (e.g., hospitals, Southside Community Center, First Five).
- Local health system works well together for emergency planning; regional plans are reviewed and tested regularly, and corrective actions are taken.

Weaknesses:

- Need for better documentation.
- Need for stronger public engagement.
- Lack of coordinated media strategy.
- Need for financial incentives for participation.
- Low staffing, which creates increased work load for partners in emergency planning.

Opportunities for improvement:

- Identify advocates and health champions.

- Conduct assessments.
- Create a cultural competency assessment.
- Create and implement a community health improvement plan (CHIP).
- Achieve accredited status.
- Partner with hospitals to minimize duplication.
- Hire a communications coordinator to increase educational opportunities and exposure for issues.
- Use collected data to increase awareness of health issues.
- Revisit community health assessment (CHA) every 3-5 years.

ESSENTIAL COMMUNITY HEALTH SERVICE 6
ENFORCE LAWS AND REGULATIONS THAT PROTECT HEALTH AND ENSURE SAFETY

This service addresses the following question: When we enforce health regulations, are we technically competent, fair, and effective?

It includes the following activities:

- ✓ Enforcing sanitary codes, especially in the food industry.
- ✓ Protecting drinking water supplies.
- ✓ Enforcing clean air standards.
- ✓ Initiating animal control activities.
- ✓ Following up hazards, preventable injuries, and exposure-related diseases identified in occupational and community settings.
- ✓ Monitoring quality of medical services (e.g., laboratories, nursing homes, and home health care providers).
- ✓ Reviewing new drug, biologic, and medical device applications.

Strengths:

- Good legal counsel available at the city and county level.
- Strong code enforcement.
- Abundant training opportunities.
- Good air and water quality.
- Active community advisory groups.
- Good laws (e.g., City of Oroville ordinance for marijuana cultivation).
- Regional Council of Rural Counties (RCRC).
- Contact with local and state legislators.
- Sharing resources.

Weaknesses:

- Need for systematic review.
- Lack of prioritization.
- Funding, time, staffing, and other resources.
- Inability to enforce some laws.
- Poor community engagement.
- Duplication and overlap of work, with poor coordination.
- Political will in conjunction with some resistance to change.
- Specific health issues (e.g., marijuana, homelessness, bed bugs, noise, tobacco, walkability, and air quality).

Opportunities for improvement:

- Improve communication between entities and increase participation.
- Concentrate on ongoing quality improvement.
- Update zoning and ordinances.
- Conduct community engagement/public outreach.
- Work with elected officials; encourage the Board of Supervisors to consider health implications.
- Tackle water resource issues.
- Meet with local and county agencies proactively.
- Conduct annual review of emergency plans.
- Secure grants.

ESSENTIAL COMMUNITY HEALTH SERVICE 7
LINK PEOPLE TO NEEDED PERSONAL HEALTH SERVICES AND ASSURE THE PROVISION OF HEALTHCARE WHEN OTHERWISE UNAVAILABLE

This service addresses the following question: Are people in our community receiving the health services they need?

It includes the following activities:

- ✓ Ensuring effective entry for socially disadvantaged and other vulnerable persons into a coordinated system of clinical care.
- ✓ Providing culturally and linguistically appropriate materials and staff to ensure linkage to services for special population groups.
- ✓ Ensuring ongoing care management.
- ✓ Ensuring transportation services.
- ✓ Orchestrating targeted health education, health promotion, and disease prevention to vulnerable population groups.

Strengths:

- There are many needs assessments taking place in Butte County (e.g., hospitals, aging, maternal child adolescent health).
- Ampla Butte County data indicators are being used.
- Data are being collected (e.g., breast cancer data via California Health Collaborative).
- Understanding the make-up of our populations.
- Adequate safety net.
- Referrals are being made.
- Outreach is well-funded.
- Federally Qualified Health Centers provide outreach to hard-to-reach populations.
- 211.
- Transportation for Medi-Cal managed care providers.
- Tele-health services.

Weaknesses:

- Isolation.
- Multigenerational issues of substance abuse, poverty, and trauma.
- Not collaboratively sharing survey results and other data.
- Need to obtain responses from underserved and uninsured populations.
- Health care access issues.
- Reliance on the ER.

- Lack of domestic violence services.
- Clients not taking advantage of existing programs.
- Long waits to get in to see a provider.
- Lack of specialized care.
- Complexity of Medi-Cal billing system, which results in high out of pocket expenses.

Opportunities for improvement:

- Centralize data and evaluate it.
- Ensure representation from broader community.
- Address critical elements such as mental health, substance abuse, vision, and dental.
- Integrate primary care and behavioral health.
- Consider needs of the aging population.
- Get information to harder to reach populations.
- Educate the public on health issues and health care access.
- Increase understanding of cultural beliefs around specialty care.
- Develop transportation services for specialty care.
- Better coordinate care and outreach.

ESSENTIAL COMMUNITY HEALTH SERVICE 8
ASSURE A COMPETENT PUBLIC HEALTH AND PERSONAL HEALTHCARE WORKFORCE

This service addresses the following questions: Do we have competent public health staff? Do we have competent health care staff? How can we be sure that our staff stays current?

It includes the following activities

- ✓ Educating, training, and assessing personnel (including volunteers and other lay community health workers) to meet community needs for public and personal health services.
- ✓ Establishing efficient processes for professionals to acquire licensure.
- ✓ Adopting continuous quality improvement and lifelong learning programs.
- ✓ Establishing active partnerships with professional training programs to ensure community-relevant learning experiences for all students.
- ✓ Continuing education in management and leadership development programs for those charged with administrative and executive roles.

Strengths:

- Leadership opportunities.
- Many training opportunities in-person and online (e.g., leadership training courses at Butte College).
- Incentives based on training and development.
- Licensure and certifications are addressed by organizations.
- Internal reviews result in gaps being filled.
- Internship programs.

Weaknesses:

- Resource limitations.
- Lack of collaboration.
- Delays for licensure and certification.
- Problems with recruitment and retention of staff (e.g., salaries and location are barriers to attracting people to Butte County and retaining locals).
- Lack of shared vision in leadership practice.

Opportunities for improvement:

- Utilize culturally competent trainings.
- Create a centralized location for shared information.
- Partner with other organizations.

- Focus on marketing careers for K-12 students, which provide a pathway, knowledge, and opportunities.
- Create programs to retain experienced staff.

ESSENTIAL COMMUNITY HEALTH SERVICE 9
EVALUATE EFFECTIVENESS, ACCESIBILITY, AND QUALITY OF PERSONAL AND POPULATION-BASED HEALTH SERVICES

This service addresses the following questions: Are we meeting the needs of the population we serve? Are we doing things right? Are we doing the right things?

It includes the following activities:

- ✓ Assessing effectiveness through monitoring and evaluating implementation, outcomes, and effect.
- ✓ Providing information necessary for allocating resources and reshaping programs.

Strengths:

- Affordable Care Act.
- Medicare is offering incentives to Medicare providers to offer preventive services.
- Partnering with other community groups on health care messages.
- Hospitals and some providers do individual evaluations and share findings with the community.

Weaknesses:

- Lack of flexibility with funding.
- Non-standardized reporting systems.
- Need for better coordination of care (hospitals have fewer resources to help coordinate).
- Lack of established standard to evaluate health care providers.

Opportunities for improvement:

- Leverage Affordable Care Act and other changes to heath care services.
- Ensure that the process of bringing the community together effectively engages special populations.
- Improve coordination of care between hospitals and primary care providers.
- Coordinate efforts between community partners on health care messaging.
- Establish a county-wide reporting system.
- Create a sustainable evaluation system for the health care system.
- Estimate population-based goals, keeping target populations in mind.
- Utilize 211, radio, text messaging and other technology to encourage participation in the community health assessment.

ESSENTIAL COMMUNITY HEALTH SERVICE 10
RESEARCH FOR NEW INSIGHTS AND INNOVATIVE SOLUTIONS TO HEALTH PROBLEMS

This service addresses the following question: Are we discovering and using new ways to get the job done?

It includes the following activities:

- ✓ Establishing full continuum of innovation, ranging from practical field-based efforts to fostering change in public health practice to more academic efforts that encourage new directions in scientific research.
- ✓ Continually linking with institutions of higher learning and research.
- ✓ Creating internal capacity to mount timely epidemiologic and economic analyses and conduct health services research.

Strengths:

- We are doing our best with limited resources.
- Existing and emerging partnerships.
- Partners within the community who are research-focused, including partnerships with California State University at Chico and Butte College.
- Community events and surveys to collect health data.
- Planning ahead and acting proactively.

Weaknesses:

- Lack of funding, staff and other resources create barriers to conducting research.
- Varying levels of success with collaboration (including by geographic location)
- Barriers created by regulation.
- Absence of collaboration with researchers who have the knowledge and skills to design and conduct research.
- Lack of an academic research hospital.
- Limited publication and centralization of data.
- Opportunities for improvement:
- Create a county research center with access to trainings and partnerships that is available to everyone.
- Foster a research community.
- Create a centralized database with staffing to lead a collaborative effort.
- Create an Institutional Review Board (IRB) specific to the community.
- Apply for more resources and grants.

APPENDIX CHANGE – 1

PARTNERS WHO PARTICIPATED AT THE FORCES OF CHANGE ASSESSMENT SESSIONS (11/4/14)

Butte County
Butte County Animal Control
Butte County League of Women Voters
Butte County Library
California Health and Wellness
California Health Collaborative
Chico Unified School District
CNAP CSU Chico
CSU Chico
DDS Butte County
Enloe Medical Center
Feather River Tribal Health
First Five Commission Butte County
Northern Valley Catholic Social Services
Northern Valley Indian Health Center
Oroville Union High School District
Paradise Ridge Family Resource Center
Sacramento County Environmental Health
Stonewall Alliance

APPENDIX CHANGE – 2

FORCES OF CHANGE ASSESSMENT – NOVEMBER 4, 2014 – OROVILLE

CATEGORY – **ECONOMIC**

Topics-Indicators	Threats	Opportunities
Poverty/Jobless Rate	• Access to transportation, healthy food, insurance & general services • Increased mental health and substance abuse • Decreased tax base so decreased funding for government services • Lack of economic support/jobs/training • Crime	• Education and opportunities for increased collaboration between organizations/agencies • Encourage business development/vocational skills training
Medical Care: Costs/Barriers/Access	• Costs of reimbursement • ER use increase • Spread of communicable disease • ER use inappropriate • Lack of transportation • Choices of care providers • Care providers leave area	• Logisticare (transportation for those with/barriers) • Educate on the benefits of ACA (not all bad)

CATEGORY – **TECHNOLOGY**

Topics-Indicators	Threats	Opportunities
New Medical Technology	• Lack of Privacy • Incomplete implementation and decreased costs (long-term) • Inequitable distribution of medical care	• More continuity of care that can lower costs • Increased access • Decreased medical errors • Better medication decisions • Increased potential for self-management • Advances in genetics are increasing very quickly • Wearable technology • Innovative access to medical providers

Topics-Indicators	Threats	Opportunities
Social Media	• Negates other historic sources of information. • Credible information • Decreased physical activity • Fear/Sensationalism • Cyberbullying • Disconnect with mental health • Lack of social interaction • Always on • Depression • Lack of social development in kids • Addiction (games/noise) • Security of system	• Increased dissemination and outreach • Increased opportunities to educate for people who are traditionally harder to reach • Opportunities for interaction/feedback • Increased job opportunities in social media and online commerce • Increase in information = good • Opportunity to think outside of the box • Tools/Apps

CATEGORY – **SOCIAL**

Topics-Indicators	Threats	Opportunities
Homelessness	• Community not taking kids downtown – could be teaching youth stereotypes (i.e. homeless are dangerous) • Impact on downtown business & rhetoric about downtown not being safe • Transience: actual health risks (TB, Chico pool water, etc.); actual safety risks (stabbings, homicide etc.) • Urban blight is a serious economic problem • Workforce shortage and capacity (not enough staff to meet demand) • More services needed	• More shelters • Seek funds for shelters and services • Foster kids aging out – any level would be an improvement
Mental Health	• Not enough integrated services (mental, social, primary care)	• More community services and peer support • Generation education – what is chemical vs. what is behavioral health • Mental health in schools
Substance abuse	• Increased homelessness • Electronic cigarettes	• New funding

Topics-Indicators	Threats	Opportunities
	• Child welfare	• Increased access to treatment • Education to young children
Education	• Content – one-sided/biased • Funding • Opportunity	• Take advantage of technology • Teach life skills (healthy eating, cooking, financial, etc.) in school • Roads out of poverty (including generational poverty issues)
Food: Healthy Foods, Food Deserts, Obesity	• Corporate opposition • Healthy food options may not be affordable	• Home gardens • Community gardens • Cooking/food preparation • Soda tax increase to funds programs • Increased physical activity in schools
Personal/Social Beliefs	• Apathy • Discrimination • Stigma	• Results show effectiveness - demonstrate successes • Education Interaction – Crossover • Technology outreach/apps

CATEGORY - **SCIENTIFIC**

Topics-Indicators	Threats	Opportunities
Communicable Disease: Emerging Diseases, Government Response	• Increased spread • Misinformation • Information overload • Government interaction (with other governments)	• Teachable moment • More funding • Collaborative opportunities • Research • Thinking globally • Possible increased funding for broader public health mission

CATEGORY – **GOVERNMENT/LEGAL**

Topics-Indicators	Threats	Opportunities
Affordable Care Act (ACA)	• Closing businesses • Doctors not accepting • Corporations taking over (mom/pop pharmacies closing) • Lack of specialty referrals	• Increased access • Reduced illness • More prevention focus • Change from illness to wellness focus • New opportunity for health care
Unfunded Infrastructure: Unaddressed Health Needs	• More bicycle accidents • Increased mental health needs and homelessness • Chronic diseases (less preventative care) • Unfunded infrastructures = lower quality of care due to seeing as many people as possible on bare bones budget	• County/city collaborative opportunities • Partnership opportunities between organizations/agencies • Re-design with livable community principles in mind
Marijuana/Law/Drug Enforcement	• No control or regulations on quality control • Impact on child welfare • Environmental degradation (lots of water use and runoff affecting water system) • Public safety impacts • Social acceptance of recreational use • Decreased property value • Legalization as a result of economic benefits vs. social "judgment" preference	• Medicinal value • Potential tax revenue

CATEGORY – **DEMOGRAPHIC**

Topics-Indicators	Threats	Opportunities
Lack of Appropriate Services for Children with Severe Needs	• Strain on current educational programs and educators • Increased risk for disability • Family stress and strain • Eligibility requirements limited to specific disability	• New school funding program • Multi-level program under the same roof • Increased community support

CATEGORY – **ENVIRONMENTAL**

Topics-Indicators	Threats	Opportunities
Transportation Challenges	• Transportation is not available to all • Transportation is not affordable to all	• Get people to learn about and use public transportation
Drought/Climate Change	• Lack of cooling for poor • Increasing of mosquito borne illnesses • Extreme exceptional events • Water supply/regulation controls • Permanent loss of crops and livestock • Losing recreational opportunities (i.e. low lake levels) • Exporting resources • Shorter harvest seasons = job and insurance loss • Increasing wildfire and air quality problems	• Conservation • Change behavior = changed mentality which is good! • Learn from and do not repeat current mistakes • New technology • Upgrade of existing equipment and infrastructure • State of Jefferson • Expansion of energy options • Create cooling centers • Shade streets for bikers, walkers, ambient population • Create good (safe) bike paths (protected from cars) • Good sidewalks (create or fix)

CATEGORY – **POLITICAL**

Topics-Indicators	Threats	Opportunities
Political Gridlock	• Nothing gets done	• Forced action – new norms • Change 2-party system • Personal involvement
Education	• Funding	• Funding
Lack of Job & Wage Growth	• Crime • Institutional Poverty • Education (increased drop-outs because of no opportunity)	• College, trade schools • Minimum wage increase to a living wage • Open up more affordable trade school programs
Homelessness (Chico)	• Lack of traffic to downtown areas • Decreased use of parks (physical activity) by families due to concerns • Crime • A portion of homeless population is by choice (this may foster/enable long-term dependency)	• More community engagement/awareness • Opportunities to pull together and engage in community partnerships & ownership of county/city

ADDITIONAL INPUT, OROVILLE SESSION

Impact:

- Communicable Disease
- Economics of climate change (water, drought, and environment) will equal big statewide changes related to jobs, food, wildlife, and recreation
- Homelessness/substance abuse/mental health

Themes and Patterns:

- Opportunities to focus on prevention and education to save costs: start with youth
- Limited access to services for those with limited incomes
- Lack of funding for needed services
- Technology reduces interaction/volunteerism/physical activity, but provides resources; technology is a challenge to balance (positives vs. negatives); technology provides more information however more misinformation as well

Opportunities That Benefit Everyone:

- Funding for education provides more jobs and increases standards of living
- Beliefs honored could meet needs and increase engagement

Opportunities That Could Mitigate Health Inequities:

- Listen to unheard populations
- Education
- Preventative health care
- Social media used responsibly/credibly
- Increased health education in schools would reach all kids/families

FORCES OF CHANGE ASSESSMENT – NOVEMBER 4, 2014 – CHICO

CATEGORY – **ECONOMIC**

Topics-Indicators	Threats	Opportunities
Employment/Jobs	• Brain and talent drain • Reduce the tax base • Hard to attract talent	• Opportunities for new employees • Small business development
Housing Costs	• Working poor can't afford safe, decent housing	• Extremely low interest rates • Opportunities to buy rental properties • Planes flying in and out of Chico
Homelessness/Transients	• Pollution and Crime in areas that homeless congregate • Large component of population have mental health issues	• Awareness for more resources and/or "out of the box" thinking

CATEGORY – **TECHNOLOGY**

Topics-Indicators	Threats	Opportunities
Social Media	• Loss of "real connections" with people • Information overload • Increased pornography • Cyberbullying • Lack of social development in kids • Increase of anxiety • Decrease in communication • Increase of bold "anonymous" thoughts	• More connections with organizations, opportunities to promote business, self, etc. • Access to more information • Networking • Resource for the community • Need to change how we relay information – rethink education, marketing • Quick board messaging to community, immediate impact

CATEGORY – **SOCIAL**

Topics-Indicators	Threats	Opportunities
Need for Mental Health Services	• Untreated mental health means people can't reach their potential; loss of talented, skilled workers & ability to parent in a healthy, positive way	• People getting treatment reach their potential and add valuable skills/talents to the community
Substance Abuse	• Same statement as above (mental health) • Huge impact & drain on legal system, jails, etc.	• Create more programs and community awareness of Butte County Resources • Legalize marijuana & regulate it
Increased crime	• Lack of funding for officers	• Focus as much on treatment as punishment • Butte 2-1-1 development as a resource broker
Quality of Life	• Work too much, not enough time with family • Increase in population takes away from limited resources, water, air quality, jobs • Parks and certain areas not safe any longer	• To thrive, for our next generation
Awareness of Health Related Issues	• Need for more funding to make community aware of health issues	• Compassion and understanding is increased • More services
Awareness of Resources	• Losing many resources due to outsourcing of jobs	• Promote the resources we have such as Butte 2-1-1

CATEGORY - **SCIENTIFIC**

Topics-Indicators	Threats	Opportunities
Telemedicine	• Compromise quality of services? • Reimbursement issues • Privacy issues (i.e. HIPPA)	• Brings specialty services to rural northern CA • More cost effective • Increases clients ability to access services (doesn't have to be 9-5 appointments) • There are models of successful telemedicine services being used in jails to improve health (especially mental health) of detainees

CATEGORY – **GOVERNMENT/LEGAL**

Topics-Indicators	Threats	Opportunities
Affordable Care Act (ACA)	• More people uninsured or unable to afford insurance • More providers not accepting Medicare, Medi-Cal • Decreased number of providers, increased need, decreased reimbursement	• More community residents have health coverage • Education about the ACA
Prisons/Judicial System/AB 109/Police	• Lack of local resources to handle influx • More opportunities for crime • Strain on current facilities • Release of prisoners too early without behavior change	• Non-violent prisoners stay local and can receive local services and stay connected with their families • Prop 47- more rehab, less state prison time • Emphasis on juvenile (notice services, CASA, etc.) • Paradigm shift to treat drug related offenders as having a medical rather than a criminal problem
Public Safety	• Lack enough public safety officers • Too heavy in "admin" positions • Decreased respect for public safety	• Increased police force • Increased police academy needs • Neighborhood watch model to commercial areas
College Tuition Costs	• Student loan, bubble could burst! • Strategies for limited or no debt at graduation • Increased debt	• Return to free tuition for students • Exchange work/volunteer for pay on tuition

CATEGORY – **DEMOGRAPHIC**

Topics-Indicators	Threats	Opportunities
Baby Boomers/Workforce	• More need for health care services than system can handle • Aging health care workforce • Poor succession planning in agencies • Less job opportunities for recent college graduates and younger workforce • Lack of support systems to remain in own home • Lack of dependable in-home workers	• More volunteers as baby boomers retire • Job opportunities in health care for new grads (PT, OT, RN, etc.) • Baby boomers can mentor and guide younger workers • Develop scholarships for first generation college students • Increased need for businesses who address elderly needs

CATEGORY – **ENVIRONMENTAL**

Topics-Indicators	Threats	Opportunities
Traffic	• Increased accidents and pollution • Decreased parking	• Encourage and support public transportation (BCAG), and alternative modes and transportation
Pollution	• Transient camps that cause area to be uninviting to new residents and makes Chico less attractive to business/families • Increase of asthma and other respiratory conditions	• Increase awareness • More public transportation opportunities
Fire	• Many unfamiliar areas for potential of wildfires	• Keep working on clean burning wood stoves, control burning, recycle organic fuels • Harvest overgrowth & supply to poor and elders • Emergency response collaboration builds networking and shared resources
Drought/Water Scarcity	• Cost of higher water rates • Increase in prices of local/national produce and fruit	• Electing people with scientific expertise or access to people (from UC Davis, CSU Chico) to

Topics-Indicators	Threats	Opportunities
	• Increased number of dry wells/lack of saturation	make good decisions for Butte County • Conservation opportunities • Education opportunities

CATEGORY – **POLITICAL**

Topics-Indicators	Threats	Opportunities
Access to Health Care Providers	• Increased use of ER as a medical office • Increased illness • Increased communicable disease • Increased risk during outbreaks • MD's in private practice leaving the area or leaving medicine altogether due to lack of reimbursement for their services • Difficulty recruiting new health care providers • Over-regulation of medical providers; not profitable to practice in CA • Need for elderly to access Medicare/Medi-Cal/SSI services • Local hospitals struggling	• New provider opportunities • More interest in self-care and more need for general medical attention to the consumer • Preventative care through Enloe, CARD support for single power universal health care • FQHC's, rural health clinics, tribal health clinics filling the gap in health care services • Need to actively recruit young physicians to practice locally

ADDITIONAL INPUT, CHICO SESSION

Impact:

- Health: Impact jobs and other issues, need more providers
- Economic: Need jobs to keep young people here, people need a living wage, socio-economic status has a huge effect on health
- Youth: Community doesn't attract/retain, need for treatments for drug issues and crime, due to college debt (low average income here, students don't stay after graduation)
- Homeless/transient: Environmental concerns, attractive area for families and businesses

Themes and Patterns:

- Young People: cost of education, lack of jobs, hitting barriers, economics and increased population

- Technology: social media, medical
- Preventative medicine/care
- Economy: affects many categories, decreased resources (including government) and access to care, increased crime, mental health issues, homelessness, cost of housing and food costs, education isn't enough

Opportunities That Benefit Everyone:

- Addressing the homeless crisis
- Attracting more health care providers
- Personal responsibility – take care of self

Opportunities That Could Mitigate Health Inequities

- More clinics – however people need insurance
- Free/Low Cost Services
- Prevention, taking care of self
- Free classes (nutrition, exercise)
- More opportunities for physical activity (bike paths, walking groups/classes)
- Empower people
- Address mental health (both in school age and adults)

APPENDIX – CONCLUSION 1

CHIP Prioritization Methodology and Weights Assigned

In total, 72 members of the Working Group and 18 members of the Policy Council responded to the online health topic survey, with 59 members of the Working Group and 16 members of the Policy Council completing the entire survey. The survey was scored as follows: strongly disagree = 1; disagree = 2; neutral = 3; agree = 4; strongly agree = 5. Due to the Policy Council's charge of directing resources and offering final approval of the CHA, their survey responses were given more weight than those of the Working Group. This was achieved by treating the average ratings for both groups' as equivalent when combining them in the final analysis.

Criteria was established such that statement categories with at least one average rating of 4.00 or higher were multiplied by a factor of 2 across all health topics on that category, and included the following statements: this health topic impacts a large number or a high percentage of people in our community; health disparities or inequities exist for this health topic (sub-populations are more affected than the general public); there is a good chance that this health topic could be improved if local organizations and agencies address it.

Statement categories that exclusively contained average ratings less than or equal to 3.99 remained un-modified for all health topics, and included the following statements: community support to address this health topic exists, including political will; my organization (or myself) would be willing to serve on a CHIP sub-committee to address this health topic; my organization (or myself) would be willing to serve in a CHIP sub-committee leadership role to address this health topic; sufficient local resources (funding, staff, and expertise) are available or obtainable to address this health topic.

Applying these criteria, the weighted averages for each health topic were calculated and then used to determine the final priority health topics for the CHIP. For example, the weighted average for substance abuse was calculated as: [(4.30*2)+(4.53*2)+(4.23*2)+(4.24*2)+(4.05*2) +(4.00*2)+(3.57)+(3.94)+(3.42)+(3.71)+(3.23)+(3.53)+(2.78)+(3.06)] / [(6*2)+(8)] = 3.90.

Results:
The top 3 health priority topics were substance abuse, chronic disease, and socio-economic factors (see *Tables Conclusion-1* and *Conclusion-2* on the following page). The results were cross referenced and in general agreement with results of the Together We Can! Healthy Living in Butte County survey.

Table Conclusion-1: Results of Weighted Priority Health Topic Survey.

Priority Health Topics	Combined - Equal Weight Given to Avg. Guiding Committee and Avg. Policy Council Scores; Weighted Totals/Averages (Impact, Disparities, Improve = * 2; Comm. Support, Committee, Leadership, Resources =*1)	Combined Totals	Weighted Averages
1	Substance Abuse	77.94	3.90
2	Chronic Disease	76.98	3.85
3	Socio-economic Factors	76.71	3.84
4	Access to Care	75.16	3.76
5	Public Safety	74.41	3.72
6	Mental Health	73.75	3.69
7	Senior/Aging	71.14	3.56
8	Vaccinations	69.69	3.48
9	Environment	67.8	3.39
10	Transportation	67.27	3.36

Table Conclusion-2: Expanded Analysis and Results of the Weighted Priority Health Topic Survey

	Impact		Disparities		Improve		Community Support		Committee		Leadership role		Sufficient Resources		Weighted Totals/Avgs.	
Committee	**WG**	**PC**	**WG**	**PC**	**WG**	**PC**	**WG**	**PC**	**WG**	**PC**	**WG**	**PC**	**WG**	**PC**	**Total**	**Avg.**
Socio-economic	8.52	8.78	8.50	9.12	7.98	7.78	3.35	3.44	3.30	3.94	3.01	3.39	2.66	2.94	76.71	3.84
Public Safety	7.40	8.48	7.78	8.12	8.06	8.36	3.77	3.88	3.17	3.35	2.92	3.06	2.88	3.18	74.41	3.73
Mental Health	7.74	8.24	8.12	8.48	8.00	7.88	3.33	3.41	3.39	3.65	3.02	3.12	2.68	2.69	73.75	3.69
Substance Abuse	8.60	9.06	8.46	8.48	8.10	8.00	3.57	3.94	3.42	3.71	3.23	3.53	2.78	3.06	77.94	3.90
Access to Care	8.68	8.36	8.56	8.36	7.48	7.76	3.23	3.94	3.37	3.41	3.16	3.13	2.60	3.12	75.16	3.76
Chronic Disease	8.94	8.12	8.72	7.88	8.24	8.24	3.46	3.65	3.54	3.53	3.30	3.12	3.00	3.24	76.98	3.85
Environment	8.24	7.18	6.94	6.48	7.34	7.50	3.16	3.29	3.00	3.24	2.84	2.76	2.54	3.29	67.80	3.39
Senior/Aging	8.04	8.00	8.04	7.52	7.44	7.52	3.21	3.50	3.16	3.18	3.05	3.00	2.66	2.82	71.14	3.56
Vaccinations	7.48	6.94	7.42	7.64	7.68	7.76	3.11	3.47	3.07	3.12	2.89	2.94	2.88	3.29	69.69	3.49
Transportation	7.68	7.30	7.22	7.76	7.40	7.06	3.11	3.00	2.87	3.12	2.77	2.59	2.63	2.76	67.27	3.36

Categories Assigned Weights = 2 Highlighted in Pink, Weighted Totals and Weighted Averages Highlighted in Yellow
WG = Working Group, PC = Policy Council

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2016 Butte County Hospital CHNA Focus Group Results

For this community health needs assessment, all Butte County Hospitals conducted follow-up focused conversations to gather community input. All focused conversations utilized the same guidelines that were prepared by the CHC and adopted from Community Health Assessment completed by Together We Can! Healthy Living in Butte County. To better address the needs of the community as a whole, all the follow-up focused conversations are summarized below. In 2013 and 2014, health assessments conducted by Enloe Medical Center, Feather River Hospital, Orchard Hospital, Oroville Hospital and Together We Can! Healthy Living in Butte County identified the following top concerns: substance abuse, overweight/obesity, lack of exercise/physical activity, access to healthy food, mental health, diabetes, access to affordable health care, heart disease, shortage of primary care doctors/access to specialists, pulmonary issues in relation to tobacco use, secondhand smoke and asthma.

The follow-up conversations from each of the hospitals revealed that community members agreed these concerns reflect the communities' needs. Other major concerns discussed in the follow-up conversations were transportation, language and cultural competency and sensitivity, community outreach, programs and resource awareness, health and nutrition education, elderly needs, Alzheimer's and dementia resources, children's health, and environmental issues related to air and water quality. Hospitals' community members suggested other improvements including: transportation services, safe disposal for medications, partnering with California State University, Chico, recruitment of more primary care physicians, veteran resources, collaboration between agencies to better provide for those who are substance abusers, homeless, and/or mentally ill, resources for cancer patients, increase school education and increase public knowledge.

In addition, at each hospitals' follow-up conversation, community members brought up concerns and suggestions.

Enloe Medical Center's community suggested resources, changes and improvements in the following areas: physical activity, outreach, volunteer opportunities to promote healthy lifestyle, communication, housing access, veteran resources, welcoming of LGBTQ community, behavioral health clinic, telemedicine, air quality, water quality conservation, homeless population, housing, and mental health.

Feather River Hospital's community suggested improvements for the following areas: domestic violence, homelessness, children's health and nutrition, pain medication prescription and management, education on healthy habits and lifestyle, and access to healthy food. Orchard Hospital's community members suggested a Blue Zone Initiative for overall well-being, cardiac events, resources for substance addiction and abuse, physical activity opportunities, healthy heart events, mental health resources, obstetrics and gynecology (OB/GYN) services, tobacco use education, and youth outreach.

Oroville Hospital's community members suggested collaboration between agencies to better provide for the community, veterans resources, transportation assistance, community education opportunities, resources for substance abusers and the homeless, tobacco education, additional health care services, broader scope of healthcare, and that the hospital look for ways to motivate community members to engage and utilize available resources.

Overall, the focused conversations revealed many overlapping needs between the communities such like transportation services, resources for substance abuse, mental health and homelessness, community outreach to racial and ethnic minorities, seniors, youth and veterans, health and nutrition education, the need for more primary care physicians and specialists, and collaboration among agencies to better meet the needs of these communities.

Community Health Needs Assessment
Focused Conversation Guidelines

Description:
A 60-minute facilitated conversation with a targeted group of community members, led by facilitator(s). At least one facilitator is needed to lead the focused conversation, and a recorder is highly recommended to take notes during and after the conversation.

Participants are invited to a light meal and/or refreshments, fill out a brief demographics survey and then to participate in a conversation to learn and share their thoughts on the health of the community.

Instructions:

- Secure a date, time, and location for the focused conversation.
- Brainstorm a *diverse* list of community members to invite.
- Send invite to community members to attend and participate in focused conversation.
- Confirm and finalize list of community members.
- Create sign-in sheet for the event.
- Prepare materials for focused conversation:
    - Print out surveys, sign-in sheets, organize pens, markers, clipboards, tape, and any other supplies needed.
    - Prepare posters or Powerpoint slides with focused conversation questions. *If using a Powerpoint slide, make sure the reserved location is compatible.*

The Focused Conversation Agenda

~ 5 Minutes:

- Greet participants, ask them to sign-in, provide them with a demographics survey to fill out, invite them to enjoy a light meal and/or refreshments.
    - Please ask the participants to fill out the demographics survey. The other side of the survey will be filled out as the focused conversation progresses.
    - **Please assure the participants the survey is completely confidential.**
    - When they are done with the survey, ask the participants to hold onto it as the other side will be used during the conversation.

~ 5 Minutes:

- Welcome participants to the conversation and have people introduce themselves.

~ 5 Minutes:

- Provide background on the community health needs assessment and improvement process.
    - What is a “Community Health Needs Assessment”?
    - Why are we conducting a CHNA?

~ 40-45 Minutes:

- Facilitate and record a guided conversation using the questions below:

1. **In 2013 and 2014, _____ Hospital and Butte County Public Health conducted a community health needs assessment to identify our community’s top health needs. The following concerns were identified in our Hospital’s service area:** *List your hospital’s top health concerns*

    a. Do you agree these are the top concerns of our community?

    b. If no, what is/are the reason(s)?

2. **In the past several years, the following action plans have been implemented to address these concerns:** *List your hospital’s action plans*

    a. Were you aware of these action plans?

    b. Did you know these resources are available to the community?

    c. Have you or a family member utilized any of these resources?

        i. If yes, were they helpful?

        ii. If no, what is preventing you or a family member from using these resources?

    d. What other resources would you like to see to address these top concerns?

3. **Are there any other health concerns you think the hospital could address to make this community healthier?**

    Specifically, what resources, changes, or improvements would you like to see to address these concerns?

4. **If you had one suggestion on how to improve the health of your community, what would that be?**

~ 1 Minute

- Wrap up, thank participants for their time.

Immediately after the focused conversation, take some time (15-30 minutes) to complete the “Focused Conversation Reporting Form”.

Please Tell Us About Yourself

1. What is your zip code: _____

2. How would you classify your gender identity?

☐ Male ☐ Female ☐ Other ☐ Decline to state

3. Your age?

☐ 18-25 years ☐ 26-39 years ☐ 40-54 years ☐ 55-64 years
☐ 65-80 years ☐ Over 80 years ☐ Decline to state

4. The race/ethnic group you most identify with: (Check all that apply)

☐ African-American/Black ☐ American Indian/ Alaska Native ☐ Asian
☐ Hispanic/Latino ☐ Native Hawaiian/Pacific Islander ☐ White
☐ Other ☐ Decline to state

5. What is your highest educational level? (Check one)

☐ Less than high school ☐ High School Diploma or GED ☐ Some college
☐ Associate or Technical Degree ☐ College Degree (4-Years) ☐ Graduate or Higher Degree
☐ Other ☐ Decline to state

6. If employed, what is your job title? _____

7. What is your annual household income: (Check one)

☐ Less than $20,000 ☐ $20,000 to $34,999 ☐ $35,000 to $49,000
☐ 50,000 to $64,999 ☐ 65,000 to $79,999 ☐ $ 80,000 to $99,000
☐ Over $100,000 ☐ Decline to state

8. Within the past year, what types of social service benefits did you or anyone in your family receive? Check all that apply.

☐ None ☐ Respite Care ☐ Legal Aid
☐ SNAP/CalFresh/Food Stamps ☐ Unemployment Services ☐ Social Security
☐ Housing Assistance ☐ Medi-Cal/Medicare
☐ Child welfare services ☐ Veterans Affairs Benefits ☐ CalWORKS
☐ Other _____

9. In the last 12 months, how often have you used Oroville Hospital services including clinic visits?

☐ Less than once ☐ 1-2 times ☐ 3-5 times ☐ 6 or more times

You are finished. Thank you for sharing!

CHNA Follow-Up Focused Conversation Questions

1. In 2013 and 2014, Oroville Hospital and the Together We Can! Healthy Living in Butte County partnership conducted a community health needs assessment to identify our community's top health needs. *(Please read the poster "Top Priority Areas Identified")*

   a. Do you agree these are the top concerns of our community?

   b. If no, what is/are the reason(s)?

2. In the past few years, the Together We Can! Healthy Living in Butte County partnership and Oroville Hospital have been working together to implement action plans to address these concerns. *(Please read the poster "2016 CHNA Action Plans")*

   a. Were you aware of these action plans?

   b. Did you know these resources are available to the community?

   c. Have you or a family member utilized any of these resources?

      i. If yes, were they helpful?

      ii. If no, what is preventing you or a family member from using these resources?

   d. What other resources would you like to see to address these top concerns?

3. Are there any other health concerns you think the hospital could address to make this community healthier?

   Specifically, what resources, changes, or improvements would you like to see to address these concerns?

4. If you had one suggestion on how to improve the health of your community, what would that be?

Butte County, CA

The following Summary Comparison Report provides an "at a glance" summary of how the selected county compares with **peer counties** on the full set of **Primary Indicators**. Peer county values for each indicator were ranked and then divided into quartiles.

	Better (most favorable quartile)	Moderate (middle two quartiles)	Worse (least favorable quartile)
Mortality	Diabetes deaths	Cancer deaths Chronic kidney disease deaths Motor vehicle deaths	Alzheimer's disease deaths Chronic lower respiratory disease (CLRD) deaths Coronary heart disease deaths Female life expectancy Male life expectancy Stroke deaths Unintentional injury (including motor vehicle)
Morbidity	Syphilis	Adult diabetes Adult obesity Alzheimer's diseases/dementia Cancer Gonorrhea HIV Older adult depression Preterm births	Adult overall health status Older adult asthma
Health Care Access and Quality		Cost barrier to care Primary care provider access Uninsured	Older adult preventable hospitalizations
Health Behaviors		Adult female routine pap tests Adult physical inactivity Adult smoking Teen Births	Adult binge drinking
Social Factors	On time high school graduation	Inadequate social support Violent crime	Children in single-parent households High housing costs Poverty Unemployment
Physical Environment		Access to parks Limited access to healthy food Living near highways	Annual average PM2.5 concentration Housing stress

Centers for Disease Control and Prevention 1600 Clifton Rd. Atlanta, GA 30333, USA
800-CDC-INFO (800-232-4636) TTY: (888) 232-6348 - Contact CDC–INFO

County Health Rankings & Roadmaps
Building a Culture of Health, County by County

Butte (BU)

	Butte County	Error Margin	Top U.S. Performers^	California	Rank (of 57)
Health Outcomes					**38**
Length of Life					**43**
Premature death	7,400	7,000-7,900	5,200	5,300	
Quality of Life					**35**
Poor or fair health **	15%	15-16%	12%	18%	
Poor physical health days **	4.2	4.0-4.4	2.9	4.0	
Poor mental health days **	4.2	4.1-4.4	2.8	3.6	
Low birthweight	6%	6-6%	6%	7%	
Additional Health Outcomes (not included in overall ranking)					
Premature age-adjusted mortality	380	360-390	270	270	
Child mortality	50	40-60	40	40	
Infant mortality	6	5-7	5	5	
Frequent physical distress	12%	12-13%	9%	13%	
Frequent mental distress	12%	12-13%	9%	11%	
Diabetes prevalence	10%	9-10%	9%	10%	
HIV prevalence	108		41	375	
Health Factors					**35**
Health Behaviors					**47**
Adult smoking **	15%	14-16%	14%	13%	
Adult obesity	25%	21-29%	25%	23%	
Food environment index	6.4		8.3	7.7	
Physical inactivity	18%	15-21%	20%	17%	
Access to exercise opportunities	81%		91%	94%	
Excessive drinking **	20%	19-21%	12%	17%	
Alcohol-impaired driving deaths	36%	32-40%	14%	30%	
Sexually transmitted infections	419.3		134.1	439.9	
Teen births	25	24-26	19	32	
Additional Health Behaviors (not included in overall ranking)					
Food insecurity	18%		11%	15%	
Limited access to healthy foods	7%		2%	3%	
Drug overdose deaths	30	26-34	8	11	
Drug overdose deaths - modeled	≥20		6.1-8.0	11.1	
Motor vehicle crash deaths	15	13-16	9	9	
Insufficient sleep	32%	31-33%	28%	34%	
Clinical Care					**33**
Uninsured	17%	16-19%	11%	19%	
Primary care physicians	1,530:1		1,040:1	1,270:1	
Dentists	1,470:1		1,340:1	1,260:1	
Mental health providers	220:1		370:1	360:1	
Preventable hospital stays	46	44-49	38	41	
Diabetic monitoring	77%	74-79%	90%	81%	
Mammography screening	60%	57-63%	71%	59%	
Additional Clinical Care (not included in overall ranking)					
Uninsured adults	21%	19-22%	13%	24%	
Uninsured children	7%	6-9%	5%	8%	
Health care costs	$8,491			$9,102	
Other primary care providers	1,144:1		866:1	2,192:1	
Social & Economic Factors					**29**
High school graduation	87%		93%	85%	
Some college	67%	64-70%	72%	62%	
Unemployment	8.7%		3.5%	7.5%	
Children in poverty	24%	20-29%	13%	23%	
Income inequality	5.1	4.8-5.4	3.7	5.2	
Children in single-parent households	36%	33-39%	21%	32%	
Social associations	7.6		22.1	5.8	
Violent crime	304		59	425	
Injury deaths	91	85-96	51	46	
Additional Social & Economic Factors (not included in overall ranking)					
Median household income	$42,300	$39,900-44,700	$61,700	$61,900	
Children eligible for free lunch	50%		25%	48%	
Residential segregation - black/white	58		23	56	
Residential segregation - non-white/white	29		15	37	
Homicides	4	3-5	2	5	
Physical Environment					**29**
Air pollution - particulate matter	8.9		9.5	9.3	

	Butte County	Error Margin	Top U.S. Performers^	California	Rank (of 57)
Drinking water violations	Yes		No		
Severe housing problems	24%	23-25%	9%	29%	
Driving alone to work	74%	73-75%	71%	73%	
Long commute - driving alone	22%	20-23%	15%	38%	

Areas to Explore Areas of Strength

^ 10th/90th percentile, i.e., only 10% are better.
Note: Blank values reflect unreliable or missing data
** Data should not be compared with prior years due to changes in definition/methods

2016

2016 CHNA approval

This community health needs assessment was adopted on October 18, 2016 by the Adventist Health System/West Board of Directors. The final report was made widely available on December 31, 2016.

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Request a copy, provide comments or view electronic copies of current and previous community health needs assessments: https://www.adventisthealth.org/pages/about-us/community-health-needs-assessments.aspx