

Oral Health Community Health Improvement Plan

Butte County Public Health
Department

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research



Contents

- Executive Summary.....1
- Developing the Community Oral Health Improvement Plan3
- Butte County: Background and Key Oral Health Needs.....7
- Oral Health Behaviors9
- Oral Health Knowledge and Beliefs..... 12
- Utilization of Care..... 16
- Community Environment..... 21
- CHIP Alignment with Other Health Improvement Initiatives 25
- Conclusion 28
- Appendix A: Oral Health Coalition Members..... 29
- Appendix B: CHA Methods 30
- Appendix C: CHA Key Findings 37
- Appendix D: Prioritization Criteria and Scores..... 41
- Appendix E: Summary of CHIP Goals, Objectives, and Strategies 44

Executive Summary

In 2018, the Butte County Public Health Department (BCPHD) received funding from the California Department of Public Health (CDPH) to establish a countywide oral health program that would support the goals and strategies set forth in the California Oral Health Plan 2018-2028. Funded by Proposition 56, this five-year grant (2018-2022) will enable BCPHD to educate county residents about oral health and dental disease prevention, address common risk factors for oral health diseases, and increase access to oral health and dental health services.

To establish a roadmap for this work, BCPHD conducted a comprehensive Oral Health Community Health Assessment (CHA) that identified the county's oral health needs. The CHA examined primary and secondary data related to six priority oral health topics:

- Oral health status
- Access to care
- Utilization of care
- Oral health behaviors
- Oral health knowledge and beliefs, and
- Environmental factors

These topics were examined with a particular interest in understanding how the social determinants of health—including factors such as education, concentrated poverty, and access to other community resources—influence oral health outcomes.

Once identified, BCPHD and the Butte County Oral Health Coalition (formed as a result of receiving the CDPH funding) engaged in a process to develop an Oral Health Community Health Improvement Plan (CHIP), which prioritizes these needs, establishes strategic goals, and proposes concrete strategies and actions to meet each goal.

The final version of the goals, objectives, and strategies presented in this CHIP reflect the input and combined efforts of a broad range of stakeholders, including residents, local organizations, dental providers, key oral health experts, and county staff. The CHIP is intended to be used as a strategic plan by the Butte County Oral Health Program and Oral Health Coalition, guiding a coordinated effort across partners.

Summary of CHIP Goals, Objectives, and Strategies

Goal 1: Improve oral health and prevent tooth decay by promoting healthy habits

- Objective 1.1** Reduce the proportion of children with dental caries
 - Objective 1.2** Increase the proportion of children and adults who engage in oral hygiene habits that prevent oral health diseases
 - Objective 1.3** Increase the proportion of children who engage in healthy eating habits that promote good oral health
 - Objective 1.4** Reduce the number of Butte County residents who report using tobacco
-

Goal 2: Increase oral health knowledge through culturally-, linguistically-, and age-appropriate oral health education programming

- Objective 2.1** Increase access to oral health information
 - Objective 2.2** Increase knowledge of oral health best practices for infants and young children
 - Objective 2.3** Increase understanding of the benefits of fluoride for oral health
-

Goal 3: Develop and promote resources that improve the ability of low-income Butte County residents to utilize preventive dental care throughout the lifespan

- Objective 3.1** Increase utilization of preventive dental visits among children
 - Objective 3.2** Increase utilization of preventive dental visits among adults with Denti-Cal
 - Objective 3.3** Increase the percent of children who see a dentist by age one or when the first tooth appears
 - Objective 3.4** Increase utilization of dental sealants among children between ages six and nine years old
 - Objective 3.5** Increase the percent of women who see a dentist during pregnancy
 - Objective 3.6** Increase utilization of oral cancer screenings among tobacco users
-

Goal 4: Collaborate with organizations to strengthen the community environment's overall ability to support good oral health outcomes

- Objective 4.1** Increase the number of dentists who accept Denti-Cal in Butte County
- Objective 4.2** Increase the number of public water agencies with fully fluoridated water
- Objective 4.3** Increase the number of organizations that integrate oral health messages into their work with Butte County residents



Developing the Community Oral Health Improvement Plan

Purpose of the Community Health Improvement Plan

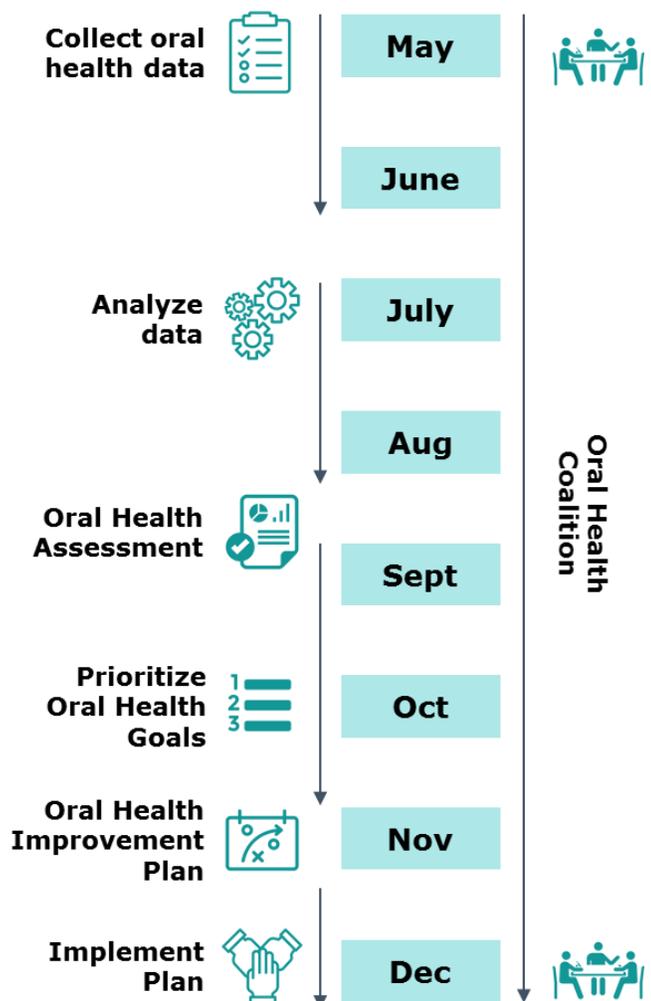
The Butte County Community Oral Health Improvement Plan (CHIP) identifies concrete strategies and action steps for improving oral health for Butte County residents. The CHIP builds on the 2018 Butte County Community Oral Health Assessment (CHA), which examined key oral health indicators in the county, and identified six priority oral health needs of county residents. The CHIP process prioritized health needs, established goals for each need, and identified strategies and action steps to meet the oral health goals. The CHIP is intended to be used as a strategic plan by the Butte County Oral Health Program and Oral Health Coalition, guiding a coordinated effort across partners.

Guiding principles

Data indicate that oral health outcomes—like other aspects of health—differ based on an individual’s demographic characteristics, such as race and ethnicity, economic advantage, and education. BCPHD is committed to community-wide efforts to reduce these oral health differences, or disparities, with a particular emphasis on health equity and addressing the social determinants of health. The reduction of disparities in oral health status in Butte County is a guiding principle of the Oral Health Program and Oral Health Coalition. BCPHD is focused on achieving health equity and addressing the social determinants of health through collaboration and partnership across public and private agencies, including government agencies, dental providers, social service providers, and community members. The CHA and CHIP processes reflected this commitment by implementing the following strategies: ensuring diverse agency representation on the Oral Health Coalition; utilizing data collection and analysis strategies that prioritized understanding unique needs of traditionally marginalized communities (e.g., communities of color; low-income); and including the existence of oral health disparities as criteria for the oral health needs prioritization process.

Overview of the CHA and CHIP processes

The CHA and CHIP reflect six months of data collection, analysis, prioritization of oral health needs, and examining social determinants of health related to those outcomes (such as education, concentrated poverty, and access to other community resources) in Butte County. See the timeline for the CHA and CHIP processes to the right.



Formation of the Oral Health Coalition

To ensure community engagement in the CHA and CHIP processes, the Butte County Public Health Department (BCPHD) began to convene local stakeholders—including dental providers, educators, early care providers, health centers, and other community agencies—as members of an Oral Health Coalition in April 2018. The Oral Health Coalition has informed and guided the development of the CHA and CHIP, meeting monthly to contribute to planning, data collection, and prioritization of the oral health needs, as well as the development of goals, objectives, and strategies to address the identified needs. Moving forward, the Oral Health Coalition will support BCPHD in the ongoing implementation of strategies to address oral health needs in Butte County. See Appendix A for a list of Oral Health Coalition members and Appendix B for details on the CHA methodology.

To ensure the ongoing work of the Oral Health Program and Oral Health Coalition remains focused on addressing disparities, BCPHD staff and Oral Health Coalition members formalized their commitment to this work in the Coalition’s vision: Healthy Smiles for Healthy Futures.

Data collection and prioritization of oral health needs

The following questions guided the CHA data collection efforts:

1. What is the status of oral health in Butte County?
2. How do oral health needs vary for different populations in Butte County, including traditionally underserved or marginalized communities?
3. Given this data, what are Butte County’s oral health needs?

BCPHD staff worked with Harder+Company to develop a list of oral health topics of interest for the oral health CHA (see Exhibit 1).

Exhibit 1. Oral health topics included in the Oral Health CHA

Oral Health Topics of Interest	
Oral health behaviors	Individual behaviors related to oral hygiene, diet, and smoking
Oral health status	Measures of oral health outcomes and well-being such as untreated decay and mouth and tooth pain
Oral health knowledge and beliefs	Knowledge of oral health best practices, as well as beliefs about oral health and dental care
Utilization of care	Use of dental services to prevent or treat dental disease and other tooth and mouth conditions
Environmental factors	Neighborhood and county factors including policy decisions that contribute to oral health
Access to care	The ability to access oral health and dental health care services

With the help of the Oral Health Coalition, BCPHD and Harder+Company collected primary data—including a community oral health survey, dental provider survey, and focus groups with county residents—in May and June of 2018. In addition, secondary data was collected from key sources of oral health information, including the California Health Interview Survey, the California Department of Health Care Services, and Oral Health Coalition members. Harder+Company analyzed primary and secondary data for each oral health topic, using a data analysis plan developed in partnership with BCPHD staff. See [Appendix B: CHA Methods](#) for more details on CHA data collection and analysis.

In August 2018, Harder+Company presented the CHA findings to the Oral Health Coalition. To prioritize identified oral health needs, Oral Health Coalition members reviewed data on each need, engaged in small discussions, and individually scored each oral health topic on six weighted criteria pre-determined by BCPHD and Oral Health Coalition (see Exhibit 2 below and Appendix D: Prioritization Criteria and Scores for more details on the prioritization process).

Exhibit 2. CHA oral health need prioritization criteria

Size: a large number or percentage of people in the community are impacted by the issue

Severity/Degree of Impact: the health need has serious consequences

Disparities: the health need disproportionately impacts specific geographic, income level, age, or racial/ ethnic populations

Prevention: the health need presents an opportunity to intervene through prevention

Feasibility: sufficient local resources and community support/ political will are available to help ensure successful outcomes

Leverage: a solution could address multiple health issues or challenges

Based on the criteria, the final prioritized list of oral health needs for the Butte County CHIP were the following:

1. Oral health behaviors
2. Oral health status
3. Oral health knowledge and beliefs
4. Utilization of care
5. Environmental factors
6. Access to care

Development of CHIP goals, objectives, and strategies

BCPHD used the results of the prioritization process to identify the goals for improving oral health. During the process of developing the goals, BCPHD and Harder+Company noted that strategies to improve any of the prioritized oral health needs would ultimately result in the improvement of oral health status. As a result,

rather than considering oral health status a prioritized health need, it became the overarching purpose of the Butte County Community Oral Health Improvement Plan. In addition, access to care and environmental factors were merged into a single oral health topic, community environment, as both reflect aspects of available resources in the community. Goals (shown in Exhibit 3) were then identified for the four remaining priority oral health needs.

Exhibit 3. Oral health priorities and goals

Priority Oral Health Need	Goal
Behaviors	Improve oral health and prevent tooth decay by promoting healthy habits
Knowledge and beliefs	Increase oral health knowledge through culturally-, linguistically-, and age-appropriate oral health education programming
Utilization of care	Develop and promote resources that improve the ability of low-income Butte County residents to utilize preventive dental care throughout the lifespan
Community environment	Collaborate with organizations to increase the community environment’s overall ability to support good oral health outcomes

BCPHD, with support from Harder+Company, also drafted objectives within each goal, and strategies to accomplish these goals. The draft goals, objectives, and strategies were presented at the September Oral Health Coalition meeting. Coalition members engaged in small group conversations to discuss and amend the drafted goals, objectives, and strategies.

The final version of the goals, objectives, and strategies presented in this CHIP reflect the combined efforts of BCPHD, the Oral Health Coalition, and Harder+Company. Each strategy also identifies key activities, and partners who will be important for accomplishing these activities. The list of potential partners is not exhaustive, and is intended as a starting point for BCPHD, the Oral Health Coalition, and other stakeholders to take action towards improved oral health for the county. Implementation of these strategies will be most effective when the partners engaged reflect the diversity of the community, and the particular knowledge and expertise to serve communities where disparities in oral health outcomes have been identified.

The CHIP includes one section for each of the county’s four oral health goals. Each chapter contains key findings from the CHA related to the goal, as well as detailed information on objectives, performance measures, and strategies. See [Appendix E: Summary of CHIP Goals, Objectives, and Strategies](#) for a summary table. 

Butte County: Background and Key Oral Health Needs

This section provides a brief introduction to the demographics of Butte County residents, as well as key oral health needs identified through the Oral Health CHA.

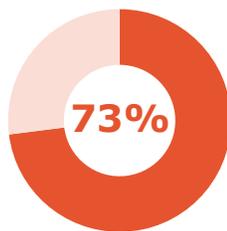
Butte County demographics

In 2017, approximately 229,000 people lived in Butte County.¹ The largest population centers—Chico, Paradise, Oroville, Magalia, and Oroville East—comprised approximately two thirds of the county's population. One third lived in small cities and towns throughout more rural parts of the county.²

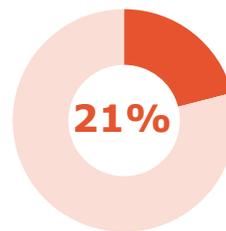
- Approximately half (47%) of Butte county residents are adults ages 25 to 64, and 19 percent are adolescents and young adults ages 15 to 24. Sixteen percent were children under the age of 14, with five percent under five years old. Seventeen percent of the population was age 65 or older.
- Nearly two-thirds of Butte County residents (73%) identified as white, compared to 38 percent across California. Conversely, Butte County has a lower percentage of Hispanic/Latino residents compared to California (15% vs. 39%). This has shifted slightly over the past three years, with an increasing percentage of residents who identify as Hispanic/Latino. Furthermore, children under age 18 reflected a slightly more racially and ethnically diverse population than adults.
- The majority of the population over age five (86%) spoke English only; this is significantly higher than California, where 56 percent of the population speaks English only.
- A slightly higher percentage of the civilian labor force in Butte County was unemployed (11%) compared to California (9%). In addition, the percent of all people with incomes below the Federal Poverty Level in the past year was also higher in Butte County (21%) than in the state (16%).



Percent of Butte County residents that are **children under the age of 14**



Percent of **residents who identify as white**, compared to 38% across California



Percent of people in Butte County who live **below the Federal Poverty Level**

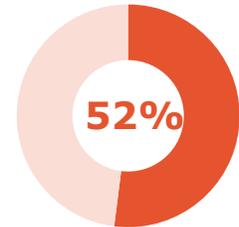
¹ U.S. Census Bureau, Population Division, Annual estimates of the resident population.

² U.S. Census Bureau, 2010 Census.

Key findings from the Oral Health CHA

Findings from this Oral Health CHA suggest that Butte County has both significant strengths related to promoting oral health among its residents, as well as opportunities for improvement. The following key findings from the Butte County Oral Health Community Health Assessment informed this CHIP:

- A high proportion of adults in Butte County have **dental insurance** (82%), and nearly all children in Butte County have dental insurance (97%).
- A majority of adults in Butte County (74%) reported good, very good, or excellent **oral health status**.
- Adults with poor oral health status reported **negative impacts on their quality of life**, including their ability to interview for jobs (41%), their need to take time off from work (14%), more pain and discomfort while eating (43%), and difficulty with speech (12%).
- Half of Denti-Cal beneficiaries (52%) felt their **mouth and tooth appearance affected their job interview prospects**, compared to 30 percent of adults with private insurance.
- Denti-Cal was more likely to be a **primary source of dental insurance** coverage for residents who were African American or Black (60%), Asian (55%), or two or more races (46%), compared to residents who were Hispanic/Latino or white (31% and 25% respectively).
- Adults with Denti-Cal were less likely to have a **dental visit in the last 12 months** (53%) compared to those with private insurance (76%).
- Half of adults (57%) and children (51%) **brushed twice per day**. Less than half of adults flossed (40%) or used fluoride toothpaste (48%) at the recommended frequency of twice per day, similar to children (36% flossing; 42% fluoride toothpaste).
- Survey and focus group findings suggest **mixed feelings and knowledge about the benefits of fluoride**. Fully fluoridated water is currently only available in Gridley and parts of Oroville.
- **Tobacco use** was more common in Butte County (17%) than in California (12%). However, tobacco users were no more likely to receive a recommendation for an oral cancer screening (32%) than non-tobacco users (36%).
- **Key barriers to oral health care** for both children and adults in the county included cost, wait times, competing priorities, negative prior experiences, and a perceived lack of Denti-Cal providers.
- The **ratio of population to providers** in Butte County (1,400:1) is higher than in California (1,210:1), and focus group participants noted a lack of Denti-Cal providers in the county.



Percent of Denti-Cal beneficiaries who felt their tooth and mouth appearance affected their job interview prospects

Cost Wait times
Competing priorities
Negative prior experiences
Lack of Denti-Cal providers

Key barriers to oral health care in Butte County

1,400:1

Ratio of population to providers, compared to 1,210:1 in California

Additional detail related to each oral health topic is presented in each of the following sections. Full findings on oral health in Butte County can be found in the Butte County Oral Health Community Health Assessment. 📄

Oral Health Behaviors

Oral health behaviors play a significant role in oral health status. Oral health behaviors refer to personal health behaviors that help to prevent oral health disease, or increase risk for poor oral health outcomes. Practicing good dental hygiene (such as flossing and brushing with fluoridated toothpaste), maintaining a healthy diet high in fresh fruits and vegetables and low in sugary foods and drinks, and refraining from smoking and other tobacco use, can help to reduce the risk of developing dental caries and oral health diseases.

The Butte County Coalition seeks to improve oral health and prevent tooth decay by promoting healthy habits among children and adults. The following key findings from the Butte County Oral Health Community Health Assessment informed this goal:

- Approximately half of adults (57%) and children (51%) brushed at the recommended frequency of twice per day.
- Less than half of adults (40%) and children (36%) flossed daily.
- Adults and children whose primary household language was English were less likely to brush twice per day (48%) compared to their peers (62%). In addition, adults with Denti-Cal were less likely to brush their teeth twice a day (46%) compared to adults with private insurance (62%) or no insurance (63%).
- Eating fruits and vegetables daily was more common for children from primarily English speaking (44%) and bilingual English and Spanish speaking (43%) households than their peers (24%).
- Seventeen percent of adults in Butte County smoke cigarettes, compared to 12 percent of adults in California.

The following pages describe the objectives, performance measures, and strategies to address the goal of promoting good oral health habits. Where applicable, objectives and performance measures identify key populations—such as children, Denti-Cal beneficiaries, and residents speaking languages other than English—for whom disparities are evident. Partners for each strategy should include those who may be particularly important for meeting the needs of communities experiencing inequities.

Goal 1:

Improve oral health and prevent tooth decay by promoting healthy habits

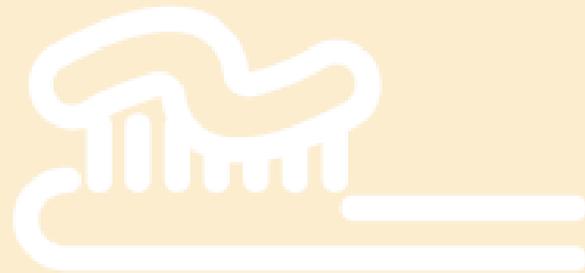


Exhibit 4 presents the objectives for Goal 1, including corresponding performance measures, baseline data, and a five-year target for improvement.

Exhibit 4. Oral health behaviors – Goals, objectives, and performance measures

Objectives and Performance Measures for Goal 1: Improve oral health and prevent tooth decay by promoting healthy habits			
Objectives	Performance Measures	Baseline (Source)	2022 Target
1.1 Reduce the proportion of children with dental caries	% of kindergarteners with untreated dental decay	21% (2016-17, Chico Unified School District)	19%
		30% (2017-18, Northern Valley Indian Health)	27%
1.2 Increase the proportion of children and adults who engage in oral hygiene habits that prevent oral health diseases	% of children who brush at the recommended frequency of twice per day	51% (2018, Butte County Oral Health Community Survey)	56%
	% of adults who brush at the recommended frequency of twice per day, by dental insurance type	62% private insurance 63% no insurance 48% Denti-Cal (2018, Butte County Oral Health Community Survey)	68% private insurance 69% no insurance 58% Denti-Cal
1.3 Increase the proportion of children who engage in healthy eating habits that promote good oral health	% of children who eat fruits and vegetables daily, by primary language	44% English	48% English
		24% non-English (2018, Butte County Oral Health Community Survey)	29% non-English
1.4 Reduce the number of Butte County residents who report using tobacco	% of adults 18 and older who smoke cigarettes	17% (2013-15 California Health Interview Survey)	15%
	% of 11 th graders who smoked cigarettes in the past month	8% males and 7% females (2013-15, California Healthy Kids Survey)	7% males and 5% females
	% of 11 th graders who smoked e-cigarettes in the past month	16% males and 9% females (2013-15, California Healthy Kids Survey)	14% males and 8% females

Exhibit 5 presents the strategies associated with Goal 1, including activities and key partners for implementing those strategies. These strategies and activities are cross-cutting, and therefore address multiple objectives outlined in Exhibit 4.

Exhibit 5. Oral health behaviors – Cross-cutting strategies, activities, and key partners

Strategies, Activities, and Key Partners for Goal 1: Improve oral health and prevent tooth decay by promoting healthy habits		
Strategies	Activities	Key partners
Train providers on oral health best practices	Support continuing education for pediatricians on oral health best practices	Pediatricians Continuing education programs (such as Smiles for Life) Child Health and Disability Prevention Program Oral Health Coalition
	Train child care providers on common oral health issues among young children, and how to engage families in conversations around their child’s oral health	Child care providers Parents and families Oral health experts/trainers
	Educate students in Butte County-based medical training programs (such as nursing and medical assistant programs) on the connections between oral health and overall health	Medical training programs Oral health experts/trainers
Integrate hands-on oral health education into existing community services, agencies, and programs	Partner with home visitation programs to provide dental case management to low-income families with young children	Existing home visitation programs Butte County Oral Health Program
	Partner with programs serving low-income families with young children to distribute toothbrush kits	Existing programs serving low-income families with young children, including home visitation programs, schools Butte County Oral Health Program
	Partner with programs to educate families with young children on the importance of health eating habits to promote good oral health	Existing programs serving families with young children, including home visitation programs, schools Butte County Oral Health Program
Build provider capacity to offer tobacco cessation counseling	Provide training and tools to dental offices/clinics and primary care providers to <u>refer</u> patients to tobacco cessation counseling	Dental offices/clinics Primary care providers Butte County Oral Health Program
	Provide training and tools to dental offices/clinics and primary care providers to <u>implement</u> tobacco cessation counseling	Dental offices/clinics Primary care providers Butte County Oral Health Program
	Incentivize dental providers and primary care providers to offer tobacco cessation counseling and other tobacco cessation aids to patients	Dental offices/clinics Primary care providers



Oral Health Knowledge and Beliefs

A person's knowledge and beliefs about oral health—from knowing how to take care of their teeth, what types of foods support healthy teeth, or how often they feel they should see a dentist—are important factors that can influence oral health outcomes. Oral health knowledge is informed by exposure to oral health education, an individual's previous oral health experiences, as well as cultural practices and attitudes. While oral health knowledge is not the only factor to influence oral health outcomes, having this knowledge can encourage and empower individuals to take steps that support their oral health.

To improve oral health knowledge, the Butte County Oral Health Coalition seeks to increase oral health knowledge through culturally-, linguistically-, and age-appropriate oral health education throughout the county. The following key findings from the Butte County Oral Health Community Health Assessment informed this goal:

- Caregivers' knowledge about children's oral health was high. Household primary language was associated with knowledge about children's oral health, with Hmong (74%) and Spanish-speaking (59%) households most likely to believe that they have to bring their child to the dentist only when they have a cavity.
- Almost half (45%) of respondents indicated they receive information on their child's oral health from the dentist's office. Caregivers of children ages six to ten years old were most likely to receive oral health information.
- Adults were more uncertain about the use of fluoride toothpaste (6%) and drinking fluoridated water (27%) than other oral hygiene practices.

The following pages describe the objectives, performance measures, and strategies to address the goal of increasing oral health knowledge. Where applicable, objectives and performance measures identify key populations—such as residents speaking languages other than English— for whom disparities are evident. Partners for each strategy should include those who may be particularly important for meeting the needs of communities experiencing inequities.

Goal 2:

Increase oral health knowledge through culturally-, linguistically-, and age-appropriate oral health education programming



Exhibit 6 presents the objectives for Goal 2, including corresponding performance measures, baseline data, and a five-year target for improvement.

Exhibit 6. Oral health knowledge and beliefs – Goal, objectives, and performance measures

Objectives and Performance Measures for Goal 2: Increase oral health knowledge through culturally-, linguistically-, and age-appropriate oral health education programming.			
Objectives	Performance Measures	Baseline (Source)	2022 Target
2.1 Increase access to oral health information	% of parents and caregivers who report receiving any oral health information that applies to their child during the past 12 months	84% (2018, Butte County Oral Health Community Survey)	92%
2.2 Increase knowledge of oral health best practices for infants and young children	% of caregivers who believe that a child should see a dentist for preventive visits, by primary language	90% English 74% Hmong 59% Spanish (2018, Butte County Oral Health Community Survey)	99% English 89% Hmong 71% Spanish
2.3 Increase understanding of the benefits of fluoride for oral health	% of adult residents who believe that drinking fluoridated tap water is important	45% (2018, Butte County Oral Health Community Survey)	50%

Exhibit 7 presents the strategies associated with Goal 2, including activities and key partners for implementing those strategies. These strategies and activities are cross-cutting, and therefore simultaneously address multiple objectives outlined in Exhibit 6.

Exhibit 7. Oral health knowledge and beliefs – Cross-cutting strategies, activities, and key partners

Strategies, Activities, and Key Partners for Goal 2: Increase oral health knowledge through culturally-, linguistically-, and age-appropriate oral health education programming.		
Strategies	Activities	Key partners
Support organizations to add oral health education to their existing programs	Provide organizations with resources (such as curricula, materials, presentations, trainings, or workshops) that educate their clients on oral health hygiene and best practices	Community nonprofit, cultural, and social service organizations Butte County Oral Health Program
	Work with community members to identify and/or adapt oral health education curricula or messages to meet the needs of various communities, including those that are low-income, speak languages other than English, and have distinct medical or behavioral needs	Community nonprofit, cultural, and social service organizations Oral Health Coalition Butte County Oral Health Program Butte County Public Health Department
	Distribute oral health books (such as “Potter the Otter” and “Brush Brush Brush”) to families with young children	Pediatrician and dental offices Schools WIC sites First 5 California/First 5 Butte County Community nonprofit, cultural, and social service organizations
	Conduct educational outreach at health fairs and other community events	Butte County Oral Health Program
Provide culturally-, linguistically-, and age-appropriate oral health education through existing community services, agencies, and programs	Add oral health education workshops and lessons to existing programs for clients at higher risk of poor oral health outcomes (such as residents who are low-income, have no insurance or Denti-Cal, or who have special medical or behavioral health needs)	Butte County Oral Health Program Butte County Oral Health Coalition Existing community services, agencies and programs such as: hospitals, nonprofit organizations, cultural organizations, shelters, and social service providers (including members of the Oral Health Coalition)
	Add age-appropriate oral health education to programs and settings serving young children and their families, such as preschools, child care, WIC, and programs serving pregnant women.	Child care providers (e.g., centers, family child care homes) Preschool providers WIC sites Hospitals and health centers offering prenatal and maternity care (including Planned Parenthood Northern California affiliate locations)
	Add age-appropriate oral health education to health curriculums in elementary, junior high, and high schools (with grades K-6 as a priority)	School districts School administrators and teachers



Utilization of Care

Using available dental services—including both preventive and restorative services—are a key way to maintain oral health and treat oral diseases. In particular, annual preventive visits for both children and adults are recommended for regular cleaning, as well as identification of caries and other dental conditions. Specific dental services, such as sealants, can also serve as key ways to prevent or mitigate oral health issues.

To improve utilization of oral health and dental health care, the Butte County Oral Health Coalition seeks to develop and promote resources that improve the ability of residents—including low-income residents—to utilize preventive dental care throughout the lifespan. The following key findings from the Butte County Oral Health Community Health Assessment informed this goal:

- Sixty-three percent of adults had a dental visit during the past year. Some adults were less likely to have a dental visit during the past year, including adults with Denti-Cal (53%) or no insurance (49%), men (48%), and younger adults ages 18 to 29 (52%).
- Adults with Denti-Cal were more likely to have visited a dentist for a specific problem (41%) instead of a routine cleaning, compared to adults with private insurance (24%).
- The majority (79%) of children had seen a dentist in the past year.
- Forty-two percent of children saw a dentist by the age of one. Thirty-one percent did not see a dentist until age 2 or 3, and fifteen percent were age four or older.
- Half (47%) of women saw a dentist during pregnancy; women were less likely to see a dentist during pregnancy if they were on Medi-Cal (39%), below the poverty level (38%), or had a high school education or lower (37%).

The following pages describe the objectives, performance measures, and strategies to address the goal of improving utilization of care. Where applicable, objectives and performance measures identify key populations—such as children, Denti-Cal beneficiaries, and people with incomes below the Federal Poverty Level—for whom disparities are evident. Partners for each strategy should include those who may be particularly important for meeting the needs of communities experiencing inequities.

Goal 3:

Develop and promote resources that improve the ability of low-income Butte County residents to utilize preventive dental care throughout the lifespan



Exhibit 8 presents the objectives for Goal 3, including corresponding performance measures, baseline data, and an end-of-grant target for improvement.

Exhibit 8. Utilization of care – Goals, objectives, and performance measures

Objectives and Performance Measures for Goal 3: Develop and promote resources that improve the ability of low-income Butte County residents to utilize preventive dental care throughout the lifespan.			
Objectives	Performance Measures	Baseline (Source)	2022 Target
3.1 Increase utilization of preventive dental visits among children	% of children who have had a preventive dental visit in the past year	79% (2018, Butte County Oral Health Community Survey)	83%
3.2 Increase utilization of preventive dental visits among adults with Denti-Cal	% of adults with Denti-Cal who had a preventive dental visit in the past year	53% (2018, Butte County Oral Health Community Survey)	58%
3.3 Increase the percent of children who see a dentist by age one or when the first tooth appears	% of children who have had a dental visit by age 1	42% (2018, Butte County Oral Health Community Survey)	46%
3.4 Increase utilization of dental sealants among children between ages six and nine years old	% of children between 6 and 9 years old with dental sealants	59% (2018, Butte County Oral Health Community Survey)	65%
3.5 Increase the percent of women who see a dentist during pregnancy	% of women who saw a dentist during their most recent pregnancy, by income level	38% from 0-100% FPL 49% from 100-200% FPL 64% from 200-300% FPL (2015-2016, CDPH MIHA)	46% from 0-100% FPL 59% from 100-200% FPL 70% from 200-300% FPL
3.6 Increase utilization of oral cancer screenings among tobacco users	% of tobacco users who receive a recommendation for an oral cancer screening	32% (2018, Butte County Oral Health Community Survey)	35%

Exhibit 9 presents the strategies associated with Goal 3, including activities and key partners for implementing those strategies. These strategies and activities are cross-cutting, and therefore simultaneously address multiple objectives outlined in Exhibit 9.

Exhibit 9. Utilization of care – Cross-cutting strategies, activities, and key partners

Strategies, Activities, and Key Partners for Goal 3: Develop and promote resources that improve the ability of low-income Butte County residents to utilize preventive dental care throughout the lifespan.		
Strategies	Activities	Key partners
Increase the accessibility of information on providers serving Denti-Cal patients	Share and promote Child Health and Disability Prevention Program (CHDP) list of Butte County Denti-Cal providers through BCPHD and other community agency websites	Butte County CHDP Program Butte County Oral Health Program Local organizations that work with Denti-Cal beneficiaries
	Regularly update Denti-Cal provider lists to reflect providers who are accepting new patients	Butte County CHDP Program Butte County Oral Health Program
Implement and expand programs that bring dental services into the community	Expand the geographic reach and frequency of mobile dental clinics, including clinics that will specifically serve children and adults with special needs	Butte County Oral Health Program Oral Health Coalition
	Implement Virtual Dental Home (VDH) model to bring preventive and restorative dental care to community locations	VDH trainers (e.g. University of the Pacific) Dentists and dental hygienists Local organizations that work with Denti-Cal beneficiaries
	Conduct oral health screenings in a school setting, with a particular focus on dental assessments for child care centers, and kindergarten and 3rd grade classrooms in South County	Child care centers Schools and school districts Dentists and dental hygienists Butte County Oral Health Program Oral Health Coalition
	Offer fluoride varnish and/or sealant application in schools, including kindergarten and 3 rd grade classrooms	Schools and school districts Dentists and dental hygienists Oral Health Coalition Butte County Oral Health Program
Improve the ability of dentists to serve key populations who have experienced challenges utilizing	Engage dental providers and organizations serving key populations who have experienced challenges utilizing dental care—such as Denti-Cal recipients and special needs populations—to identify strategies that can address gaps in service	Local organizations that serve communities with special medical or behavioral needs Butte County Oral Health Program Oral Health Coalition Dentists and dental hygienists

**Strategies, Activities, and Key Partners for Goal 3:
Develop and promote resources that improve the ability of low-income Butte County residents to utilize preventive dental care throughout the lifespan.**

Strategies	Activities	Key partners
dental care	Identify and/or develop resources (including trainings) for dental providers to improve services to key populations	Local organizations that serve communities with special medical or behavioral needs Butte County Oral Health Program Oral Health Coalition Dentists and dental hygienists Consultants, trainers and/or dental organizations that provide resources or trainings to dental providers on how to serve special populations
Integrate oral health referrals into primary care settings	Partner with OBGYN offices and clinics to provide low-income pregnant women with oral health information and referrals to dentists	Butte County Maternal Child and Adolescent Health Program Hospitals and health centers offering prenatal and maternity care (including Planned Parenthood Northern California affiliate locations) Oral Health Coalition
	Partner with primary care providers to refer tobacco users to dentists for oral cancer screenings	Primary care providers (including Medical providers) Dentists and dental hygienists Tobacco Education and Cessation Oral Health Coalition
	Establish referral processes between primary care providers/hospital emergency departments and dentists to support high risk patients (including diabetic patients) to receive care	Primary care providers (including Medical providers) Hospital emergency departments Dentists and dental hygienists Butte County Oral Health Program
	Establish referral networks between primary care providers and dentists to support low-income adults and children to establish dental homes/usual sources of care	Primary care providers (including Medical providers) Dentists and dental hygienists Butte County Oral Health Program Oral Health Coalition
Educate community members on preventive dental visits	Integrate information on preventive services (including regular dental cleanings and exams, as well as dental sealants for children) into oral health media campaign	Butte County Oral Health Program Oral health media campaign
	Ensure information on benefits of dental sealants for children is easily accessible to parents with children between 6 and 9 years old	Dentists and dental hygienists Local organizations that work with families with children between ages 6 and 9 Butte County Oral Health Program

**Strategies, Activities, and Key Partners for Goal 3:
Develop and promote resources that improve the ability of low-income Butte County residents to utilize preventive dental care throughout the lifespan.**

Strategies	Activities	Key partners
	Partner with local organizations to amplify Smile California (media campaign to increase awareness of Denti-Cal benefits for Medi-Cal beneficiaries)	Denti-Cal Butte County Oral Health Program Local organizations that work with Denti-Cal beneficiaries
	Integrate education on navigating Denti-Cal services into existing programs for adults and families who are Medi-Cal beneficiaries	Butte County Oral Health Program Existing community services, agencies and programs such as: hospitals, nonprofit organizations, cultural organizations, shelters, and social service providers (including members of the OH Coalition)



Community Environment

The resources available and policies in a community play a key role in whether individuals have access to oral health information, are able to practice good oral health behaviors, or can regularly receive the oral health care that they need. In addition to the social determinants of health that have been examined throughout this CHIP—such as income, race or ethnicity, and primary language—elements of the community environment that can influence oral health include access to dental insurance, easy-to-access dentists and dental services, availability of fluoridated water, and consistent communication of key oral health messages.

The Butte County Oral Health Coalition prioritizes collaboration with community-based organizations, providers, and government agencies to increase protective factors that promote and improve oral health. The following key findings from the Butte County Oral Health Community Health Assessment informed this goal:

- While the majority of adults (82%) and children (97%) have dental insurance, large proportions relied on Denti-Cal as their primary form of coverage (36% of adults and 64% of children). The overall population-to-dentist ratio in Butte County (1,400:1) is already higher than in California (1,210:1), and the limited number of Denti-Cal providers in the county means this ratio is even higher for Denti-Cal beneficiaries.
- The lack of Denti-Cal providers in the county was identified as a key barrier to care for children and adults. Focus group participants noted long appointment wait times for in-county providers, frequent referrals to out-of-county providers, and the high burden of travelling out-of-county. Children with Denti-Cal were more likely to be taken outside of Butte County for their dental care. These barriers are disproportionately experienced by people of color and people who are low-income.
- Community water fluoridation is a recommended public health measure that reduces the incidence of tooth decay among both children and adults.³ As of 2016, only two public water systems in Butte County were fully fluoridated: the Cal-Water Service Company in Oroville, which covers only parts of Oroville, and the City of Gridley.⁴ In comparison, 64 percent of Californians served by community water systems have fluoridated water.⁵
- Only five percent of parents and caregivers who responded to the community survey reported receiving oral health information that relates to their child outside of the dentist office, and several focus group participants expressed an interest in additional oral health information.

The following pages describe the objectives, performance measures, and strategies to improve the community environment that influences oral health outcomes. Where applicable, objectives and performance measures identify key populations—Denti-Cal beneficiaries—for whom disparities are evident. Partners for each strategy should include those who may be particularly important for meeting the needs of communities experiencing inequities.

³ Centers for Disease Control and Prevention. Community Water Fluoridation. Accessed [here](#).

⁴ California Water Boards, Fluoridation by Public Water Systems, 2016. Accessed [here](#).

⁵ Centers for Disease Control and Prevention, State Fluoridation Percentage Calculations and States Ranked by Fluoridation Percentage, 2014. Available [here](#).

Goal 4:

Collaborate with organizations to strengthen the community environment's overall ability to support good oral health outcomes



Exhibit 10 presents the objectives for Goal 4, including corresponding performance measures, baseline data, and a five-year target for improvement.

Exhibit 10. Community environment – Goals, objectives, and performance measures

Objectives and Performance Measures for Goal 4: Collaborate with organizations to strengthen the community environment’s overall ability to support good oral health outcomes			
Objectives	Performance Measures	Baseline (Source)	2022 Target
4.1 Increase the number of dentists who accept Denti-Cal in Butte County	# of dentists/dental clinics who accept Denti-Cal	11 (August 2018, Butte County CHDP Program)	16
4.2 Increase the number of public water agencies with fully fluoridated water	# of public water agencies with fully fluoridated water	2 (2016, California Water Boards)	3
4.3 Increase the number of organizations that integrate oral health messages into their work with Butte County residents	% of adult residents who report receiving oral health information outside of the dentist’s office during the past 12 months	5% (2018, Butte County Oral Health Community Survey)	20%

Exhibit 11 presents the strategies associated with Goal 4, including activities and key partners for implementing those strategies. These strategies and activities are cross-cutting, and therefore simultaneously address multiple objectives outlined in Exhibit 10.

Exhibit 11. Community environment – Cross-cutting strategies, activities, and key partners

Strategies, Activities, and Key Partners for Goal 4: Collaborate with organizations to strengthen the community environment’s overall ability to support good oral health outcomes		
Strategies	Activities	Key partners
Increase the number of Denti-Cal providers serving Butte County residents	Connect dental providers to trainings and technical assistance that support them to become (and remain) Denti-Cal providers	Butte County Oral Health Program Oral Health Coalition Dentists and dental hygienists Denti-Cal Program
	Explore opportunities for Butte County Public Health Department to include dental services at public clinics	Butte County Public Health Department Butte County Oral Health Program
	Apply for funds to open school-based health centers that include oral health components	Schools and school districts Oral Health Coalition Butte County Oral Health Program
	Partnering with local colleges to increase interest in dental careers	Oral Health Coalition Local colleges
Increase community interest in fluoridated water	Meet with local water districts/agencies to discuss possibility of community water fluoridation	Butte County Oral Health Program Butte County Environmental Health Program Water districts/agencies
	Create opportunities (such as community forums) for residents and agencies to discuss benefits and concerns related to fluoridated water	Butte County Oral Health Program Butte County Environmental Health Program Water districts/agencies Other city, town or county agencies
Launch multi-platform oral health media campaign	With community-buy-in, develop and test oral health messages that are culturally- and linguistically-appropriate	Butte County Oral Health Program Butte County Public Health Department Oral Health Coalition Community nonprofit, cultural, and social service organizations

**Strategies, Activities, and Key Partners for Goal 4:
Collaborate with organizations to strengthen the community environment’s overall ability to support good oral health outcomes**

Strategies	Activities	Key partners
	With community buy-in, develop and test oral health messages that are age-appropriate and address care across the lifespan	Butte County Oral Health Program Butte County Public Health Department Oral Health Coalition Community nonprofit, cultural, and social service organizations
	Launch oral health media campaign through social media, traditional media, and community outreach that includes information on healthy nutrition, oral hygiene habits, the benefits of fluoride, and tobacco use	Butte County Oral Health Program Butte County Public Health Department Oral Health Coalition Community nonprofit, cultural, and social service organizations
	Partner with local agencies to amplify oral health media campaign	Butte County Oral Health Program Oral Health Coalition Community nonprofit, cultural, and social service organizations
Identify and pursue policies, funding, and best practices that support good oral health	Continue facilitation of the Oral Health Coalition in order to share best practices across agencies	Butte County Oral Health Program Oral Health Coalition
	Encourage community participation in decision-making about external funding opportunities	Butte County Oral Health Program Butte County Public Health Department Oral Health Coalition
	Identify policy strategies that limit exposure to products that increase risks for poor oral health outcomes, such as sweetened beverages, flavored tobacco, and e-cigarettes	Butte County Oral Health Program Butte County Public Health Department Oral Health Coalition
	Identify additional funding streams for oral health education and/or service provision	Butte County Public Health Department Butte County agencies and other public agency partners Schools and school districts Butte County Oral Health Program Oral Health Coalition



CHIP Alignment with Other Health Improvement Initiatives

Butte County’s Oral Health CHIP goals and objectives align with and complement objectives outlined in the 2018-2028 California Oral Health Plan, as well as Healthy People 2020. Exhibit 12 demonstrates how these three health improvement initiatives align.

Exhibit 12. Comparison of Butte County Oral Health CHIP to other health improvement initiatives

Butte County Oral Health CHIP	State: 2018-2028 California Oral Health Plan	Federal: Healthy People 2020
Goal 1: Improve oral health and prevent tooth decay by promoting healthy habits	Improve the oral health of Californians by addressing determinants of health and promote healthy habits and population-based prevention interventions to attain healthier status in communities	N/A
<i>Objective 1.1:</i> Reduce the proportion of children with dental caries	Reduce the proportion of children with dental caries experience and untreated caries	Reduce the proportion of children and adolescents who have dental caries experience in their primary or permanent teeth Reduce the proportion of children and adolescents with untreated dental decay
<i>Objective 1.2:</i> Increase the proportion of children and adults who engage in oral hygiene habits that prevent oral health diseases	N/A	N/A
<i>Objective 1.3:</i> Increase the proportion of children who engage in healthy eating habits that promote good oral health	N/A	N/A
<i>Objective 1.4:</i> Reduce the number of Butte County residents who report using tobacco	Increase the percentage of patients who receive evidence-based tobacco cessation counseling and other cessation aids in dental care settings	Increase the proportion of adults who received information from a dentist or dental hygienist focusing on reducing tobacco use or on smoking cessation in the past year
Goal 2: Increase oral health knowledge through culturally-, linguistically-, and age-appropriate oral health education	N/A	N/A

programming		
<i>Objective 2.1:</i> Increase access to oral health information	N/A	N/A
<i>Objective 2.2:</i> Increase knowledge of oral health best practices for infants and young children	N/A	N/A
<i>Objective 2.3:</i> Increase understanding of the benefits of fluoride for oral health	N/A	N/A
Goal 3: Develop and promote resources that improve the ability of low-income Butte County residents to utilize preventive dental care throughout the lifespan	Align dental health care delivery systems, payment systems, and community programs to support and sustain community-clinical linkages for increasing utilization of dental services	N/A
<i>Objective 3.1:</i> Increase utilization of preventive dental visits among children	<p>Increase the proportion of children who had a preventive dental visit in the past year and reduce disparities in utilization of preventive dental services</p> <p>Increase the percentage of Medi-Cal enrolled children ages 1 to 20 who receive a preventive dental service</p> <p>Integrate dental services with educational, medical, and social service systems that serve vulnerable children and adults.</p>	<p>Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year</p> <p>Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year</p>
<i>Objective 3.2:</i> Increase utilization of preventive dental visits among adults with Denti-Cal	N/A	Increase the proportion of adults who receive preventive interventions in dental offices
<i>Objective 3.3:</i> Increase the percent of children who see a dentist by age one or when the first tooth appears	N/A	N/A
<i>Objective 3.4:</i> Increase utilization of dental sealants among children between ages six and nine years old	Increase the percentage of children ages six to nine years who have received dental sealants on one or more of their permanent first molar teeth	Increase the proportion of children and adolescents who have received dental sealants on their molar teeth
<i>Objective 3.5:</i> Increase the percent of women who see a dentist during pregnancy	Increase the proportion of pregnant women who report having been seen by a dentist	N/A

<p><i>Objective 3.6:</i> Increase utilization of oral cancer screenings among tobacco users</p>	<p>N/A</p>	<p>Increase the proportion of adults who received an oral and pharyngeal cancer screening from a dentist or dental hygienist in the past year</p>
<p>Goal 4: Collaborate with organizations to strengthen the community environment’s overall ability to support good oral health outcomes</p>	<p>Collaborate with payers, public health programs, health care systems, foundations, professional organizations, and educational institutions to expand infrastructure, capacity, and payment systems for supporting prevention and early treatment services</p>	<p>N/A</p>
<p><i>Objective 4.1:</i> Increase the number of dentists who accept Denti-Cal in Butte County</p>	<p>Increase the number of dentists practicing in recognized dental professional shortage areas or providing a majority of their services to recognized underserved populations</p>	<p>Increase the proportion of local health departments and Federally Qualified Health Centers (FQHCs) that have an oral health program</p>
<p><i>Objective 4.2:</i> Increase the number of public water agencies with fully fluoridated water</p>	<p>Increase the proportion of the California population served by community water systems with optimally fluoridated water</p>	<p>N/A</p>
<p><i>Objective 4.3:</i> Increase the number of organizations that integrate oral health messages into their work with Butte County residents</p>	<p>Increase the coordination, consistency, and reach of oral health messages targeted to different audiences in multiple languages and various formats</p>	<p>N/A</p>



Conclusion

The Butte County Oral Health CHA and CHIP represent the combined efforts of the Butte County Public Health Department, Oral Health Coalition members, community members, and Harder+Company Community Research. This plan outlines the priority oral health needs in Butte County, as well as effective and concrete actions that local government agencies and community organizations can take to help address those needs in order to improve oral health in the county. In particular, the Butte County Public Health Department's commitment to reducing disparities in oral health outcomes is represented in its goals, objectives, performance measures, and strategies. With Coalition members and other key community partners, the Butte County Public Health Department will develop an implementation plan with key tasks, timelines, and responsibilities to ensure progress towards the county's oral health goals. 🏠

Appendix A: Oral Health Coalition Members

As of October 2018, the Butte County Oral Health Coalition includes representatives from the following organizations:

- American Lung Association
- Ampla Health
- Associated Students Child Development Lab (ASCDL) of California State University (CSU), Chico
- Butte County Behavioral Health Department
- Butte County Office of Education
- Butte County Public Health Department
 - Child Health and Disability Prevention (CHDP) Program
 - Maternal, Child & Adolescent Health (MCAH) Program
 - Support Services, Nursing Division
 - Women, Infants and Children (WIC) Program
- California Health Collaborative
- California Tribal Temporary Assistance for Needy Families (TANF) Partnership (CTTP)
- Chico Unified School District
- Every Woman Counts
- First 5 Butte County
- Feather River Tribal Health
- Hmong Cultural Center
- Mechoopda Indian Tribe of Chico Rancheria
- Northern Valley Indian Health
- Valley Oak Children's Services



Appendix B: CHA Methods

The following sections outline key methods of data collection and analysis for each component of the Oral Health Community Health Assessment.

Butte County Oral Health Community Survey

Purpose

The Butte County Public Health Department's (BCPHD) Oral Health Community Survey gathered information on oral health status, knowledge and beliefs, behaviors, and utilization of services among adults over the age of 18 who lived or worked in Butte County.

Survey content and development

The survey's 25 questions were informed by existing oral health and dental health surveys—including the American Dental Association's Caries Risk Assessment, the National Health and Nutrition Examination Survey (NHANES), and the California Health Interview Survey (CHIS)—to ensure that community survey findings could be compared to existing data at the county and state level. In some instances, these questions were adapted (or augmented) to examine unique oral health characteristics and key questions in Butte County. Caregivers answered an additional 18 questions about their child's oral health.

The Oral Health CHA Community Survey was developed in consultation with Harder+Company and BCPHD staff with oral health expertise. The survey was piloted with select Oral Health Coalition members in May 2018.

Data collection

Survey responses were collected in May and June 2018 through two key avenues:

- Distributed online by both BCPHD staff and Oral Health Coalition members, and
- Distributed in-person by BCPHD at key community locations, including farmers markets, schools, and at key county agencies.

BCPHD partnered with community agencies and Oral Health Coalition members to ensure that the survey was distributed across the county and, in particular, to traditionally marginalized and underserved communities. Some respondents at locations that were selected specifically to reach caregivers of young children only received child-specific questions (along with select demographic questions).

Online survey respondents could be entered into a drawing for a \$25 gift card, and in-person survey respondents received a \$5 gift card upon completing each of the two sections of the survey as compensation for their time. No incentives were provided for completed surveys that were distributed at schools and taken home to be filled out by caregivers.

A total of 820 responses were collected from Butte County community residents. Of these respondents, 459 adults received questions about their own oral health

knowledge and behaviors. A total of 526 adults received and answered questions about their child between the ages of zero and 17; some of these adults did not respond to questions about their own oral health.

Survey Demographics

The Butte County Oral Health Community Survey collected demographic data to understand more about respondents, as well as to understand how they compared to the population of Butte County as a whole.⁶

- **Geographic distribution.** Respondents were concentrated in the larger population centers in the County, with most responses from residents of Oroville (39%), Chico (21%), Thermalito (8%), Paradise (6%) and Palermo (5%). Nineteen percent of respondents lived outside of these five population centers. Three percent of respondents indicated that they work in—but do not reside in—Butte County.
- **Gender.** People who identified as female/women accounted for the majority of survey respondents (86%), compared to 50 percent of the county's population.
- **Age.** Similar to the adult population of Butte County, Community Survey respondents were adults between ages 18 and 59 (85%). Approximately 15 percent of respondents were age 60 or older.
- **Primary language.** Like the county, most survey respondents reported primarily speaking English at home (79%). Respondents who spoke more than one language at home, as well as those who identified their primary household language as a language other than English, were overrepresented in the survey: eleven percent reported bilingual households (6% bilingual Spanish and 5% bilingual Hmong, and less than 1% bilingual in another language), and eight percent reported a primary household language other than English (3% Spanish, 5% Hmong, and less than 1% other languages).
- **Race or ethnicity.** The majority of survey respondents (65%) identified as white and 12 percent identified as Latino/Hispanic, reflecting the overall population in Butte County. The Community Survey oversampled residents who were multiracial (12% vs. 4% in the county), Native American or Alaska Native (4% vs. <1%), African American or Black (2% vs. 1%), and Asian (5% Asian, including 4% Hmong, vs. 1%). Like the county, less than one percent of respondents were Native Hawaiian/Pacific Islander or another race or ethnicity.
- **Educational level.** Most respondents (77%) reported having some college education or higher. Eighteen percent had received a high school diploma or GED, and four percent had not completed high school.
- **Poverty level.** While the Community Survey did not ask respondents to report their income, respondents were asked to indicate whether they received any form of government assistance, such as WIC, Head Start, Medi-Cal, or Cal-Fresh (Supplemental Nutrition Assistance Program). Just

⁶ Language and geographic location questions were answered by all survey respondents, including those who only completed questions about their child's oral health. Questions regarding race or ethnicity, gender identity, age, employment status, receipt of government assistance, and highest level of education were only answered by a subset of adults who completed the adult portion of the survey, or completed the full survey.

under half (42%) reported receiving at least one form of government assistance.

- **Employment status.** Over half of respondents (56%) reported either full-time employment (44%) or part-time employment (16%). Seven percent reported that they were unemployed and seeking work, seven percent could not work due to disability, and four percent were full-time students.
- **Children.** Of 820 total survey responses, 526 respondents (68%) reported having children between ages zero and 17 years old. Among these respondents, over half (59%) reported that their youngest child was between ages zero to six, and 34% percent were between ages 6 and 10. A large proportion reported that their child was white (45%); a significant proportion reported that their child was multiracial (22%), Hmong (15%), or Latino/Hispanic (11%). Smaller percentages of respondents had children who were African American or Black (3%), American Indian/Alaska Native (3%), non-Hmong Asian (1%), Native Hawaiian or Pacific Islander (<1%), or another race (<1%). Over two-thirds (69%) reported that their youngest child received some form of government assistance (such as WIC, Head Start, Medi-Cal, or CalFresh). Children under age 10 more likely to receive government assistance (70%) than older children (53%).

Data analysis

Descriptive analyses were conducted on survey questions in the form of counts, percentages, and/or proportions. The total number of respondents included for each analysis varies depending on the question, the total number who completed the question, and the relevant subpopulations of interest.

Where applicable and appropriate, data was stratified by the following demographic characteristics: dental insurance type, race or ethnicity, age group, socioeconomic status as measures by receive of public assistance, geographic location in Butte County, gender identification, and primary language. Stratifications were determined based on both the content of the question and availability of a sufficient number of responses. Tests of significance were used to determine whether differences were significantly different; however, statistical significance was not used to make the final determination for which data would be included in this report. Rather, data were included in this report if they contributed to understanding the strengths and oral health needs of county residents.

Butte County Dental Provider Survey

Purpose

BCPHD administered a survey to dental providers about both the services they offered to their patients, as well as their perspectives on key oral health and dental health priorities in the county.

Survey content and development

The Oral Health CHA Dental Provider Survey was developed by BCPHD with consultation from Harder+Company. The survey's 13 questions were informed by existing oral health and dental health surveys, literature on dental providers' roles in addressing oral health, and topics of interest to BCPHD staff and other stakeholders.

Data collection

The Dental Provider Survey was distributed by BCPHD staff to dental providers and offices who serve Butte County residents. Surveys were distributed through e-mail and by mail in June 2018. A total of 23 dental providers—primarily dentists—responded to the survey.

Data analysis

Descriptive analyses were conducted on survey questions in the form of counts, percentages, and/or proportions. The total number of respondents included for each analysis varies depending on the question, the total number who completed the question, and the relevant subpopulations of interest.

While stratifications by provider profession, Denti-Cal status, languages offered at the provider's practice, and type of clients seen at each practice were explored, they have not been included in this report due to small sample size.

Focus groups

Purpose

BCPHD set out to conduct focus groups that captured in-depth perspectives on oral health, including access to and receipt of dental services. In particular, BCPHD prioritized focus groups with traditionally marginalized and underrepresented communities in the county.

Focus group content and development

Focus group protocols were developed by BCPHD with consultation from Harder+Company and BCPHD staff.. Questions focused on understanding community oral health attitudes, knowledge, experiences, as well as their ideas for improving oral health in the county. In particular, they were designed to reflect key oral health topics that were included in the Butte County Oral Health Community Survey, and to gather additional in-depth knowledge about these topics.

Data collection

Four focus groups were conducted with 37 Butte County residents in June 2018. These focus groups were held with:

- Members of the African American community as well as other racial groups from the South Oroville area, recruited in partnership with the African American Family and Cultural Center
- Members of the Spanish-speaking Latino community, recruited in partnership with Northern Valley Catholic Social Services, Promotores Program.
- Members of the Hmong community, recruited in partnership with the Hmong Cultural Center.
- Members of the Native American community, recruited in partnership with Mechoopda Indian Tribe of Chico Rancheria and primarily representing the Mechoopda tribe.

One planned focus group in the city of Paradise was cancelled due to a low

response rate.

All focus group participants received a \$15 gift card as an incentive for their participation. An optional demographic survey was also distributed to focus group participants.

Focus group demographics

Demographic data were also collected from the 37 people who participated in the four focus groups. Most participants lived in the larger cities of Oroville and Chico. Of these participants:

- The majority of participants were from Oroville (43%) and Chico (41%). Two participants worked in, but did not live in, Butte County.
- Approximately 60 percent of respondents were female, and 40 percent were male.
- While race or ethnicity data were not collected for all participants, focus groups intentionally focused on collecting data from historically marginalized communities. Therefore, focus group participants were largely African American/Black, American Indian or Alaska Native, Hmong, and Spanish-speaking Hispanic/Latino residents.

The percentage of focus group participants who relied on Denti-Cal as their primary form of insurance (41%) or who had no insurance coverage (32%) was higher than among survey respondents and higher than the county as a whole.

Data analysis

Audio recordings from focus groups were transcribed. Notes and transcripts were analyzed using Atlas.TI qualitative analysis software. Coding schema were developed using an iterative process grounded in the focus group protocols and preliminary review of transcripts. Key themes were identified based on the total number of mentions, as well as the total number of focus groups that discussed the theme. In addition, key insights that illuminated specific issues faced by traditionally underserved or marginalized communities were included in key themes to reflect BCPHD's interest in understanding the particular barriers and challenges that these communities have encountered in achieving optimal oral health.

Secondary data

Purpose

Secondary data from public data sources were used to describe oral health status, outcomes, and utilization of care in the county. In addition, this secondary data was used to draw comparisons to statewide oral health.

Selection of indicators

To select secondary data for the Oral Health CHA, BCPHD identified oral health topics of interest for CHA data collection, including demographics, oral health outcomes, access to oral health services (including specific services such as dental sealants and oral cancer screenings), and oral health knowledge, beliefs, and practices. Using these areas of interest, Harder+Company reviewed public data sources with oral health related questions and compiled a database of possible oral health secondary data to examine. Final selection of secondary data for inclusion in

this CHA was determined based on availability of the data at the county level, availability of stratifications, most recent years of data available, and relevance to selected oral health topics.

Data collection and analysis

BCPHD and Harder+Company gathered available secondary data for each identified source. The California Health Interview Survey is a key source of oral health data in California; however, estimates for Butte County can be statistically unstable due to small sample size. Point estimates that are statistically unstable have been notated as such in this report.

In addition to secondary data available through public sources, BCPHD staff also compiled secondary data from Oral Health Coalition members who have collected data from their constituents about oral health.

Asset mapping

Purpose

To understand the resources for (as well as the challenges to) improving oral health, the Oral Health Coalition participated in an asset mapping activity.

Facilitation of asset mapping activity

BCPHD staff worked with Harder+Company to design an asset mapping activity that was conducted at the June 2018 meeting of the Oral Health Coalition. This asset mapping activity set out to identify two distinct types of assets for improving oral health:

- Place-based, “mappable” assets and resources that strengthen the community, and
- Social networks and relationships that build community capacity and resilience as it relates to supporting the community.

In particular, Oral Health Coalition members were encouraged to think broadly about oral health, and the social determinants of oral health within Butte County. Participants were also asked to identify barriers to accessing these resources, along with gaps in available services.

In small groups, Coalition members responded to several guiding questions about community strengths and opportunities, and where in the community they access (or could access) both formal and informal resources. Participants were encouraged to think about what resources they see as they walk down the street and where they go when they need specific goods or services. After small group discussions, participants shared their conversations and discoveries back with the full Oral Health Coalition.

Synthesis of findings

These primary and secondary data sources were synthesized for each oral health topic. The following criteria were considered when determining whether an indicator for the county qualified as a need:

- Comparison to statewide benchmarks

- Disparities between populations within Butte County
- Key themes that emerged from focus groups

Findings for each oral health topic were reviewed closely with BCPHD and the Oral Health Coalition to come to consensus about whether to consider the topic an oral health need. 

Appendix C: CHA Key Findings

This appendix includes key findings on oral health indicators from the Butte County Oral Health Community Health Assessment, organized by oral health topic. Primary and secondary data for each indicator were synthesized to determine whether the indicator represented an oral health need for the county. The following criteria were considered when determining whether an indicator for the county qualified as a need:

- Comparison to statewide benchmarks
- Disparities between populations within Butte County
- Key themes that emerged from focus groups

Exhibit 13. Synthesis of oral health key findings

Topic	Indicator	Key finding	Oral health need?
Oral health status	Perceived oral health status	Overall perceived oral health status was similar to oral health status for Californians. However, those with poor oral health status reported impacts on their ability to interview for jobs (41%), their need to take time off from work (14%), more pain and discomfort while eating (43%) and difficulty with speech (12%).	Yes
	Mouth tooth and pain	Denti-Cal beneficiaries were more likely to take days off from work because of discomfort (17%) than those with no insurance (15%) or private insurance (11%). Over half (52%) of Denti-Cal beneficiaries felt their mouth and tooth appearance affected their job interview prospects, compared to 30% with private insurance. Missing school as a result of dental pain or discomfort was more common among children whose primary source of insurance was Denti-Cal (15% vs. 6%), and higher in Butte County Community Survey respondents (12%) than Butte (5%) or California (7%) CHIS data.	Yes
	Untreated decay	In 2016-17, 21 percent of the 384 kindergarten students assessed by the Chico Unified School District had untreated decay. Among the 917 pre-kindergarten through 8 th grade students screened for dental issues in Chico by Northern Valley Indian	Yes

		Health during the 2017-18 school year, 30 percent had untreated decay and 10 percent had urgent dental needs.	
	Oral cancers	The age-adjusted incidence rate of oral cavity and pharynx cancers in Butte County was 12.8 per 100,000, compared to 10.0 per 100,000 in California and similar to other Northern California counties.	Yes
Access to oral health care	Dental insurance coverage	A high proportion of adults in Butte County had dental insurance (82% in Community Survey, 72% according to CHIS) compared to California (61%). Nearly all children in Butte County have dental insurance (97% in Community Survey, 99% according to CHIS).	No
	Usual source of care	Adult and child Denti-Cal beneficiaries were more likely to visit a public clinic than a dentist office compared to those with private insurance. Caregivers with Denti-Cal and caregivers in rural parts of the county were more likely to take their child out of Butte County for care (14%) than those with private insurance (2%).	Yes
Utilization of care	Age at first visit	Less than half of children (42%) saw a dentist by age 1.	Yes
	Dental visit in the last 12 months	Adults with private insurance were more likely to have a dental visit in the last 12 months (76%) compared to those with Denti-Cal (53%) or no insurance (49%). Young adults and men were less likely to have a dental visit in the past year. In Butte County’s Community Survey, 79 percent of children saw a dentist in the last 12 months. This was lower than reported in CHIS for Butte County (98%) and the state (83%).	Yes
	Reason for most recent visit	Adults with Denti-Cal were more likely to have visited a dentist for a specific problem (41%) compared to adults with private insurance (24%).	Yes
	Dental visit during pregnancy	The overall percent of women who saw a dentist during their recent pregnancy (47%) was similar to California (43%). However, significant disparities exist for women with Medi-Cal (39%), women below the poverty level (38%), and women with a high school education or less (37%).	Yes
	Scaling and root planing	Most adults who had received a recommendation for scaling and root planing (71%) received the service.	No

	Oral cancer screening	One-third of adults received a recommendation for an oral cancer screening. Tobacco users were no more likely to receive a recommendation for a screening (32%) compared to non-tobacco users (36%).	Yes
	Utilization of sealants	Fifty-nine percent of children between ages six and 14 had received sealants.	No
	HPV vaccine	Among 17 Community Survey respondents with children between ages 13-17, 71 percent had received an HPV vaccine, similar to the statewide vaccination rate. Twenty-six percent of providers indicated discussing the HPV vaccine with their patients.	No
	Barriers and attitudes about oral health care	Key barriers to dental care identified for both children and adults included cost, time required to see a dentist, competing priorities, negative prior experiences, and a perceived lack of dental providers-particularly providers who accept Denti-Cal—in the county.	Yes
Oral health behaviors	Dental care and hygiene	Approximately half of adults (57%) and children (51%) brushed at the recommended frequency of twice per day. Less than half of adults flossed (40%) or used fluoride toothpaste (48%) at the recommended frequency of twice per day, similar to children (36% flossing; 42% fluoride toothpaste). Adults and children whose primary household language was English were less likely to brush (both 48%) than their peers (both 62%). Similar differences were found for adult flossing and child fluoride toothpaste use.	Yes
	Dietary behaviors	Children with Denti-Cal were more likely than children with private insurance (46% vs. 31%) to drink juice and eat candy (55% vs. 37%) more than four times per week. Children from primarily English speaking (44%) and bilingual English and Spanish speaking (43%) households were more likely to report eating fruits and vegetables daily than their peers (24%).	Yes
	Smoking and tobacco use	More adults use tobacco products in Butte County (17%) compared to those who smoke in California (12%), with the majority (75%) having used tobacco for eight years or more.	Yes
	Child sleeping with bottle	Ten percent of Butte County Community Survey respondents with children under age six reported that their child had slept with a bottle in their mouth that contained milk, formula, juice, or other sugary beverages during the past week, compared	Yes

		to 5 percent of Children in California.	
Oral health knowledge	General knowledge of oral health best practices	Adults are more uncertain about the use of fluoride toothpaste (6%) and drinking fluoridated water (27%) than other oral hygiene practices. Survey and focus group findings suggest mixed messages related to the benefits of fluoride.	Yes
	Caregivers' knowledge of child behaviors	Caregivers' knowledge about children's oral health is high, with room for improvement for some groups around the importance of annual dental visits, the importance of baby teeth, or having a toothbrush be the last thing in a child's mouth at night.	Yes
	Receipt of oral health information	Almost half (45%) of respondents indicated they receive information on their child's oral health from the dentist's office in the past 12 months.	Yes
Environmental factors	Access to fresh fruits and vegetables	A high proportion of Butte County residents report always finding fresh fruits and vegetables in their neighborhood (77% compared to 74% in California).	No
	Exposure to fluoridated water	Fully fluoridated water is currently only available in Gridley and parts of Oroville.	Yes
	Availability of dental providers	The ratio of population to providers in Butte County (1,400:1) is higher than in California (1,210:1), and focus group participants noted a lack of Denti-Cal providers in the county.	Yes
	Availability of oral health information	Less than five percent of caregivers report receiving oral health information through public health campaigns outside of the dentist's office in the past 12 months.	Yes



Appendix D: Prioritization Criteria and Scores

Prioritization criteria

In July 2018, the Oral Health Coalition amended, approved, and weighted criteria drafted by BCPHD and Harder+Company to identify the most pressing oral health needs in the county. To establish criterion weights, Coalition members individually rated the relative importance of each criterion on a scale of 1-5, with 1 representing low importance and 5 representing high importance. Ratings for each criterion were then averaged to derive the criteria weights (see Exhibit 14 below). Criteria weights were created to enable for a prioritization process that allowed Coalition members to provide input on what criteria seemed most important to measure given their knowledge of the Butte County population.

Exhibit 14. Oral health prioritization criteria

Criteria	Definition	Criteria Weight
Size	A large number or percentage of people in the community are impacted by the issue.	2.1
Severity/Degree of Impact	The health need has serious consequences.	3.7
Disparities	The health need disproportionately impacts specific Geographic, age, or racial/ ethnic populations.	3.0
Prevention	The health need presents an opportunity to intervene through prevention	4.1
Feasibility	Sufficient local resources and community support/ political will are available to help ensure successful outcomes	4.2
Leverage	A solution could address multiple health issues or challenges.	3.0

Prioritization process

In August 2018, Harder+Company presented findings from the Oral Health CHA, organized around the six original oral health topics: oral health status, access to care, utilization of care, oral health behaviors, oral health knowledge and beliefs, and environmental factors. Harder+Company led Coalition members through a review of key findings related to each oral health topic, and asked members to score each topic based on each of the six prioritization criteria. Members had an opportunity to discuss CHA findings in small groups before providing individual scores.

Harder+Company used several steps to calculate the weighted scores for each oral health topic:

1. **Averaged criterion scores.** Within each topic, the average scores for each criterion were calculated (e.g., oral health status score for severity/degree of impact; oral health status score for disparities).
2. **Weighted criterion scores.** Averaged criterion scores were multiplied by the criteria weights (defined above in Exhibit 14) within each topic.
3. **Weighted scores for each oral health topic.** Weighted criterion scores were added within each topic to create the weighted oral health topic score.

The weighted scores indicated the following prioritization of oral health topics: oral health behaviors; oral health status; oral health knowledge and beliefs; utilization of care; environmental factors; and access to care (see Exhibit 15).

Exhibit 15. Oral health topic, definitions, and related indicators

Oral Health Topic	Definition	Related Indicators	Weighted Score
Oral health behaviors	Individual behaviors related to oral hygiene, diet, and smoking	Frequency of brushing and flossing; use of fluoride toothpaste; consumption of foods that support oral health; child and infant feeding behaviors; smoking behaviors	79.4
Oral health status	A large number or percentage of people in the community are impacted by the issue.	Perceived oral health status; mouth and tooth pain or discomfort; missed days of work or school due to pain; untreated tooth decay; oral cancer rates	77.5
Oral health knowledge and beliefs	Knowledge of oral health best practices, as well as beliefs about oral health and dental care	Adult knowledge of oral health best practices (including opinion on fluoride); adult knowledge of children's oral health best practices; receipt of oral health information	74.1
Utilization of care	Use of dental services to prevent or treat dental disease and other tooth and mouth conditions	Annual preventive visits; reasons for most recent visit; utilization of emergency room or urgent care for oral health problems; barriers to care; utilization of specific services such as oral cancer screenings, scaling and root planning, dental visits during pregnancy, dental sealants received, and the HPV vaccine in children/adolescents	73.1
Environmental factors	Neighborhood and county factors—including policy decisions—that contribute to oral health	Access to fresh fruits and vegetables; exposure to fluoridated water; access to oral health information; availability of dental providers	72.6
Access to care	The ability to access oral health and dental health care services	Dental insurance coverage; establishment of a usual source of care	56.3

During the process of developing the goals, BCPHD and Harder+Company noted that strategies to improve any of the prioritized oral health needs would ultimately result in the improvement of oral health status. As a result, rather than considering oral health status a prioritized health need, it became the overarching purpose of the Butte County Community Oral Health Improvement Plan. In addition, access to care and environmental factors were merged into a single oral health topic, community environment, as both reflect aspects of available resources in the community.

The final list of prioritized oral health needs for the Butte County CHIP were the following:

1. Oral health behaviors
2. Oral health knowledge and beliefs
3. Utilization of care
4. Community environment



Appendix E: Summary of CHIP Goals, Objectives, and Strategies

The table below summarizes the goals, objectives, and strategies that support the Butte County Oral Health CHIP's purpose of improving the oral health status of Butte County residents.

Butte County Oral Health CHIP Purpose: Improve the oral health status of Butte County residents			
Goal	Objectives	Performance Measures	Strategies
1. Improve oral health and prevent tooth decay by promoting healthy habits	1.1 Reduce the proportion of children with dental caries 1.2 Increase the proportion of children and adults who engage in oral hygiene habits that prevent oral health diseases 1.3 Increase the proportion of children who engage in healthy eating habits that promote good oral health 1.4 Reduce the number of Butte County residents who report using tobacco	1.1 By 2022, reduce the percent of kindergarteners with untreated dental decay from 21% to 19% in Chico Unified Schools, and from 30% to 27 % in Northern Valley Indian Health. 1.2a By 2022, increase the percent of children who brush at the recommended frequency of twice per day from 51% to 56%. 1.2b By 2022, increase the percent of adults who brush at the recommended frequency of twice per day from 62% to 68% for adults with private insurance, 63% to 69% for adults with no insurance, and 48% to 58% for adults with Denti-Cal. 1.3 By 2022, increase the percent of children who eat fruits and vegetables daily from 44% to 48% for children whose primary language is English, and from 24% to 29% for children whose primary language is not English.	<ul style="list-style-type: none"> • <i>Train providers on oral health best practices</i> <ul style="list-style-type: none"> ○ Support continuing education for pediatricians on oral health best practices ○ Integrate oral health information into existing training series, such as Butte County's Child Health and Disability Prevention (CHDP) Program training ○ Train child care providers on common oral health issues among young children, and how to engage families in conversations around their child's oral health ○ Educate students in Butte County-based medical training programs (such as nursing and medical assistant programs) on the connections between oral health and overall health • <i>Integrate hands-on oral health education into existing community services, agencies, and programs</i> <ul style="list-style-type: none"> ○ Partner with home visitation programs to provide dental case management to low-income families with young children ○ Partner with programs serving low-income families with young children to distribute toothbrush kits ○ Partner with programs to educate families with young children on the importance of healthy eating

Butte County Oral Health CHIP Purpose: Improve the oral health status of Butte County residents			
Goal	Objectives	Performance Measures	Strategies
			<p>habits to promote good oral health</p> <ul style="list-style-type: none"> • <i>Build provider capacity to offer tobacco cessation counseling</i> <ul style="list-style-type: none"> ○ Provide training and tools to dental offices/clinics and primary care providers to refer patients to tobacco cessation counseling ○ Provide training and tools to dental offices/clinics and primary care providers to implement tobacco cessation counseling ○ Incentivize dental providers and primary care providers to offer tobacco cessation counseling and other tobacco cessation aids to patients
2. Increase oral health knowledge through culturally-, linguistically-, and age-appropriate oral health education programming	<p>2.1 Increase access to oral health information</p> <p>2.2 Increase knowledge of oral health best practices for infants and young children</p> <p>2.3 Increase understanding of the benefits of fluoride for oral health</p>	<p>2.1 By 2022, increase the percent of parents and caregivers who report receiving any oral health information that applies to their child during the past 12 months from 84% to 92%.</p> <p>2.2 By 2022, increase the percent of caregivers who believe that a child should see the dentist for preventive visits from 90% to 99% among people whose primary language is English, from 74% to 89% among people whose primary language is Hmong, and from 59% to 71% among people whose primary language is Spanish.</p> <p>2.3 By 2022, increase the percentage of adult residents who believe that drinking fluoridated tap water is important from 45% to 50%.</p>	<ul style="list-style-type: none"> • <i>Support organizations to add oral health education to their existing programs</i> <ul style="list-style-type: none"> ○ Provide organizations with resources (such as curricula, materials, presentations, trainings, or workshops) that educate their clients on oral health hygiene and best practices ○ Work with community members to identify and/or adapt oral health education curricula or messages to meet the needs of various communities, including those that are low-income, speak languages other than English, and have distinct medical or behavioral needs ○ Distribute oral health books (such as "Potter the Otter" and "Brush Brush Brush") to families with young children ○ Conduct educational outreach at health fairs and other community events • <i>Provide culturally-, linguistically-, and age-appropriate oral health education through existing community services, agencies, and programs</i> <ul style="list-style-type: none"> ○ Add oral health education workshops and lessons to

Butte County Oral Health CHIP Purpose: Improve the oral health status of Butte County residents				
Goal	Objectives	Performance Measures	Strategies	
			<p>existing programs for clients at higher risk of poor oral health outcomes (such as residents who are low-income, have no insurance or Denti-Cal, or who have special medical or behavioral health needs)</p> <ul style="list-style-type: none"> ○ Add age-appropriate oral health education to programs and settings serving young children and their families, such as preschools, child care, WIC, and programs serving pregnant women. ○ Add age-appropriate oral health education to health curriculums in elementary, junior high, and high schools (with grades K-6 as a priority) 	
3.	<p>Develop and promote resources that improve the ability of low-income Butte County residents to utilize preventive dental care throughout the lifespan</p>	<p>3.1 Increase utilization of preventive dental visits among children</p> <p>3.2 Increase utilization of preventive dental visits among adults with Denti-Cal</p> <p>3.3 Increase the percent of children who see a dentist by age one or when the first tooth appears</p> <p>3.4 Increase utilization of dental sealants among children between ages six and nine years old</p> <p>3.5 Increase the percent of women who see a dentist during pregnancy</p> <p>3.6 Increase utilization of oral cancer screenings among tobacco users</p>	<p>3.1 By 2022, increase the percent of children who have had a preventive visit in the past year from 79% to 83%.</p> <p>3.2 By 2022, increase the percent of adults with Denti-Cal who had a preventive visit from 53% to 58%.</p> <p>3.3 By 2022, increase the percent of children who have had a dental visit by age 1 from 42% to 46%.</p> <p>3.4 By 2022, increase the percent of children between 6 and 9 years old with sealants from 59% to 65%.</p> <p>3.5 By 2022, increase the percent of women who saw a dentist during their most recent pregnancy by income level where those between 0-100% FPL increase from 38% to 46%, 100-200% FPL increase from 49% to 59%, and 200-300% FPL increase from 64% to 70%.</p> <p>3.6 By 2022, increase percent of tobacco users who receive a recommendation for an oral cancer screening from 32% to 35%.</p>	<ul style="list-style-type: none"> ● <i>Increase the accessibility of information on providers serving Denti-Cal patients</i> <ul style="list-style-type: none"> ○ Share and promote Child Health and Disability Prevention Program (CHDP) list of Butte County Denti-Cal providers through BCPHD and other community agency websites ○ Regularly update Denti-Cal provider lists to reflect providers who are accepting new patients ● <i>Implement and expand programs that bring dental services into the community</i> <ul style="list-style-type: none"> ○ Expand the geographic reach and frequency of mobile dental clinics, including clinics that will specifically serve children and adults with special needs ○ Implement Virtual Dental Home (VDH) model to bring preventive and restorative dental care to community locations ○ Conduct oral health screenings in a school setting, with a particular focus on dental assessments for child care centers, kindergarten and 3rd grade classrooms in South County ○ Offer fluoride varnish and/or sealant application in

Butte County Oral Health CHIP Purpose: Improve the oral health status of Butte County residents			
Goal	Objectives	Performance Measures	Strategies
			<p>schools, including kindergarten and 3rd grade classrooms</p> <ul style="list-style-type: none"> • <i>Improve the ability of dentists to serve key populations who have experienced challenges utilizing dental care</i> <ul style="list-style-type: none"> ○ Engage dental providers and organizations serving key populations who have experienced challenges utilizing dental care—such as Denti-Cal recipients and special needs populations—to identify strategies that can address gaps in service ○ Identify and/or develop resources (including trainings) for dental providers to improve services to key populations • <i>Integrate oral health referrals into primary care settings</i> <ul style="list-style-type: none"> ○ Partner with OBGYN offices and clinics to provide low-income pregnant women with oral health information and referrals to dentists ○ Partner with primary care providers to refer tobacco users to dentists for oral cancer screenings ○ Establish referral processes between primary care providers/hospital emergency departments and dentists to support high risk patients (including diabetic patients) to receive care ○ Establish referral networks between primary care providers and dentists to support low-income adults and children to establish dental homes/usual sources of care • <i>Educate community members on preventive dental visits</i> <ul style="list-style-type: none"> ○ Integrate information on preventive services (including regular dental cleanings and exams, as well as dental sealants for children) into oral health media campaign ○ Ensure information on benefits of dental sealants

Butte County Oral Health CHIP Purpose: Improve the oral health status of Butte County residents			
Goal	Objectives	Performance Measures	Strategies
			<p>for children is easily accessible to parents with children between 6 and 9 years old</p> <ul style="list-style-type: none"> ○ Partner with local organizations to amplify Smile California (media campaign to increase awareness of Denti-Cal benefits for Medi-Cal beneficiaries) ○ Integrate education on navigating Denti-Cal services into existing programs for adults and families who are Medi-Cal beneficiaries
4. Collaborate with organizations to strengthen the community environment's overall ability to support good oral health outcomes	<p>4.1 Increase the number of dentists who accept Denti-Cal in Butte County</p> <p>4.2 Increase the number of public water agencies with fully fluoridated water</p> <p>4.3 Increase the number of organizations that integrate oral health messages into their work with Butte County residents</p>	<p>4.1 By 2022, increase the number of dentists/dental clinics who accept Denti-Cal from 11 to 16.</p> <p>4.2 By 2022, increase the number of public water agencies with fully fluoridated water from 2 to 3.</p> <p>4.3 By 2022, increase the number of adult residents who report receiving oral health information outside of the dentist's office in the past 12 months from 5% to 20%.</p>	<ul style="list-style-type: none"> • <i>Increase the number of Denti-Cal providers serving Butte County residents</i> <ul style="list-style-type: none"> ○ Connect dental providers to trainings and technical assistance that support them to become (and remain) Denti-Cal providers ○ Explore opportunities for Butte County Public Health Department to include dental services at public clinics ○ Apply for funds to open school-based health centers that include oral health components ○ Partner with local colleges to increase interest in dental careers • <i>Increase community interest in fluoridated water</i> <ul style="list-style-type: none"> ○ Meet with local water districts/agencies to discuss possibility of community water fluoridation ○ Create opportunities (such as a forum) for communities and agencies to discuss benefits and concerns related to fluoridated water • <i>Launch multi-platform oral health media campaign</i> <ul style="list-style-type: none"> ○ With community-buy-in, develop and test oral health messages that are culturally- and linguistically-appropriate ○ With community buy-in, develop and test oral health messages that are age-appropriate and

Butte County Oral Health CHIP Purpose: Improve the oral health status of Butte County residents			
Goal	Objectives	Performance Measures	Strategies
			<p>address care across the lifespan</p> <ul style="list-style-type: none"> ○ Launch oral health media campaign through social media, traditional media, and community outreach that includes information on healthy nutrition, oral hygiene habits, the benefits of fluoride, and tobacco use ○ Partner with local agencies to amplify oral health media campaign ● <i>Identify and pursue policies, funding, and best practices that support good oral health</i> <ul style="list-style-type: none"> ○ Continue facilitation of the Oral Health Coalition in order to share best practices across agencies ○ Encourage community participation in decision-making about external funding opportunities ○ Identify policy strategies that limit exposure to products that increase risks for poor oral health outcomes, such as sweetened beverages, flavored tobacco, and e-cigarettes ○ Identify additional funding streams for oral health education and/or service provision



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