



# napa county comprehensive community health assessment

PREPARED BY



Moore Iacofano Goltzman, Inc.

*in collaboration with*



Harder+Company

*and*

Live Healthy Napa County



A Tradition of Stewardship  
A Commitment to Service





# table of contents

## CHAPTER 1: INTRODUCTION

Overview	1
Napa County Community Profile:	5

## CHAPTER 2: ASSESSMENT #1: COMMUNITY THEMES, STRENGTHS & FORCES OF CHANGE

Purpose	9
Summary of Findings Across Methods	10
Detailed Findings: Forces of Change Brainstorming Session	11
Detailed Findings: Community Survey	12
Detailed Findings: Outreach Workshops	22
Detailed Findings: Stakeholder Interviews	34

## CHAPTER 3: ASSESSMENT #2: LOCAL PUBLIC HEALTH SYSTEM

Purpose	37
NPHPSP Assessment Results	38
NPHPSP Assessment Findings	40
Next Steps	48

## CHAPTER 4: ASSESSMENT #3: COMMUNITY HEALTH STATUS

Methods and Limitations	49
Socioeconomic Characteristics	50
Quality of Life	56
Social and Mental Health	57
Maternal, Child, and Adolescent Health	72
Healthcare and Preventative Services	76
Behavioral Risk Factors	79
Illness and Injury	85
Causes of Death	97

## CHAPTER 5: CONCLUSION

Summary of Assessment Findings	103
Conclusion	110



# introduction

## 1. OVERVIEW

Typically when people think of health, they think of it in relation to disease or illness, but health is part of every aspect of our daily lives. The World Health Organization defines health as a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity. This definition indicates that improving health necessitates moving beyond addressing just illness to consider a range of factors that have an influence on health.

### Live Healthy Napa County

Napa County community members understand that improving the health of individuals, families, and communities requires a comprehensive understanding of health, one that considers all of the conditions in which people are born, grow, live, work, and age, including the health system. By addressing all of these conditions, sometimes called the "social determinants of health," people and communities can be healthier and enjoy an enhanced quality of life.

The Live Healthy Napa County (LHNC) collaborative was created from the notion that improving overall health requires a shared responsibility among diverse stakeholders. LHNC is a collaboration whose intention is to promote and protect the health and wellbeing of every member of the community. LHNC is a public-private partnership bringing together, among others, representatives not just from health and healthcare organizations, but also from business, public safety, education, government and the general public to develop a shared understanding and vision of a healthier Napa County. To guide the work, LHNC crafted a vision, core values, and guiding principles.

#### LHNC Vision

*In Napa County, community members will take responsibility for improving and sustaining health through shared leadership, strategic planning, meaningful community engagement, and coordinated action.*

#### EXAMPLES OF FACTORS THAT IMPACT HEALTH

- Economic development
- Job opportunities
- Child and youth development
- Community infrastructure (buildings, streets, sidewalks)
- Healthy schools
- Healthy worksites
- Healthy systems (transportation, food, housing)
- Access to prevention-focused medical and social services
- Health status awareness and self-empowerment
- Educational attainment

#### Chapter Contents:

- 1. Overview .....1
- 2. Napa County Community Profile .....5

### LHNC CORE VALUES

- **Community** — Create a truly inclusive, community-driven process that prioritizes the strengths, needs and concerns of Napa County residents, workers and visitors.
- **Commitment** — Build long-term support and investment among community partners to ensure sustainability of a collaborative public health system.
- **Collaboration** — Foster partnerships and coordinate existing plans to meet the evolving needs of the community and to avoid duplication of services.
- **Equity** — Value diverse cultures, concepts and beliefs while continually striving to achieve health equity for the entire community.
- **Visibility** — Raise awareness of public health within the community and deepen the public's understanding of the social determinants of health.
- **Action** — Take meaningful action to expand and improve health and wellbeing in all of Napa County.

### LHNC GUIDING PRINCIPLES

- **Systems Thinking** — Promote an appreciation for the dynamic interrelationship of all the components of the local public health system required to develop a vision of a healthy community.
- **Dialogue** — Ensure respect for diverse voices and perspectives during the collaborative process.
- **Shared Vision** — Form the foundation for building a healthy future.
- **Data** — Inform each step of the process.
- **Partnerships and Collaboration** — Optimize performance through shared resources and responsibility.
- **Strategic Thinking** — Foster a proactive response to the issues and opportunities facing the system.
- **Celebration of Successes** — Ensure that contributions are recognized and sustain excitement for the process.

## Community Health Assessment

In 2012, LHNC embarked on a collaborative process to conduct a comprehensive Community Health Assessment that aims to establish the foundation for sustainable improvements in health in Napa County. As part of the comprehensive assessment LHNC conducted three community assessments.

- **The Community Themes, Strengths, and Forces of Change Assessment** provides a deep understanding of the issues that local residents, businesses, and neighborhood groups feel are important to the health of their neighborhoods and communities. It also identifies forces such as legislation, technology and other impending changes that will affect Napa County's health.
- **A Local Public Health System Assessment** measures the capacity and capability of the local public health system.
- **The Community Health Status Assessment** uses data to illuminate the health status of Napa County and its residents, helping to answer

questions including: *How healthy are Napa residents? What does the health status of Napa County look like?*

The methodology for each of the assessments will be detailed in their respective chapters.

### Planning Process

To complete the three part assessment, LHNC embarked on a six-month collaborative process that involved three planning groups, each composed of diverse stakeholders: the Steering Committee, the LHNC Core Support Team, and the Subcommittees. The Steering Committee represented a cross section of stakeholders in Napa County. The Steering Committee's primary role was to oversee all aspects of the planning design, provide expertise, and review findings. The LHNC Core Support Team included representatives from Kaiser Permanente, Napa County Health & Human Services Agency, Napa Valley Coalition of Nonprofit Agencies, St. Joseph Health, Queen of the Valley (SJH-QOV), and St. Helena Hospital.

**COMMUNITY HEALTH ASSESSMENT PLANNING STRUCTURE**

**Steering Committee**

- Oversees project approach, design, and resources
- Provides expertise and reviews findings

**Core Support Team**

- Manages and monitors communications and project progress
- Reviews documents and makes recommendations to Steering Committee

**Subcommittees**

- Provides input on existing conditions, community needs, and potential solutions to inform the Community Health Assessment and Community Health Improvement Plan
- Community stakeholders are also part of the Steering Committee

**STEERING COMMITTEE COMPOSITION**

*Leaders and representatives from organizations across the County:*

- |  |  |  |
|--|--|--|
| • American Canyon Family Resource Center                                 | • Napa Chamber of Commerce   | • Napa Valley Unified School District              |
| • Angwin Community Council   | • Napa County Agriculture; Planning, Building, & Environmental Services; Housing and Community Development; Health and Human Services Agency; Sheriff's Office | • Napa Valley Vintners                             |
| • Area Agency on Aging   | • Napa County Farm Bureau  | • On the Move                                      |
| • Calistoga Family Center  | • Napa County Office of Education  | • ParentsCAN                                       |
| • Calistoga Institute  | • Napa County Transportation and Planning Agency   | • Puertas Abiertas Community Resource Center       |
| • Cities of American Canyon, Napa, and St. Helena and Town of Yountville | • Napa Emergency Women's Services (NEWS)   | • Somos Napa/We Are Napa                           |
| • Community Action Napa Valley (CANV)                                    | • Napa Learns  | • St. Helena Family Center                         |
| • Community Health Clinic Ole  | • Napa Valley College  | • St. John the Baptist Catholic Church             |
| • Community members  |  | • St. Joseph Health, Queen of the Valley (SJH-QOV) |
| • Cope Family Center   |  |  |

The Core Support Team's role was to monitor the planning process and provide recommendations to the Steering Committee. The Subcommittees included a broad range of community stakeholders, some of whom were also Steering

Committee members, who provided input on each section of the assessment. Each subcommittee was responsible for providing recommendations to the Steering Committee.

**Assessment Team**

The Community Health Assessment is the result of a collaborative effort by the partnership of organizations that make up the Live Healthy Napa County Core Support Team from Kaiser Foundation

Hospital-Vallejo, Napa County Health & Human Services Agency, Napa Valley Coalition of Nonprofit Agencies, St. Helena Hospital and St. Joseph's Health-Queen of the Valley. To support the Community Health Assessment process, the Core Support Team worked with two outside planning firms. A description of each organization follows.

### **MIG**

Since it was founded in 1982, MIG has focused on planning, designing and sustaining environments that support human development. MIG embraces inclusivity and encourages community and stakeholder interaction in all of their projects. For each endeavor—in planning, design, management, communications or technology—MIG's approach is strategic, context-driven and holistic, addressing social, political, economic and physical factors to ensure that clients achieve the results they want.

### **HARDER+COMPANY COMMUNITY RESEARCH**

Harder+Company Community Research is a comprehensive social research and planning firm with offices in San Francisco,

Davis, San Diego, and Los Angeles, California. Harder+Company's mission is to help clients achieve social impact through quality research, strategy, and organizational development services. Since 1986, Harder+Company has assisted foundations, government agencies, and nonprofits throughout California and the country in using good information to make good decisions for their future. Harder+Company's success rests on providing services that contribute to positive social impact in the lives of vulnerable people and communities.

### **Purpose of the Comprehensive Community Health Assessment**

The **Community Health Assessment (CHA)** is intended to be a community resource that is used in a myriad of ways. This report begins by outlining specific needs and challenges in Napa County based on the three assessments, and provides an overview of resources and strengths as well. The data presented throughout the assessment reflect an understanding that "health" extends beyond the medical setting; thus to improve health and wellbeing the community strategies must consider the

social, economic, behavioral, and structural factors that impact health.

The next phase of this process is to develop a **Community Health Improvement Plan (CHIP)**, which will continue to engage a broad range of stakeholders in the development of concrete strategies that will address the issues identified by the Community Health Assessment.

### **Organization of this Report**

The Community Health Assessment is organized into five chapters: 1) Introduction, 2) Community Themes, Strengths and Forces of Change Assessment, 3) Local Public Health System Assessment, 4) Community Health Status Assessment, and 5) Conclusion. The Introduction presents the CHA background and provides an overview of the Napa County population. Chapters 2 through 4 will highlight the key findings from each assessment. Chapter 5 summarizes the key highlights from all three assessments and provides crosscutting themes to consider for the Community Health Improvement Plan (CHIP).

## 2. NAPA COUNTY COMMUNITY PROFILE: WHAT DOES NAPA LOOK LIKE NOW?

In order to fully appreciate the findings of the comprehensive Community Health Assessment, it is important to first understand the basics about Napa County. The purpose of this section is to provide a "snapshot" of the County; key socioeconomic characteristics that impact health in Napa County will be discussed in further detail in the Community Health Status Assessment chapter.

### County Overview

- Napa County encompasses approximately 748 square miles in the North Bay region of California.
- The 2010 Census reported Napa County's population as 136,484.

- Between 2006 and 2010, the median household income in Napa County was \$67,389, compared to the California median household income of \$60,883.

### Population

Napa County's population estimates for 2000 and 2010 are presented in the table below. Napa County experienced a 9.8% growth in population during this period, while California's population increased by 10.0%.

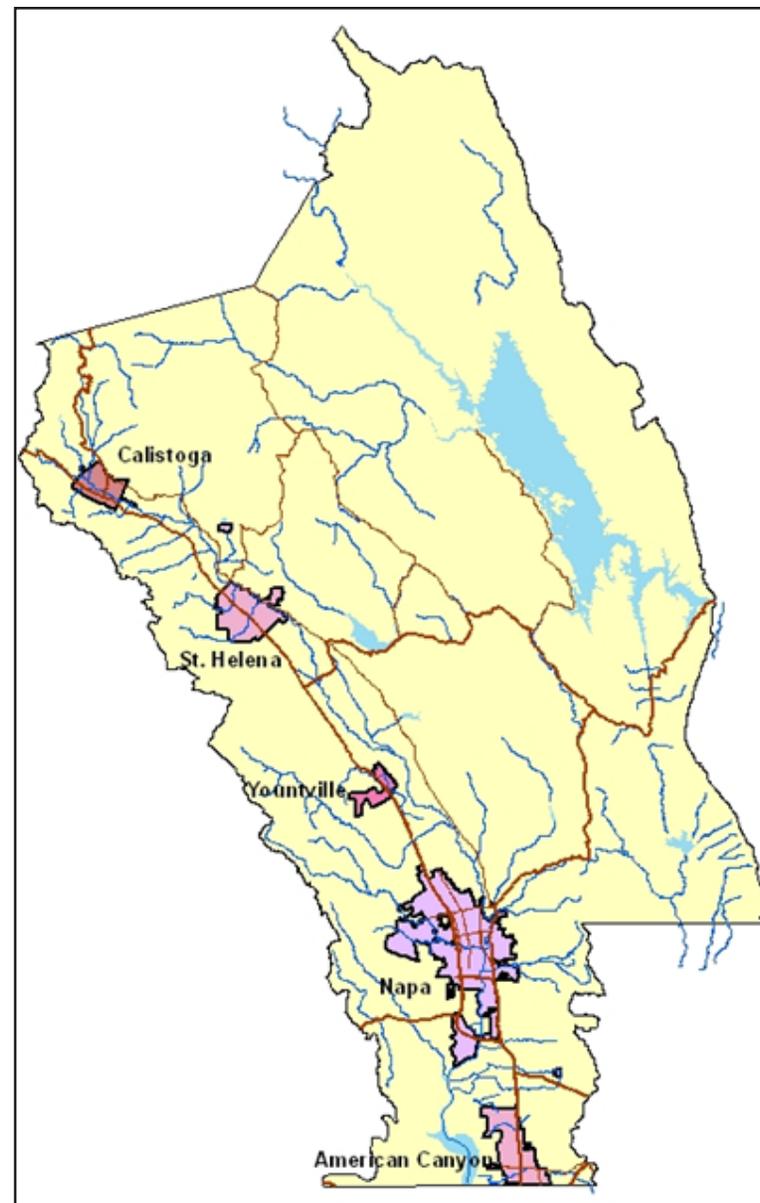
### Age

A comparison of counts by age group in Napa County between the 2000 and 2010 Census (Figure 1-2) indicates that while the total number of people in each age group increased over the 10-year period, only teens and youth age 15 to 24 years and adults age 25

FIGURE 1-1: POPULATION OF NAPA COUNTY AND CALIFORNIA

	2000	2010	% of change
<b>Napa County</b>	124,279	136,484	9.8
<b>California</b>	33,871,648	37,253,956	10.0

Source: U.S. Census Bureau, 2000 and 2010



Above: Map of Napa County

FIGURE 1-2: AGE DISTRIBUTION IN NAPA COUNTY, 2000 AND 2010

Age Group	Napa County, 2000		Napa County, 2010		Trend, 2000-2010
	Number	Percent	Number	Percent	
Total Population	124,279		136,484		↑
Young children (0-4)	7,563	6.1%	8,131	6.0%	↓
Children (5-14)	17,147	13.8%	17,616	12.9%	↓
Teens and Youth (15-24)	15,798	12.7%	17,762	13.0%	↑
Adults (25-64)	64,685	52.1%	72,381	53.0%	↑
Older adults (65+)	19,086	15.4%	20,594	15.1%	↓
Older adults (85+)	2,926	2.4%	3,094	2.3%	↓

Source: U.S. Census Bureau, 2000 and 2010

FIGURE 1-3: POPULATION BY RACE AND ETHNICITY, NAPA COUNTY AND CALIFORNIA, 2010

Population by race and ethnicity	Napa		CA
	Number	Percent	Percent
Non-Hispanic white	76,967	56.4%	40.1%
Hispanic/Latino	44,010	32.2%	37.6%
Asian	9,223	6.8%	13.0%
Two or more races	5,580	4.1%	4.9%
African American/Black	2,668	2.0%	6.2%
American Indian/Alaska Native (AIAN)	1,058	0.8%	1.0%
Native Hawaiian and Other Pacific Islander (NHOPI)	372	0.3%	0.4%

Source: U.S. Census Bureau, 2010

to 64 years increased as a percentage of the total population. Overall the population distribution is similar to that of California (data not shown), with Napa

County having a slightly higher percentage of people age 65 and older (15%) compared to the statewide average (11%).

### Race and Ethnicity

Based on the 2010 Census data, 56.4% of Napa County's population is non-Hispanic white, which is higher than the state (40.1%). Thirty-two percent of Napa County's population is Hispanic/Latino, which is slightly lower than the state (37.6%). Nearly seven percent of the population is Asian, which is also lower than the state (13.0%). Similar to California, multiracial/ethnic populations represent approximately four percent of Napa County's population. African American, American Indian/Alaska Native (AIAN), and Native Hawaiian and other Pacific Islander (NHOPI) represent approximately three percent of Napa County's population.

Overall, between the 2000 and 2010 Census, there was an increase among all racial and ethnic groups except among non-Hispanic white and American Indian/Alaska Native populations. In total numbers, the largest population increase in Napa County was among the Hispanic/Latino population, which increased from 29,416 people in 2000 to 44,010 people in 2010. However, the Asian population in Napa County more than doubled and the African American/Black population

FIGURE 1-4: POPULATION BY RACE AND ETHNICITY, NAPA COUNTY, 2000 AND 2010

Race/Ethnicity	Napa County, 2000		Napa County, 2010		Trend, 2000-2010
	Number	Percent	Number	Percent	
Total Population	124,279		136,484		↑
Non-Hispanic white	85,932	69.1%	76,967	56.4%	↓
Hispanic/Latino	29,416	23.7%	44,010	32.2%	↑
Asian	3,694	3.0%	9,223	6.8%	↑
Two or more races	4,606	3.7%	5,580	4.1%	↑
African American/Black	1,645	1.3%	2,668	2.0%	↑
American Indian/Alaska Native (AIAN)	1,045	0.8%	1,058	0.8%	↔
Native Hawaiian and Other Pacific Islander (NHOPI)	289	0.2%	372	0.3%	↑
<i>Source: U.S. Census Bureau, 2000 and 2010</i>					

increased by over 50% during this time period. The non-Hispanic white population decreased from 69.1% of the population in 2000 to 56.4% of the population in 2010. By 2030, the Hispanic/Latino population is projected to be 41.7% of the population (66,166 people) and the non-Hispanic white population is projected to be 44.9% (71,235 people).

### Household Characteristics

In Napa County, the average household size at the time of the 2010 Census was 2.64 people and the average family size was 3.21 people. According to the U.S. Census Bureau there are 49,754

FIGURE 1-5: HOUSING CHARACTERISTICS OF NAPA COUNTY RESIDENTS, 2010

	Number	Percent
Total households	49,754	100%
Family households (families)	32,567	65.5%
With own children under 18 years	15,277	30.7%
Husband-wife family	25,131	50.5%
With own children under 18 years	11,436	23.0%
Male householder, no wife present	2,189	4.4%
With own children under 18 years	906	1.8%
Female householder, no husband present	5,247	10.5%
With own children under 18 years	2,935	5.9%
Nonfamily households	17,187	34.5%
Householder living alone	13,002	26.1%
Households with individuals 65 years and over	6,305	12.7%
Average household size	2.64	--
Average family size	3.21	--
<i>Source: 2010 Census, table DP02</i>		

## chapter one

households in Napa County; of those 65.5% are family households and 34.5% are non-family households. Approximately 31% of households have children under 18 and nearly 13% have individuals who are age 65 and older.

# assessment #1: community themes, strengths & forces of change

## 1. PURPOSE

The Community Themes, Strengths and Forces of Change Assessment chapter is intended to provide a deep understanding of the issues that local residents, businesses, and neighborhood groups in Napa County feel are important to the health of their neighborhoods and communities.

### Community Themes and Strengths

The Community Themes and Strengths assessment provides key information on the following:

- What is important to our community?
- How is quality of life perceived in our community?
- What assets do we have that can be used to improve community health?

Data related to community themes and strengths was collected through a community survey, stakeholder interviews, and a series of community workshops.

### Forces of Change

The Forces of Change analysis provides a community response to the following questions:

- What are the political, cultural, environmental, and social factors that affect health in Napa County, positively and negatively?
- What are some specific challenges that LHNC faces in achieving health for all in Napa County?
- How can these challenges be addressed?

Data related to the forces of change were collected through a brainstorming session with LHNC Steering Committee members and other interested stakeholders.

Together, these data provide a comprehensive picture of the needs and challenges identified by a broad range of Napa County community members, as well as the opportunities and strengths that can be leveraged to improve the health and wellbeing of residents.

#### Chapter Contents:

1. Purpose .....	9
2. Summary of Findings Across Methods.....	10
3. Detailed Findings: Forces of Change Brainstorming Session ..	11
4. Detailed Findings: Community Survey.....	12
5. Detailed Findings: Outreach Workshops .....	22
6. Detailed Findings: Stakeholder Interviews .....	34

## 2. SUMMARY OF FINDINGS ACROSS METHODS

The following themes were identified across several of the methods used to collect qualitative and quantitative data for this chapter. While many important needs and assets surfaced in only one or two methods and are not included here, the assets, issues, and opportunities listed below came up repeatedly across the County.

### Napa County's Assets

- Low crime rates and safe neighborhoods in many County communities
- A clean environment
- Good schools in many areas of the County
- A strong economy with local jobs available in many areas of the County
- Strong community involvement
- Many existing partnerships between nonprofits and local government

### Challenges Facing Napa County

- Drug and alcohol abuse
- Lack of affordable housing and rising cost of living
- Wealth disparity/spread of poverty

- Limited access to services outside of cities
- Lack of public transportation system to connect people to services and unsafe roads and sidewalks
- Limited mental health services because of cost, location, or other barriers

### Trends Affecting Community Health in Napa County

- Aging population
- Shrinking HMO provider network
- Growing Latino population with many low-income households
- Decrease in state and federal funding for local schools, social services, and other community programs
- Increase in diagnosis of chronic conditions such as obesity and diabetes in young people
- Increased focus on preventative care rather than medical treatment

### Barriers to Health Care Access

- Cost of care
- Lack of insurance
- Lack of doctors accepting insurance, particularly for Kaiser patients, who are limited to accessing care on Kaiser's health care campuses

- Lack of available specialists
- Immigration status and language

### Needed Improvements

- Affordable housing and related services
- A drug, violence, and gang free environment
- Better access to health care for residents, including mental health services, emergency medical care, and late-night clinics
- More employment opportunities
- Strong schools and educational opportunities for children, youth, and families in all areas of the County
- Improved transportation options, including better roads and sidewalks and transit lines that connect families to hospitals and pharmacies
- Improved access to fresh, healthy foods, especially in schools
- Expanded opportunities for community dialogues and engagement
- Multilingual resources and services
- Funding

### 3. DETAILED FINDINGS: FORCES OF CHANGE BRAINSTORMING SESSION

The Forces of Change Brainstorming Session, held in November 2012 as part of the LHNC Steering Committee's second meeting, set out to identify the political, cultural, environmental, and social factors that affect health and quality of life in Napa County. It was designed to create a comprehensive but focused understanding of key factors.

#### Methodology

The LHNC Steering Committee identified the key forces of change affecting health and wellbeing in the County. Approximately 40 Steering Committee members and 20 audience members divided into small groups to generate responses to the questions noted above. Session facilitators recorded responses.

#### Brainstorming Results

##### OVERARCHING THEMES

- Marginalization of the Latino population within the Napa County community
- Need for focus on preventative health care rather than medical treatment
- Incorporation of mental health within the health care spectrum

- Need for community participation across all demographics and cultures
- Need for stronger communication and collaboration
- Need to define "health" in a way that represents all community members

##### SOCIOECONOMIC CONDITIONS

- Decline of middle class jobs and proliferation of low-paying jobs that are hurting the local economy
- Access to education and social mobility for local Spanish-speaking population
- Access to affordable housing
- Spread of poverty
- Distinct needs of a growing aging population
- Napa County's wealth disparity

##### COMMUNITY PARTICIPATION

- Too few opportunities for community conversations/need for dialogue between different community groups
- Role of strong partnerships between nonprofits, local government, and community
- Lack of Spanish-language agendas for City Council Meetings
- Need to update public on regular basis

##### HEALTH CARE ACCESS

- Lack of health care related resources
- Language and cultural barriers for non-English speakers
- Unique needs of transient residents
- Role of technology as a tool to remove barriers to health care
- Access to resources for smaller, isolated communities

##### MENTAL HEALTH

- Attention to/resources for mental health
- Access to mental health information
- Mental health stigma
- Incorporation of mental health within overall personal wellness and preventative care education
- Access to information about mental health in local schools

##### HEALTHY FOOD ACCESS

- Thriving local food movement
- Access to fresh foods for youth and seniors
- Nutritional education in schools and for general public
- Poor access to fresh foods in schools
- Community gardens movement

**Live Healthy Napa County  
Community Health Survey**

Please take a minute to complete the survey below. **The purpose of this survey is to get your opinions about community health issues and concerns in Napa County.** Live Healthy Napa County (LHNC) will use the results of this survey and other information to identify the most important problems that can be addressed through community action.

**Your opinion is important!** If you have already completed a survey, please don't fill out another one. Thank you and if you have any questions, please contact us (*see contact information on back*).

1. Where do you live? Please check **one** from the following list:
- |  |                                       |
|--|---------------------------------------|
| <input type="checkbox"/> American Canyon | <input type="checkbox"/> Oakville     |
| <input type="checkbox"/> Angwin          | <input type="checkbox"/> Rutherford   |
| <input type="checkbox"/> Calistoga       | <input type="checkbox"/> St. Helena   |
| <input type="checkbox"/> City of Napa    | <input type="checkbox"/> Yountville   |
| <input type="checkbox"/> Deer Park       | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lake Berryessa  |                                       |

2. Where do you work? Please check **one** from the following list:
- |  |  |
|--|--|
| <input type="checkbox"/> American Canyon | <input type="checkbox"/> St. Helena                  |
| <input type="checkbox"/> Angwin          | <input type="checkbox"/> Yountville                  |
| <input type="checkbox"/> Calistoga       | <input type="checkbox"/> Work at home                |
| <input type="checkbox"/> City of Napa    | <input type="checkbox"/> Not working                 |
| <input type="checkbox"/> Deer Park       | <input type="checkbox"/> Work outside of Napa County |
| <input type="checkbox"/> Lake Berryessa  | <input type="checkbox"/> Unincorporated Napa County  |
| <input type="checkbox"/> Oakville        | <input type="checkbox"/> Other: _____                |
| <input type="checkbox"/> Rutherford      |  |

*For the following questions, please circle the number to the left of your answer.*

3. In the list below, what do you think are the **three** most important factors that make this county a good place to live?

Circle **only 3** numbers of the 15 below:

- |                                |                                     |
|--------------------------------|-------------------------------------|
| 1 Community involvement        | 9 Good jobs and healthy economy     |
| 2 Low crime/safe neighborhoods | 10 Strong family life               |
| 3 Good schools                 | 11 Healthy behaviors and lifestyles |
| 4 Access to health care        | 12 Low death and disease rates      |
| 5 Parks and recreation         | 13 Religious or spiritual values    |
| 6 Clean environment            | 14 Arts and cultural events         |
| 7 Affordable housing           | 15 Other: _____                     |
| 8 Acceptance of diversity      |                                     |

Above: The LHNC survey was distributed in both English and Spanish at locations throughout the County.

**4. DETAILED FINDINGS:  
COMMUNITY SURVEY**

In addition to the Forces of Change brainstorming session, the LHNC Core Support Team worked with community partners across the County to conduct a survey of residents, service providers, and other stakeholders. The survey was a tool to gather data on how participants perceive health in Napa County, what the critical issues are, and how community members are currently accessing services.

**Methodology**

The community survey included a series of 28 multiple-choice questions that asked respondents to consider quality of life in Napa County, which health issues they felt were most pressing for County residents, how and where they accessed health care and social services, what barriers they faced in accessing services, how they viewed economic and housing conditions in the County, and what types of recreational and volunteer activities they were involved in.

The survey also collected optional demographic and geographic data on survey takers.

The survey was offered in both Spanish and English, and participants could choose to fill out an online or hard copy version. The online survey was offered using the SurveyMonkey online survey software. See Appendix A for the full text of the survey questions.

The online version of the survey was made available from October 17 through December 4, 2012. Completed hard copies of surveys were accepted by mail through December 10, 2012.

**Survey Response**

In all, 2,383 individuals completed surveys. Of these, 1,452 completed the survey online, while 931 completed the survey in hard copy. Approximately 356 respondents completed the survey in Spanish; the remaining respondents completed the survey in English.

### Limitations

The community survey had a number of limitations that should be kept in mind in interpreting and using the data collected. First, this survey was not intended to capture a representative sample of Napa County residents. Efforts were made to reach a geographically and demographically diverse group of participants, but in some cases this resulted in oversampling. Because some participants completed this survey as part of an outreach workshop led by a community organization, there were also some demographic clusters.

The community response to this survey was higher than the response to similar surveys conducted in the County in the past, but achieving a scientifically valid response rate would have been cost- and time-prohibitive for this planning process.

### Survey Results

#### DEMOGRAPHICS OF RESPONDENTS

A wide range of groups across Napa County participated in the survey. Following is a brief profile of those who took part in the survey.

#### Place of Residence

- Just over half (54.5%) of survey respondents lived in the City of Napa, while there were also a number of participants from St. Helena (11.0%), Calistoga (7.7%), American Canyon (5.8%), and Angwin (5.3%). (See Figure 2-1.)
- Communities across the unincorporated County also participated.
- Some survey respondents lived outside Napa County. Many lived in Sonoma or Solano Counties.

#### Place of Work

- Over 40% of respondents worked in the City of Napa, while 15% worked in the City of St. Helena. (See Figure 2-2.)
- Nearly 20% of respondents reported that they were either not working or retired.

#### Gender of Respondents

- Three quarters (75%) of survey respondents were female; a quarter (25%) were male. This represented a marked difference from the overall gender division of the County, where 50.1% of residents are female and 49.9% are male. (Data not shown.)

#### Age of Respondents

- Approximately 30% of survey takers were ages 40 to 54, while a

FIGURE 2-1: PLACE OF RESIDENCE

Where do you live?	
Answer Options	Response
City of Napa	54.5%
St. Helena	11.0%
Calistoga	7.7%
American Canyon	5.8%
Angwin	5.3%
Yountville	3.3%
Lake Berryessa	1.4%
Deer Park	1.0%
Rutherford	0.3%
Oakville	0.1%
Other	9.7%
	n=2368

FIGURE 2-2: PLACE OF WORK

Where do you work?	
Answer Options	Response
City of Napa	40.5%
Not working	15.3%
St. Helena	14.8%
Work at home	4.1%
Calistoga	3.6%
Work outside of Napa	2.8%
Rutherford	2.6%
Yountville	2.5%
Angwin	2.3%
American Canyon	1.8%
Deer Park	1.7%
Unincorporated Napa	1.6%
Oakville	0.6%
Lake Berryessa	0.3%
Other	7.7%
	n=2359

quarter (24.9%) were ages 26 to 39. Approximately 20% were ages 55 to 64, while 12% were between ages 65 and 80. About six percent of respondents were ages 18 to 25, four percent were under age 18, and four percent were over age 80. (See Figure 2-3.)

- Almost all of the youth participants were from the cities of Napa or American Canyon, where school or youth workshops were conducted. The majority of participants over age 64 were from the cities of Napa, St. Helena, or Calistoga, where several senior workshops were held.

- The percentage of survey participants who were 65 or older matches overall demographics of the County, where 15.4% of residents are 65 or older. However, children and youth under age 25 were underrepresented in the survey. Countywide, they comprise almost a third of the population, but represented only 10% of survey participants. This also meant that adults ages 25 to 64 were somewhat overrepresented in the survey.

**Household Income of Respondents**

- Approximately 15% of survey respondents reported a household income

of under \$20,000, while another 14% reported incomes of \$20,000 to \$34,999. Nine percent had a household income between \$35,000 and \$49,999, while 11% had an income of \$50,000 to \$64,999. Another nine percent reported an income between \$65,000 and \$79,999 and 15% had an income of \$80,000 to \$100,000. Just over a quarter (27.1%) of respondents had a household income over \$100,000. (See Figure 2-4.)

**Race/Ethnicity of Respondents**

- Two thirds (65.4%) of survey respondents reported identifying as White/

FIGURE 2-3: AGE OF RESPONDENTS

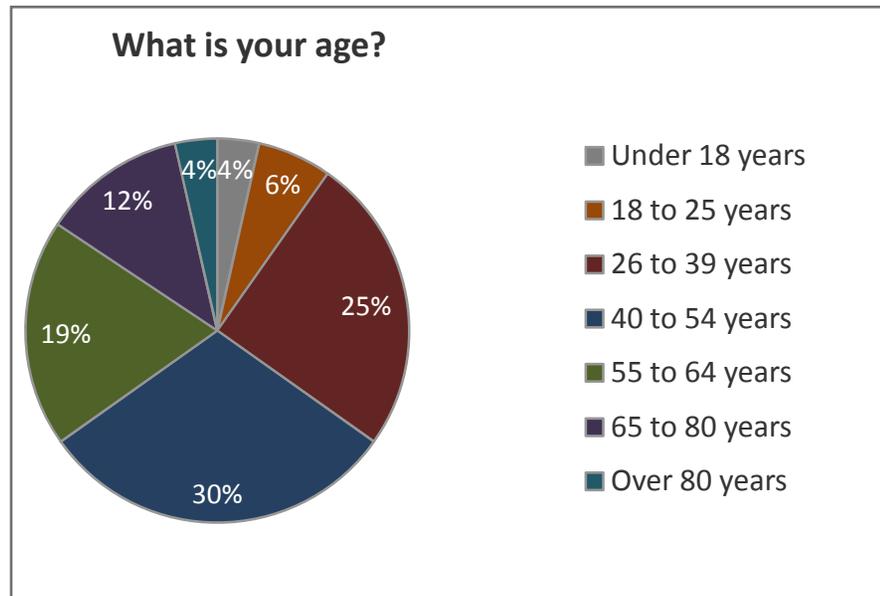
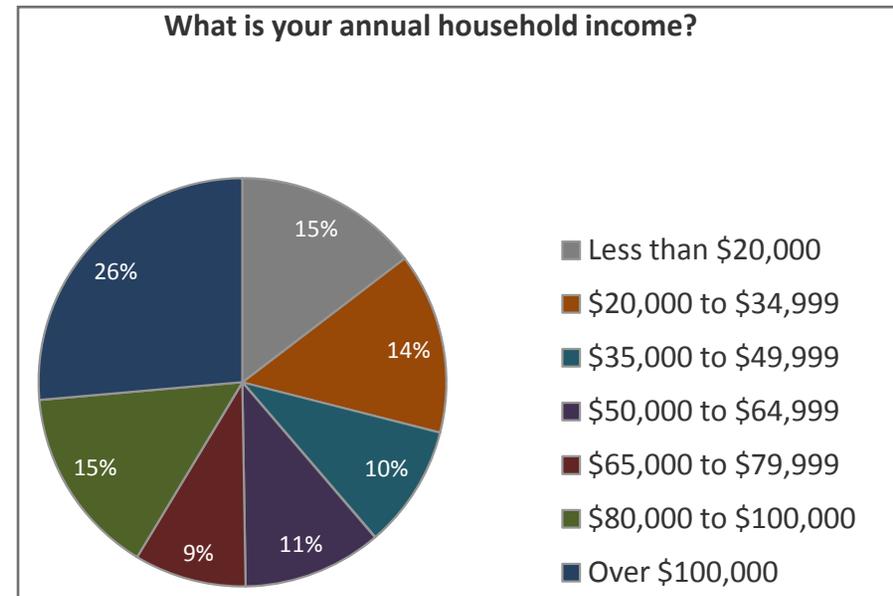


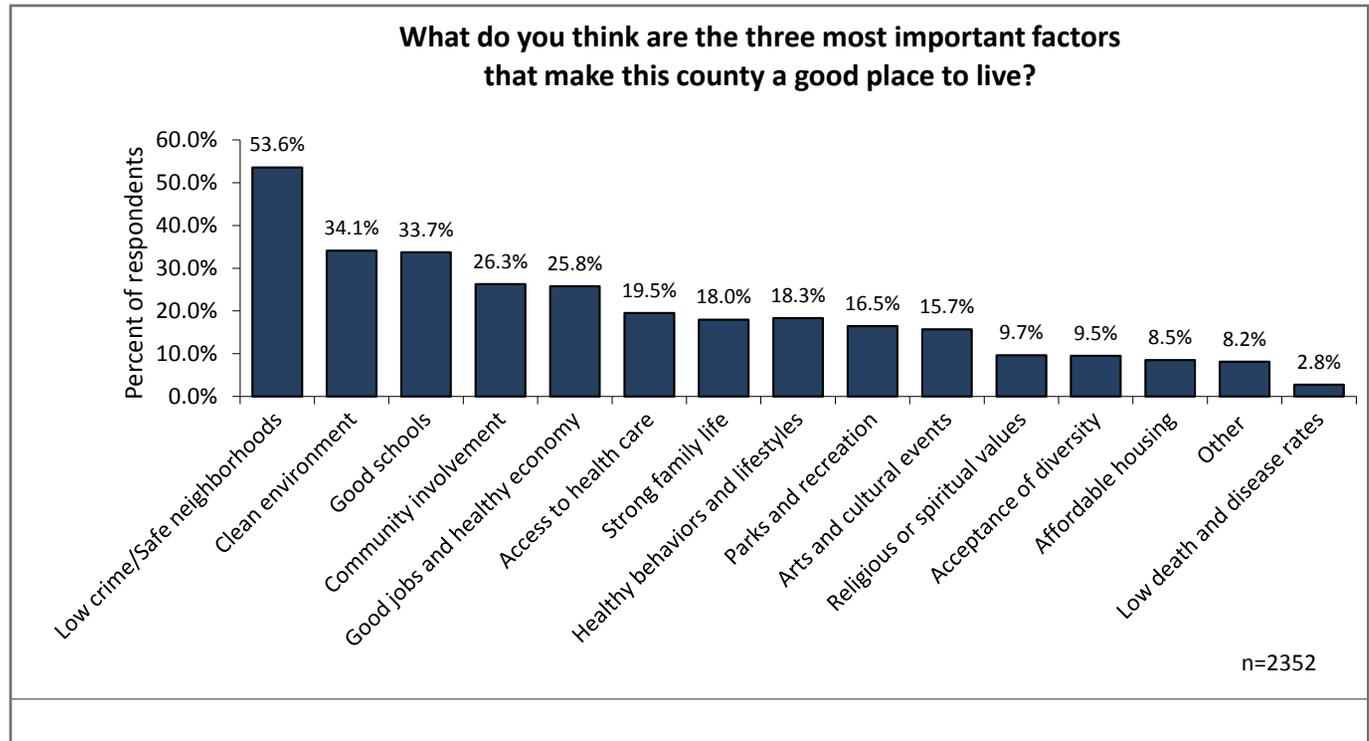
FIGURE 2-4: HOUSEHOLD INCOME OF RESPONDENTS



Caucasian, while 31.9% reported that they identified as Hispanic/Latino. Approximately 3.5% identified as Asian or Pacific Islander, 2.4% as Native American, and 1.5% as Black or African American. (Data not shown.)

- The percentage of survey participants identifying as White/Caucasian is higher than the 56.4% of residents identified as Non-Hispanic White in the 2010 U.S. Census. However, the percentage of survey takers identifying as Hispanic/Latino (31.9%) is roughly on par with this group's representation in the County population (32.2%, according to the 2010 Census). Participants identifying as Black or African American were only slightly underrepresented, as this group comprises two percent of the overall population based on the 2010 Census. Asian residents were underrepresented in the survey, while Native American residents were overrepresented. Although 4.1% of residents identified as

FIGURE 2-5: FACTORS MAKING NAPA COUNTY A GOOD PLACE TO LIVE



two or more races in the 2010 Census, very few survey participants selected this option.

**Highest Educational Level Achieved**

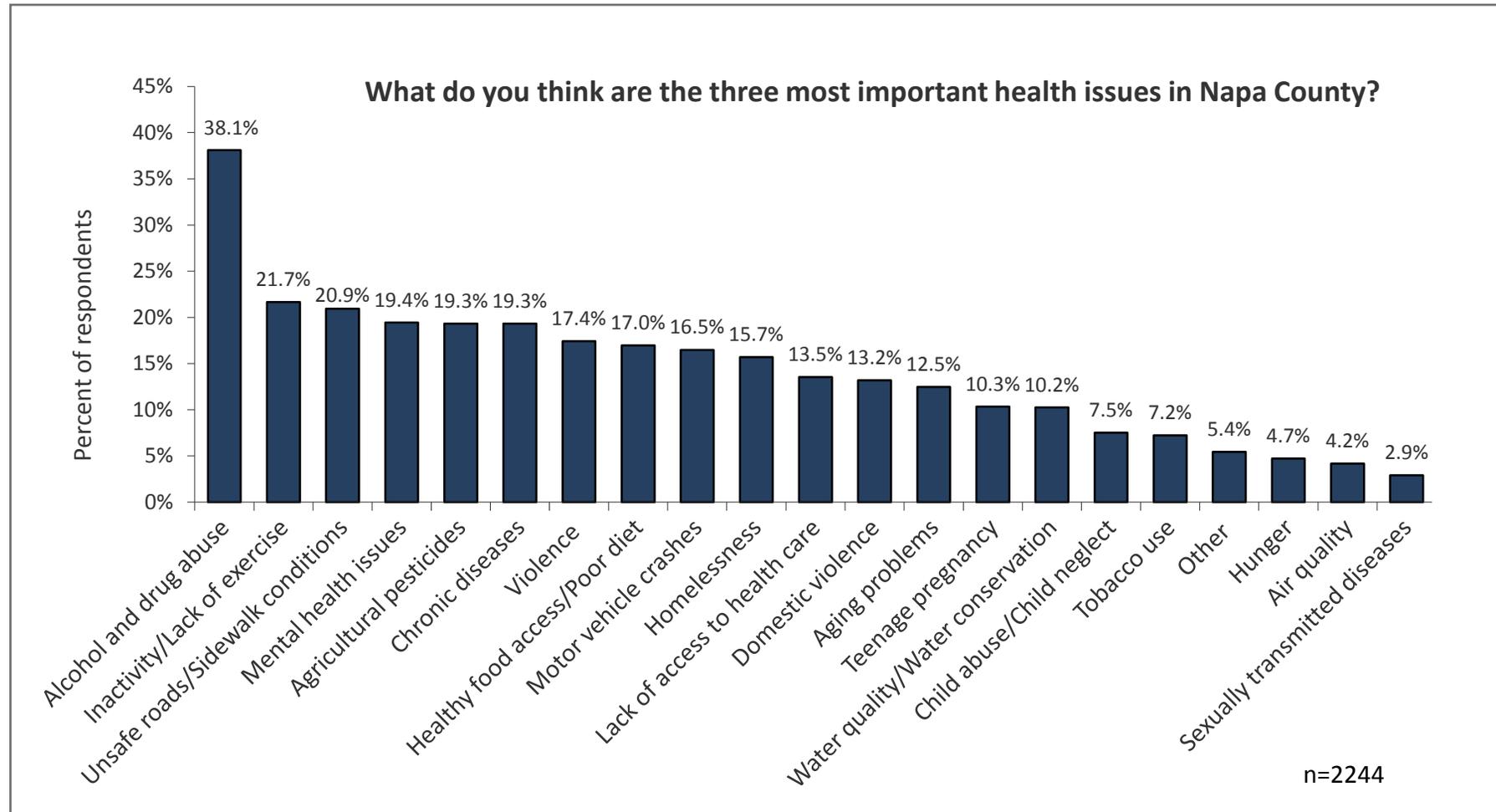
- About a tenth (10.3%) of survey respondents, including youth participants, had less than a high school education, while 12.1% held either a high school diploma or a General Equivalency Degree (GED). (Data not shown.)

- Approximately 19% of survey takers had some college education, and 30% had a college degree. Just over a quarter (25.5%) of respondents held a graduate or professional degree.

**Origin of Survey**

- Approximately 40% of respondents received the survey via email. About 11% received it at a community meeting or event, while seven percent got it at church. Others received it through

FIGURE 2-6: KEY HEALTH ISSUES FACING NAPA COUNTY



family support groups, including ParentsCAN; schools, including County Head Start programs; social service programs; work; or via Facebook. (Data not shown.)

**PERSPECTIVES ON HEALTH IN NAPA COUNTY**

*Factors Making Napa County a Good Place to Live*

- Over half (53.6%) of respondents identified low crime rates and safe neighborhoods as one of the three most

important factors making Napa County a good place to live. This was the most frequently chosen factor in every community except American Canyon, where more participants selected good schools

as an important factor, and Rutherford, where the top choice was good jobs and a healthy economy. There were not enough responses to this question from Oakville participants to determine a clear trend. (See Figure 2-5.)

- About a third of respondents selected either a clean environment (34.1%) or good schools (33.7%) as among the three most important factors making Napa County a good place to live.
- Respondents in American Canyon were most likely to select good schools as a factor, while those in Deer Park and Angwin were most likely to choose a clean environment as a factor.
- A quarter of respondents identified community involvement (26.3%) or good jobs and a healthy economy (25.8%) as key factors. These trends were relatively consistent across the County, although Yountville and Calistoga participants were slightly more likely to select community involvement as a factor.

**Key Health Issues Facing Napa County**

- Over 38% of respondents chose drug and alcohol abuse as one of the three most important issues affecting community health in Napa County. (See Figure 2-6.)

- Approximately 20% of respondents selected one of the following as top health issues facing Napa County: unsafe roads and sidewalk conditions, inactivity and lack of exercise, mental health issues, agricultural pesticides, and chronic diseases such as diabetes or cancer.

**Perception of Health in Napa County**

- Nearly 90% of respondents felt that Napa County was a healthy or very healthy community in which to live. This trend was relatively consistent across the County. (Data not shown.)
- Approximately six percent of respondents felt that Napa County was an unhealthy or very unhealthy community in which to live.

**Perception of Safety in Napa County**

- Almost 92% of respondents called Napa County a safe or very safe place to grow up or raise children. Almost all survey takers in the unincorporated areas of

FIGURE 2-7: LOCATION OF HEALTH CARE SERVICES

Where do you go most often to access health care services for yourself and your family?	
Answer Options	Percent
Napa County clinics/ health centers	42.4%
Napa County hospitals	22.8%
Napa County emergency rooms	2.5%
Community-based organizations	2.3%
Napa County Health and Human Services	1.9%
Schools/Universities	1.1%
Mobile health vans	0.6%
Alcohol or drug dependency programs	0.1%
Other	29.3%
	n=2261

the County felt Napa County was a safe or very safe place. (Data not shown.)

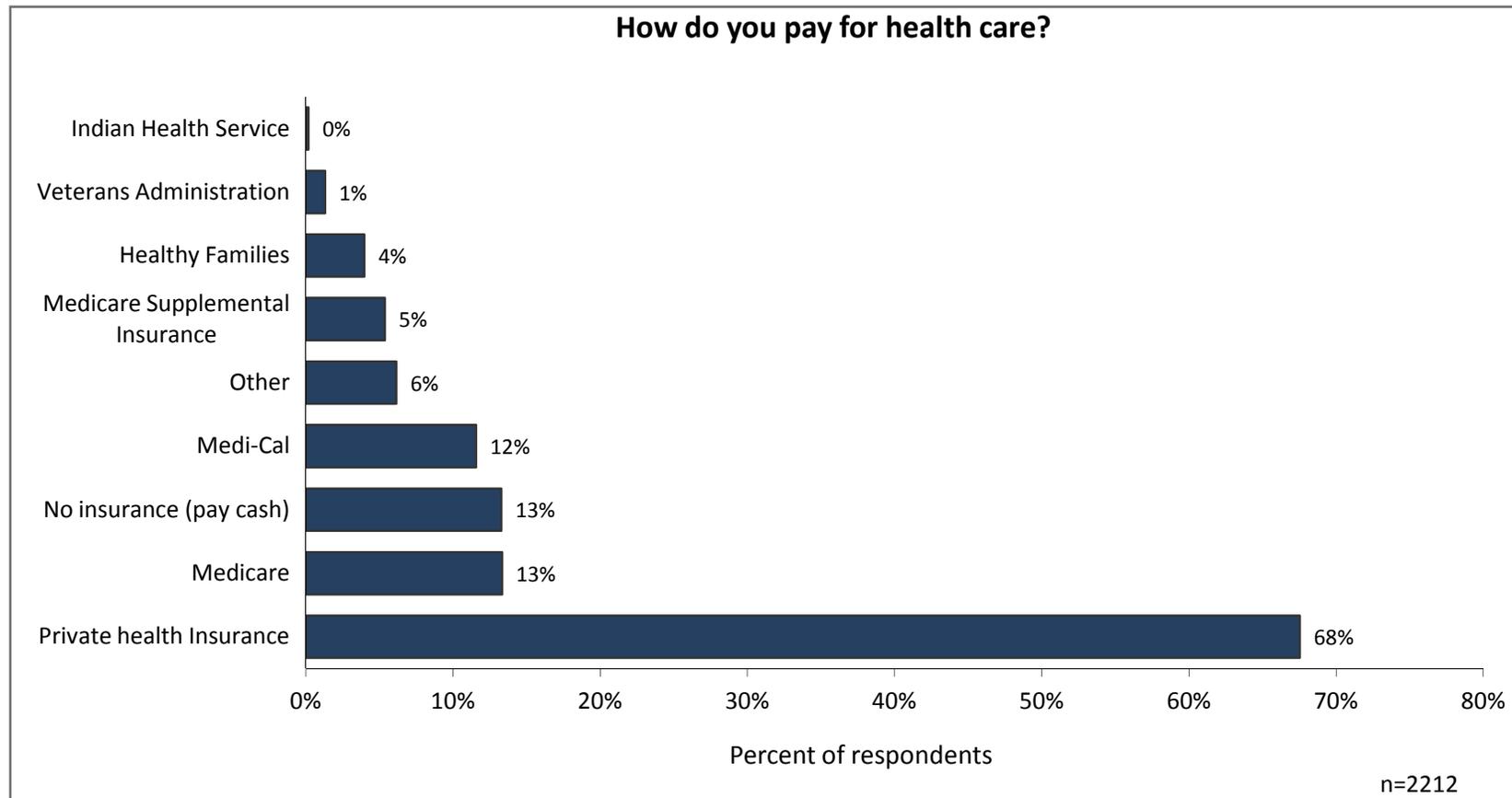
- Approximately four percent felt that the County was an unsafe or very unsafe place to grow up or raise children.

**ACCESS TO HEALTH CARE SERVICES**

**Location of Health Care Services in Napa County**

- Approximately 40% of respondents access health care services at Napa County clinics and health centers, while 22% rely on the County's hospitals for health care services. (See Figure 2-7.)
- In Angwin and Deer Park, a majority of respondents reported accessing health care services at County hospitals.

FIGURE 2-8: METHOD OF PAYMENT FOR HEALTH CARE SERVICES



- Many members of Kaiser Permanente reported that they accessed health care services at Kaiser's facilities in Vallejo or Vacaville.

**Use of Health Care Services in Napa County**

- Two thirds (67.0%) of respondents were able to get needed health care services within Napa County. (Data not shown.)

- Approximately 19% of respondents could access some, but not all, of the services they needed within the County.
- Among those who could not access health care services within the County, top reasons cited were cost of care; lack of insurance; lack of doctors accepting insurance, particularly for

Kaiser patients, who can only visit Kaiser doctors; lack of available specialists; and immigration status.

**Use of Services Outside Home City**

- For those who accessed health care services outside of their home cities, a third (33.4%) did so because their

doctors of choice were located in different cities. *(Data not shown.)*

- Approximately 20% of respondents did not have access to needed specialists in their home cities. Survey takers in Deer Park and Rutherford were most likely to report this.
- A number of respondents noted that as Kaiser members, they were limited to Kaiser's health care campuses.

#### **Use of Mental Health Care Services**

- Nearly three quarters (72.5%) of respondents reported that neither they nor their families had used mental health services within the past year. *(Data not shown.)*
- Approximately 20% of respondents or their family members had used counseling or therapy services within the past year.
- Only a small percentage of survey takers reported that they or their families had used crisis care, hospitalization, or residential treatment services within the past year.
- Of those who needed but could not access mental health services, the majority cited cost or lack of insurance as the reason. Others mentioned timing or location of services, fear of

employers finding out, lack of time, and waiting lists for services, among other reasons.

#### **Use of Social Service Benefits**

- Approximately 60% of survey takers reported that they and their families received no social service benefits within the past year. *(Data not shown.)*
- Of those who did receive services, 19% received Medicare or Medi-Cal benefits and almost 15% received Social Security benefits, while approximately seven percent participated in the CalFresh Program, formerly known as Food Stamps. Approximately five percent of respondents received unemployment services, while another five percent received Healthy Families insurance.

#### **Access to Social Service Benefits**

- Approximately 78% of those respondents who received social service benefits were able to obtain them in Napa County. *(Data not shown.)*
- Among those who were not, reasons included the lack of an Employment Development Department office in Napa, the difficulty of working with the Napa Social Security office, and the location of needed services.

#### **Method of Payment for Health Care Services**

- Over two thirds (67.5%) of respondents reported paying for health care through insurance. *(See Figure 2-8.)*
- Approximately a third (35.8%) of respondents paid for health care through Medicare, Medi-Cal, Healthy Families, Veterans Administration, or Indian Health Service insurance.
- Another 13.3% of respondents reported having no insurance and paying cash for health care services.

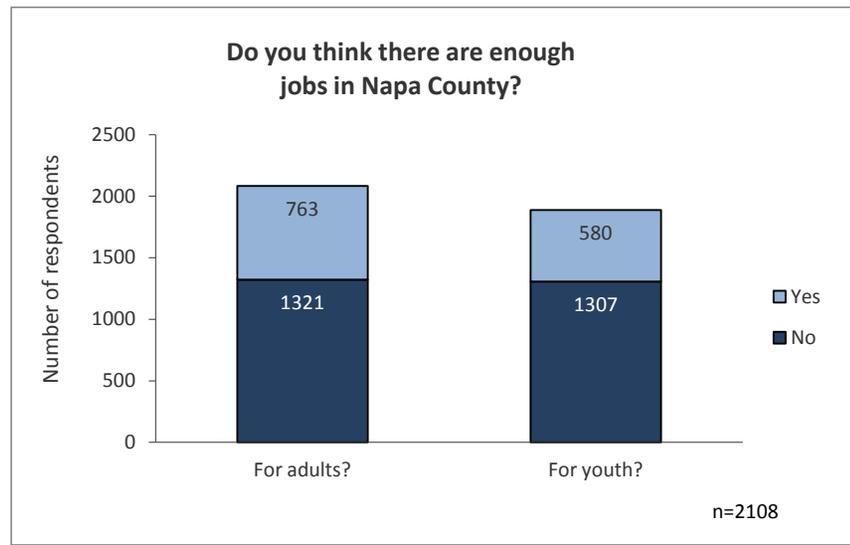
#### **Employment Status**

- A quarter (24.3%) of survey respondents reported that they were not currently employed. This group included individuals who were voluntarily out of the work force, including those who were retired or caring for family. *(Data not shown.)*
- Approximately nine percent of respondents were self-employed, while almost 15% were employed part-time.
- About half (51.9%) of respondents were employed full-time.

#### **Reasons for Not Working**

- Roughly 38% of those who were not working were retired, while just over 12% were medically ill or disabled. *(Data not shown.)*

FIGURE 2-9: AVAILABILITY OF JOBS IN NAPA COUNTY

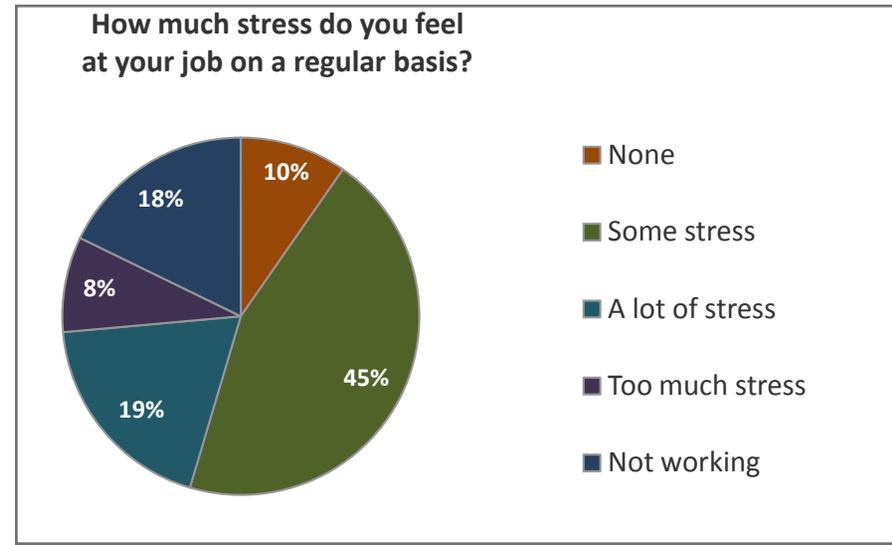


- Approximately 15% were caring for family, while an additional 15% could not find work. Two percent reported needing additional training.
- Jobs for Youth and Adults in Napa County**
- Approximately 63% of respondents felt that there were not enough jobs for adults in Napa County, while 70% of respondents felt there were not enough jobs for youth in the County. These trends were relatively consistent across the County. (See Figure 2-9.)

**Stress at Work**

- About 45% of survey takers reported feeling some stress at their jobs on a

FIGURE 2-10: STRESS IN THE WORKPLACE



- regular basis, while 19% reported feeling a lot of stress. (See Figure 2-10.)
- Approximately eight percent of respondents felt too much stress at their jobs, while 10% felt none.
- Participants in Deer Park were most likely to report feeling stress at work, with nearly half reporting either a lot of or too much stress at work. This trend that did not appear to be linked to age, household income, or other demographic factors.

**Satisfaction with Housing Situation**

- Almost three quarters (73.6%) of respondents felt satisfied with their housing situations. (Data not shown.)

- Among the quarter (26.4%) who did not, the primary reason, cited by 59% of survey takers, was cost. Respondents in Angwin, Calistoga, Napa, St. Helena and Yountville were more likely to report that housing costs were too high than those in other areas of the county. (See Figure 2-11.)
- About 27% of respondents felt their homes were too small, while 12% reported feeling their homes were overcrowded or run down. Countywide, approximately nine percent of respondents were unhappy with their homes because of problems with other people, while another nine percent

were dissatisfied because of the distance from town and services.

- In Lake Berryessa, however, over 45% of respondents were dissatisfied with their housing situation. Of these, 40% cited distance from services as the major concern. This trend did not appear to be specific to a demographic group.

**Favorite Places for Recreation in Napa County**

- Nearly half of survey respondents went to parks most often for recreation, while 40% spent time in their neighborhoods or went to restaurants. (Data not shown.)

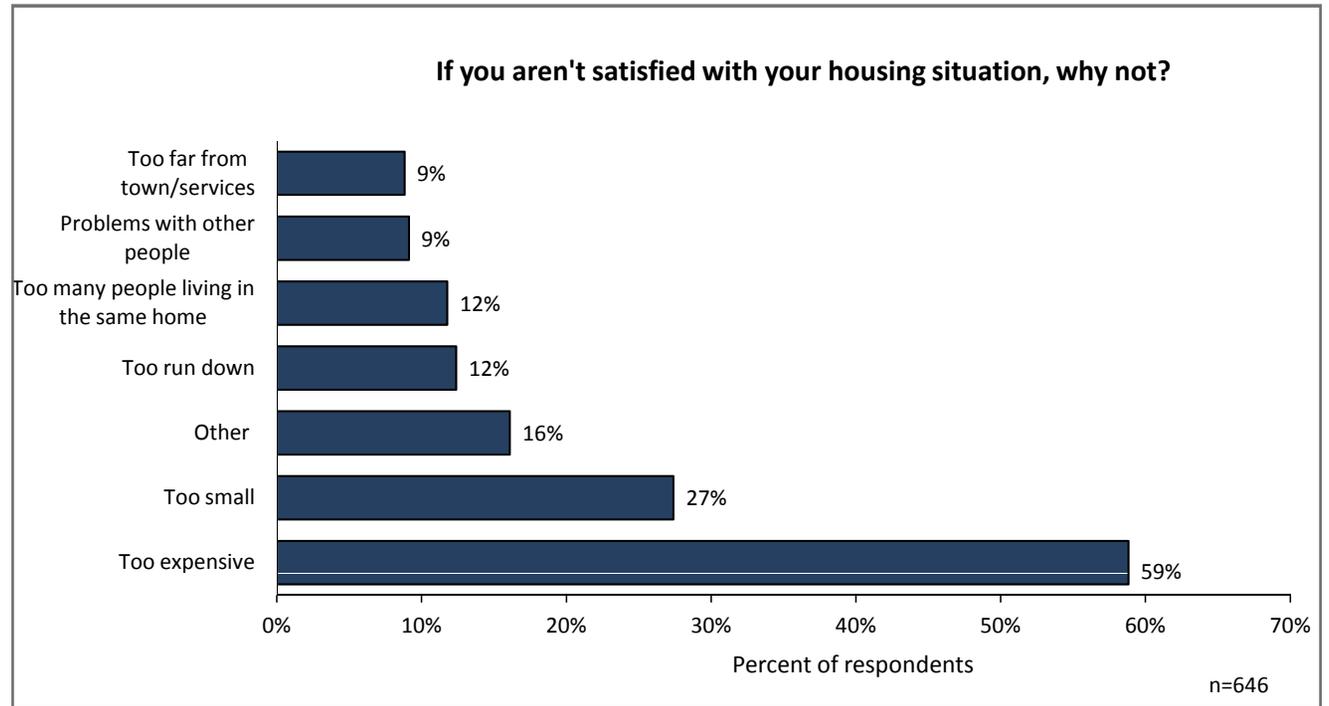
- Almost 30% went to movie theaters, and a quarter went to churches. About 20% went to rivers, lakes, beaches or woods; health or fitness clubs; or the library.

**Needed Recreation Activities in Napa County**

Survey participants reported that they would use a wide range of recreation activities if available. Among the most requested activities were the following:

- Dance classes

**FIGURE 2-11: REASONS FOR DISSATISFACTION WITH HOUSING SITUATION**



- Dance halls and dances with live music
- Arts, culture, and language classes
- Free or low-cost classes and activities in all areas
- Expanded bicycle trails, more dedicated bicycle paths, and bicycle paths that connect County communities
- More public swimming pools
- Employment training classes
- Exercise classes, including zumba
- More affordable movie and live theaters
- Year-round ice and roller skating rinks
- Sports activities and teams, both indoor and outdoor
- Sports activities for special needs children
- Activities that use the river, including fishing and boat access
- Walking trails between cities
- Community and cultural centers

- Attractions such as miniature golf or a zoo
- Yoga classes
- Rock climbing, rowing, bocce ball, racquet ball, batting cages, disc golf, tai chi, and other activities
- More live music venues
- Book club
- Clubs for seniors
- Gyms that offer child care
- More recreation centers for children and youth, including teen centers
- Activities for the entire family
- More public hunting land and shooting ranges
- Better dog parks
- Minor league baseball team
- More public swimming pools
- Affordable 18-hole golf courses
- More community parks, including parks for children in Angwin

#### **Rate of Volunteerism**

- Nearly 40% of survey respondents reported spending 1 to 5 hours each month volunteering, while an additional 14% each spent 5 to 10 or more than 10 hours a month.

- A third (33.4%) of survey takers did not spend any time volunteering in the community.

#### **Obstacles to Volunteerism**

The survey also asked participants to identify the reasons they were unable to or chose not to volunteer in their communities. The vast majority of survey takers identified lack of time as the biggest obstacle, with many noting that they had to work too much, had to care for children or other family members, or had household responsibilities that consumed any free time. Some participants noted that the cost of living in Napa County forced them to work multiple jobs at times when they might otherwise be able to volunteer. Youth participants identified the volume of homework as a time obstacle as well.

Other obstacles to volunteering included:

- Lack of transportation to volunteering sites
- Schedule of volunteer opportunity, since many participants noted that they might volunteer if evening opportunities were available
- Lack of child care

- Poor health, especially among older participants
- Unpredictable hours of employment
- Lack of English-language abilities to find and participate in volunteer opportunities
- Opportunities to bring children, youth, or dogs along to volunteer activities
- Lack of secular volunteering opportunities in some areas of the County
- Lack of volunteer activities relevant to interests or cultural background
- Lack of follow-through from volunteer organizations, especially schools

## **5. DETAILED FINDINGS: OUTREACH WORKSHOPS**

In addition to the survey, residents and other stakeholders had an opportunity to participate in the community health assessment process through a series of workshops facilitated by volunteers from community organizations and agencies in the fall of 2012. Over 300 residents participated in 28 workshops in October and November 2012.

## Workshop Locations

Workshops were held at locations across Napa County through the following organizations. Many of these groups serve residents throughout the County.

### CITY OF AMERICAN CANYON

- American Canyon Family Resource Center
- Filipino American Association of American Canyon

### COMMUNITY OF BERRYESSA

- Berryessa Senior Center

### CITY OF CALISTOGA

- Active Minds Program Parent Group
- Creative Living Calistoga
- Rancho de Calistoga

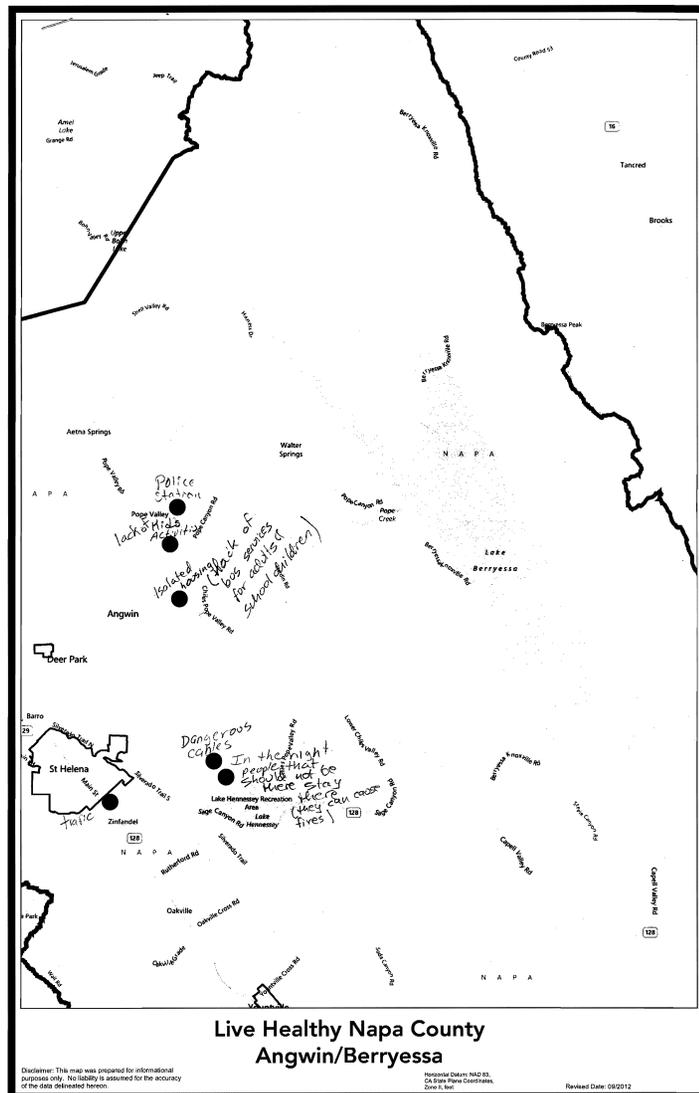
### CITY OF NAPA

- Community Action of Napa Valley
- Cope Family Center
- Housing Authority of the City of Napa Section 8 Family Self-Sufficiency Program
- Leadership Academy Youth Leaders in Action (LAYLA)
- McPherson Elementary School
- Mental Health Board
- Movimiento Familiar Cristiano



Outreach workshop groups worked together to craft a vision for Napa County and to identify the top three needed improvements.

- Napa Emergency Women's Services (NEWS)
- Napa Health and Human Services Agency parent support group
- Napa LGBTQ Project
- Napa Valley Lutheran Church
- Napa Valley Unified School District
- ParentsCAN
- People Empowering People (PEP)
- Puertas Abiertas Community Resource Center
- St. John the Baptist Catholic School
- VOICES Napa



At each outreach workshop, small groups used maps of different areas of the County to identify assets and challenges geographically.

#### CITY OF ST. HELENA

- Rianda House Senior Activity Center
- St. Helena Family Center
- Vineyard Valley

#### CITY OF YOUNTVILLE

- Yountville Community Center

### Methodology

Each workshop included three exercises: the community survey, a visioning exercise, and a mapping exercise. Volunteer facilitators attended a two-hour training on October 9, 2012 to learn how to conduct each exercise and to receive a workshop toolkit containing all of the materials they would need to host their workshops.

Facilitators asked participants for general demographic information and noted where the workshop took place in order to track geographic, ethnic/racial, and age diversity in the outreach process.

Facilitators also collected contact information for participants who were interested in ongoing project updates.

Most workshops lasted for approximately 90 minutes, although in some cases facilitators adapted the workshop content to accommodate time constraints. A typical workshop included the following:

- A brief welcome and introduction period as participants arrived and signed in;
- A review of the LHNC vision, values, and guiding principles;
- A review of the community survey, which participants were asked to fill out independently;
- A visioning exercise that engaged participants in a group dialogue to craft a vision for a healthy Napa County; and
- A mapping exercise that asked participants to identify key assets and challenges in their local communities.

#### VISIONING EXERCISE FORMAT

For the visioning exercise, facilitators asked participants to reflect on what a healthy Napa County would look like in the future. Specifically, participants were asked to answer the following two questions:

- What does a healthy Napa County mean to you?
- What resources and/or improvements are needed to support individual health and to create healthy communities in the future?

Participants wrote their responses on post-it notes, which facilitators then collected and clustered by topic on a large blank sheet of paper. The groups then discussed the ideas and identified common themes before prioritizing which topics to record as part of a draft vision statement. Each group also identified their top three needed improvements to support health in the County.

### MAPPING EXERCISE FORMAT

The mapping exercise was designed to provide information to help connect, strengthen, and leverage the existing health assets and resources in Napa County. For this activity, participants worked in groups of three using an 11" by 17" map to identify assets and challenges related to Countywide health that can be found on a map, including physical places or areas.

The four maps available for this exercise covered the following areas:

- 1) Napa/American Canyon and surrounding areas;
- 2) Yountville/Rutherford/Oakville and surrounding areas;
- 3) St. Helena/Calistoga and surrounding areas; and
- 4) Angwin/Lake Berryessa and surrounding areas.

Each facilitator was provided with copies of all four maps, and participants had the opportunity to group themselves according to where they lived or used services most frequently in the County.

Each group was given two sets of stickers: blue stickers to geographically identify strengths, resources, or assets that support health in Napa County; and red stickers to geographically identify challenges or issues that detract from health in Napa County. The results of this exercise are presented below.

### Key Findings: Visioning Exercise

#### WHAT DOES A HEALTHY NAPA COUNTY MEAN TO YOU?

Workshop groups described their vision of a healthy Napa County in the following ways.

#### *Many Community Amenities*

- Napa County will have a strong sense of community and active volunteer participation.
- All residents will have access to outdoor recreational facilities, art, music, dance, ice skating, swimming, and more.
- Community infrastructure such as roads and sidewalks will be well maintained.
- Public transportation will be enhanced, with more bus stops throughout the community.
- All residents will have access to safe, multi-modal transportation.
- There will be more cultural and social community events throughout the County.
- Communities will be peaceful and quiet.
- There will be less traffic throughout the County.
- Small communities in the County will have access to emergency services close to home.
- Communities will have more convenient shopping.

#### *Resources for a Diverse Population*

- Medical professionals will be competent in LGBTQ issues.

- The County will offer English classes that provide childcare.
- Tolerance and diversity will characterize Napa County.
- The community will be welcoming and inclusive.

**Healthy, Safe Residents**

- All residents will have access to health education.
- Napa County communities will be safe, with bicycle and walking patrols in downtown areas.
- All residents will have access to healthy, affordable foods.
- There will be affordable dental, eye, pediatric, and medical clinics.
- High school students will have access to drug and alcohol resistance programs.
- Residents will have access to social services.
- All residents will have access to health care, including non-traditional health care.
- Residents will have more awareness of and information about services.
- The County obesity rate will be reduced.
- Emergency room use will drop.

- Napa County residents will have strong mental health services.
- Napa County residents will be knowledgeable about healthy eating.

**Strong Communities and Affordable Housing**

- Homes will be free of violence and neglect.
- Neighborhoods will be walkable, with safe streets.
- Housing will be affordable to rent and to buy.
- There will be places for spiritual health and growth.
- Homelessness will be eliminated.

**Active Schools and Lifelong Learning**

- Residents will have access to lifelong learning opportunities.
- More parents will participate in the schools.
- Napa County will have excellent schools with specialized services.
- Schools will be bully-free environments.

**A Growing Economy**

- Napa County workers will earn a living wage.
- Napa County will celebrate economic diversity, with many different income levels and jobs for all.

- There will be many well-paying local jobs.

**Strong Families and Empowered Youth**

- All students will have access to quality out-of-school programs.
- Residents will have access to affordable quality childcare.
- Families will have support, especially in times of financial need.
- All children will be fed and clothed.
- Youth will have strong role models and peer mentoring.
- Youth will have access to jobs, activities, and places to hang out.

**A Healthy Environment**

- The Napa River will be clean.
- The environment will be beautiful, with clean air and water and active recycling programs.
- Fewer pesticides will be used in vineyards.

**NEEDED IMPROVEMENTS**

Participants also identified a number of needed improvements.

**Funding**

- Incentives and scholarships
- Grants

- Funding for education campaigns supporting healthy lifestyles (composting, recycling, etc.)
- Funding subsidy for child care
- Increased taxes for upper income brackets
- Sliding scale access for kids to physical and cultural activities, DARE, etc.
- Additional sources of funding from the private and philanthropic sectors
- Subsidized medicine such as Clinic Ole

**Transportation**

- More alternative transportation (e.g., public transit, bike lending)
- Improved public transportation

**Nutrition/Access to Healthy Food**

- Incentives for local food production
- Public gardens/co-ops
- Affordable healthy food
  - Access to healthy proteins
- Improved nutrition and access to healthy foods
  - Reduced number of high-fat, fast food restaurants
  - Requirement for calories and components of foods be listed on all restaurant menus

- Improved nutrition for infants, schools, and elderly residents
- Use of the local farmers' market to encourage making fresh, healthy food more affordable
- More support for local gardens
- Improved school menus
- More affordable organic foods

**Access to Mental Health Services**

- Advocacy for a review of mental health policies and laws
- Sliding scale/free mental health services
- Children's mental health services
- Mental health and behavioral health programs
- Infrastructure for services (mental health/substance abuse)

**Senior Services**

- Planning for elder care
  - Office in Calistoga dedicated to senior needs
  - Fixed rent housing for seniors
- Affordable Housing and Homelessness**
- More affordable housing (*from multiple groups*)
  - More low-income housing (e.g., Section 8)

- Increased incentives to build mixed use, mixed income, safe and family friendly, affordable housing
- More set-aside funding for future affordable housing projects
- Improved access to affordable housing
  - Subsidies for new affordable housing projects
  - Rent control
  - New and innovative ideas on existing housing
- Improved housing opportunities for low-income residents
  - Independent homeless shelters
  - Help and support with transition from homeless to housed
- Increased public awareness of those at risk of homelessness
  - More advocacy for the less fortunate
  - Greater concern from elected officials
- Housing mediators

**Access to Health Care**

- Good health care for all
- Improved preventative health care
  - Support services in schools

- o Communication with people working directly with clients in the field
- Better access to medical care
  - o Home medical visits
  - o Transport to hospital
  - o Pharmacy open on weekends
  - o Walk-in medical clinic
  - o Health care closer to isolated communities—not just in Santa Rosa or Napa
- More health care providers that accept Medi-Cal and/or that provide health services to people with disabilities
- Lower cost medical services
- Accessible emergency clinics open late at night
- Reduced wait time in hospitals
- Access to dental health
  - o Dental mobile van
  - o Dental care for mentally ill
- Improved access to health services
  - o Improved public transportation to health services
  - o Mobile services for rural and isolated populations

#### *Schools and Services for Children and Youth*

- Educational attainment for young people across the County
- Programs for children that are free or low-cost
- Increased parent involvement in schools
- Resources for special needs children
- Zero tolerance policy for bullying in workplace/schools
- Updated school textbooks
- Improved resources for local youth
  - o More places to hang out
  - o A youth advocacy group
  - o Local tax cuts for hiring youth
- Increased funding for schools
  - o Land surveys

#### *Support for Families*

- New parent (caretaker) support

#### *Public Safety*

- Better law enforcement/community relationships
- Road safety
  - o Better lighting outside of developed areas
  - o Improvement of roads and sidewalks
- Gang prevention classes for parents

#### *Community Involvement*

- Community forums
  - o More productive, open dialogue on addressing invisible Napa issues such as poverty, LGBTQ, and racism
- Low-cost community events for all ages
- More community participation and involvement
  - o More volunteers (goal of five hours per month)
  - o Town meetings
- Renewal of neighborhoods (e.g., affordable housing, job diversity)

#### *Healthy Environment*

- Reduced use of agricultural pesticides
- Less pollution
  - o River cleanups
  - o Ban on plastic bags
- More urban trees and green spaces
- More green buildings
- More recycling centers/education about waste control

#### *Training and Information*

- Health literacy for children
- Educational training for community
- Clear responses and information from County services

- Empowerment programs/life skills training
- More community health fair events with community health providers
- Promotion of new programs

**Parks and Recreation**

- Community recreation centers and pools
- Bike trails
- Dogs on leash/dog park
- Improved access to and promotion of outdoor activities
  - o More bike riding and bike trails
  - o An open/safe river trail
  - o A "ride-to-work" or "improve-your-health" day
- Access to free or low-cost gyms and recreation centers
  - o Free or low-cost childcare available at gyms
  - o Music and dance classes
- Pool open longer hours
- More community gyms
- Community center for people to socialize

**Local Government**

- Support from leadership
- Political support

10A

**Trazando un Mapa para Viva Sana Condado de Napa**

¿Cuáles virtudes, recursos y ventajas apoyan la salud en el Condado de Napa hoy día? (pegatinas azules)

Virtud #1. Escuela McPherson = Clases para padre (Universidad para padre)

Virtud #2. Policías.

Virtud #3. Muchos parques.

Virtud #4. Tenemos una Ciudad limpia.

Virtud #5. Ciudad turística, muy acogedora.

¿Cuáles desafíos, problemas y asuntos desmerecen la salud en el Condado de Napa hoy día? (pegatinas rojas)

Desafío #1. Vigilancia en el río por Boyabundos y personas drogándose.

Desafío #2. Mas seguridad en las calles de la Yajome y central

Desafío #3. Seguridad en los parques mas luz y vigilancia

Desafío #4. Fuller park: Mas seguridad - mucha gente sin hogar durmiendo.

Desafío #5. Laurel muchas pandillas y delicuencia.

ARTE C: ACTIVIDAD DE HACER MAPA  
NOMBRE DE GRUPO E UBICACIÓN:  
NOMBRES DE LOS PARTICIPANTES:  
FECHA:

At an outreach workshop, a Spanish-speaking group completed this worksheet on community health assets and challenges in the County.

- Consumers of alternate transportation (e.g., bike advocates) on planning commissions
- Community planning (e.g., economic development, housing/job diversity)
- Local governance

**Collaboration and Coordination**

- Collaboration of agencies and coordination to reduce costs and improve access
  - o Cover gaps in health care coverage
- Increased County office participation
- Public/private partnerships

- Enhanced collaboration between agencies to create more successful plans for patients
- A County health ombudsperson assigned to families/seniors

#### **Diversity and Inclusion**

- Friendlier service from social service agencies
  - Improved training/acceptance of diversity
- More inclusive health facilities
  - More programs/organizations like Clinic Ole and Planned Parenthood that are welcoming and inclusive
- Countywide diverse & inclusive communication campaign for health and LHNC
- Dual immersion education
- Training of medical professionals on LGBTQ issues
  - Competence, best practices, visibility, communication, planning for inclusion, diversity
  - More training on representation within medical structure (e.g., brochures)
- More diverse representation in newspapers, community events, political offices, and community leadership

- Free or low-cost cultural center/place to learn
- Acceptance and inclusion of different cultures
- Less discrimination
- More social service workers

#### **Economic Development and Jobs**

- More well-paying jobs (*multiple groups*)
- More job opportunities, including encouraging new businesses and incentives for employers to hire locally
- Employment opportunities for people with disabilities
- Improved access to education, training, and internships
- More shopping
- Business/community event days
- Job opportunities that diversify industry beyond grapes and tourism
  - Less corporate, tourist-oriented; more family- and community-run businesses
  - Outreach to large employers or manufacturing type jobs

#### **Poverty and Income**

- Focus on self-sufficiency standard rather than poverty level

- Reduced cost of living

#### **Other Needed Improvements**

- Better work/life balance
- More advocacy to promote healthy living
- Ability to access services
- More substance abuse programs

#### **TOP NEEDED IMPROVEMENTS**

Each workshop group selected the top three needed improvements from the list that group participants developed. Collectively, they ranked improvements in the following order.

- Affordable housing and related services, especially for families (*selected by eight groups*)
- Expanded affordable recreational activities and facilities for children, youth, families, and those with special needs (*selected by eight groups*)
- Health care, including mental health services, emergency medical care, and late-night clinics (*selected by four groups*)
- A drug, violence, and gang free environment (*selected by three groups*)
- Better and more inclusive communication about community events and health (*selected by three groups*)

- Employment opportunities *(selected by three groups)*
- Education, including trade workshops and vocational education *(selected by three groups)*
- Transportation, including better roads and transportation to hospitals and pharmacies *(selected by three groups)*
- Community involvement, especially Latino involvement in education *(selected by two groups)*
- Training and education on community health issues, including agricultural toxins *(selected by two groups)*
- Bigger space and longer hours for Clinic Ole *(selected by two groups)*
- Funding *(selected by two groups)*
- A diversified business base *(selected by two groups)*
- Healthy, low-cost foods, including fruits and vegetables *(selected by two groups)*
- Health care providers that accept Medi-Cal *(selected by one group)*
- Cleaner environment: natural pesticide use in vineyards, culture of recycling for children *(selected by one group)*
- Childcare *(selected by one group)*

## Key Findings: Mapping Exercise

### CHALLENGES

In the mapping exercise, workshop groups identified the following challenges—many of them location-specific—facing Napa County:

#### Transportation Challenges

- Poor condition of city streets and sidewalks
- Need for more public transportation routes
- Need for longer public transportation service hours
- Lack of transportation options for those without driver's licenses
- No transportation available to get families to medical specialist appointments in San Francisco or other distant locations
- Lack of transportation to and from school for children and youth

#### Public Safety Challenges

- Speeding cars, especially near schools and those driven by youth
- Need for more security presence at parks where transient or homeless individuals sleep
- Lack of crosswalks at key pedestrian crossings
- Lack of traffic lights at intersections with frequent accidents

- Gangs, especially on Laurel Street, Pueblo Avenue, and at Salvador Trailer Park
- Dogs in city parks
- Lack of fire and police protection in American Canyon
- More lights and surveillance in parks

#### Affordable Housing Challenges

- Lack of affordable short-term housing for seasonal workers
- Lack of affordable apartments
- Need for more services in low-income housing developments
- Substandard housing in some County areas
- Lack of programs for those experiencing or at risk of homelessness

#### Accessibility

- Lack of ADA-accessible parks and schools for children with special needs

#### Obstacles to Accessing Healthy Food

- Lack of grocery stores in some County areas
- "Fast food lanes" in local stores
- Lack of education and information about healthy food, nutrition and food services
- Use of agricultural pesticides in areas around St. Helena

***Linguistic or Cross-Cultural Challenges***

- Discrimination from public health and human services workers
- Lack of Spanish-language information and materials, especially from service providers
- Lack of acceptance of cultural and racial differences

***Lack of Educational or Youth Services***

- Lack of high-quality affordable daycare and preschools
- Need for more teachers
- Need for a language immersion school
- Lack of out-of-school and after-school activities for children and youth, especially in Pope Valley
- Lack of funding for Napa Valley College
- Need for more sports and recreation programs for youth over age 12
- No schools in Berryessa area

***Lack of Community Services***

- Lack of senior services in Angwin
- Lack of a LGBTQ center
- Too few resources to address poverty and hunger
- Too few churches in some areas
- Old movie theater on W. Imola Avenue

***Drug and Alcohol Problems***

- Easy access to drugs and alcohol, especially for youth
- Poor access to treatment programs for substance dependency

***Economic Challenges***

- High cost of living
- Income disparities
- Unemployment and underemployment
- Class divides

***Health and Health Care Issues***

- Lack of affordable health care
- Lack of access to health care for seniors
- Disparities in access to medical care based on income
- Mental health
- Discrimination from public health and human services workers
- Obesity

***Other Challenges***

- Lack of recognition of the Latino contribution to the Valley's wealth
- Inadequate local government involvement in some communities
- Napa River flooding
- Dangerous cables near Lake Hennessey

- Boat pollution in the lakes
- Isolation of families in Berryessa
- Aging population
- Agricultural pesticide use
- Need for greater business diversity

**ASSETS**

Community assets identified by workshop groups geographically included the following:

***Affordable Housing Resources***

- Calistoga Affordable Housing
- Vineyards providing housing to workers

***Healthy Food Amenities***

- Cal Mart
- Farmers' markets
- Community Action Napa Valley (CANV) Food Bank
- The food pantry in St. Helena

***Community Services***

- Wide array of community services
- Municipal services
- SparkPoint American Canyon financial support services
- City Hall
- Napa County Health and Human Services

- Police and fire departments throughout the County
- Free immigration law clinics

**Community Amenities**

- Public recreation facilities such as community centers, bocce courts, pools, baseball, and bicycle trails
- Cultural facilities such as libraries and museums and events such as Art Walk
- Parks and outdoor spaces, including Crane, Kennedy, Alston, Pueblo, Westwood Hills, and Skyline Parks and Tulocay Cemetery
- Cultural amenities, including theaters and bowling alleys
- Skate parks
- Free wireless internet in public places (e.g., Starbucks)
- Recreational activities at Lake Berryessa

**Educational Resources**

- School system
- Yountville Elementary School
- Napa Valley College
- McPherson School
- Lincoln Adult School
- Napa Infant Preschool Program
- Boys and Girls Club

**Economy/Employment Assets**

- VOICES Napa, an organization providing support for housing, education, employment and wellness services to transitioning youth ages 16 to 24
- Vineyards as backbone of the County
- Growing economy

**Community Health Resources**

- Clinic Ole
- Sister Anne Dental Clinic
- St. Helena Hospital
- Planned Parenthood
- St. Joseph Health, Queen of the Valley Medical Center
- Kaiser Napa Clinic
- Napa Valley College Mental Health Center
- Mental and behavioral programs
- Napa County Health and Human Services

**Support for Seniors**

- Rianda House
- Senior centers
- Veterans Home

**Support for Families**

- Calistoga Family Center

- Vibrant nonprofit sector (e.g., family resource centers)
- St. Helena Family Center
- Social service agencies serving at-risk families
- The Bridges Program
- American Canyon Family Resource Center
- ParentsCAN health liaisons, advocates, navigators
- Resource Centers that provide referrals
- Availability of helpful services

**Faith Community**

- St. John the Baptist Catholic Church
- Local churches providing spiritual support

**Other Assets**

- Little League for those with disabilities
- Sense of community spirit in Yountville
- Privacy of Napa County communities
- Spanish language materials offered in some places
- Pedestrian-scale communities
- Clean environment
- Airport

## 6. DETAILED FINDINGS: STAKEHOLDER INTERVIEWS

### Methodology

In the months of November and December 2012, a total of 16 stakeholder interviews were conducted with key leaders throughout Napa County. Interviewees were identified by the Core Support Team based on the following criteria:

- Represent diverse, hard-to-reach populations in Napa;
- Bring a unique perspective that is relevant to LHNC;
- Provide an existing service to the community that addresses the goals of LHNC;
- Have overcome challenges in their communities and are successfully achieving the goals of LHNC; and
- Overall, are strategic thinkers and people with vision.

In the interviews, participants were asked to describe a healthy Napa County; identify the most important health factors and issues; identify populations that are adversely affected by health problems; and identify assets, strengths, and challenges that affect health throughout Napa County.

### Key Findings

Stakeholder interviewees highlighted factors that can help make Napa a healthy county. They also identified factors affecting the health of residents, trends in the health field, issues that must be addressed to foster health, strengths and assets of the County, and challenges facing the County. Each is categorized as a top, secondary, or lower tier finding based on how frequently the response was mentioned by interviewees.

#### WHAT IS A HEALTHY NAPA COUNTY?

- There is a belief that health needs to be addressed holistically: emotional, mental, and physical health. This may mean placing more of an emphasis on coordination to address complexity. *(Mentioned across all respondents.)*
- Everyone needs access to health care (behavioral and physical), decent jobs, good food, wellness services, and transportation. *(Supported by most respondents.)*
- People should be able to live and work in their own community. *(Strong emphasis by most respondents.)*

### MOST IMPORTANT HEALTH FACTORS

#### Top Health Factors

- Affordable housing
  - Currently seeing multiple family households in unsafe environments
  - Community that works here cannot live here
  - Strong link between health and housing
- Healthy behaviors/lifestyles
  - Includes the built environment, walkability
  - Access to basic foods
- Opportunity to be economically self-sufficient
  - Poverty as a big indicator of health
- Community involvement
- Shift away from case management

#### Secondary Health Factors

- Educating the youth
- Education for families
  - English language learning
  - Financial education
  - Child development
  - How to access services
  - Awareness

- Community involvement—ensuring that the community voice and perspective of underserved population is incorporated

**Lower Tier**

- Clean environment
  - Napa is a relatively clean environment in terms of clean air
- Low crime rate/safe neighborhoods
  - Napa is a relatively safe area
- Community leadership that extends beyond the nonprofits (e.g., to elected officials, community members)

**MOST IMPORTANT HEALTH ISSUES**

**Top Issues**

- Obesity
  - Concern for overall population
  - Concern for youth—diagnosing at a younger age
- Mental health
  - Community mental health—understanding why people aren't accessing services
  - Mental health issues caused by the economic situation
  - Seniors
  - Immigration issues
  - Obesity/mental health link

- Alcohol and drug abuse
  - A connection with the economic downturn
  - Concern for young people
- Inactivity/lack of exercise
  - Closely associated with obesity

**Secondary Issues**

- Agricultural pesticides
  - Was not seen as an issue by respondents. Primarily a perceived issue—lack of knowledge of reality
- Chronic disease management
- Unsafe roads/sidewalk conditions
  - Concern for American Canyon
  - Calistoga infrastructure problems
- Dental care

**Specific populations adversely affected by health problems**

- Low-wage/low-income workers with low socioeconomic status
  - Seen as the strongest driver for adverse health outcomes
- Seniors, particularly around mental health and helping them lead healthy lives
  - Particularly in Calistoga
- Latinos

- Migrant workers
- Children and youth
- Undocumented immigrants
  - Fear within Latino community and associated emotional issues
- Migrant workers with limited English and family members reading at third grade level
  - Particularly in American Canyon

**ASSETS AND STRENGTHS**

**Top Assets and Strengths**

- Napa's robust nonprofit network and comprehensive safety net system
- Very collaborative community
  - Napa Valley Coalition of Nonprofit Agencies is an example of this
- Supportive philanthropic community
  - Auction Napa Valley
- Excellent health care clinics
- Supportive health and human services leadership
- Small community with high communication; easy to facilitate meetings between agencies
- Over 95% of children with insurance

**Secondary Assets and Strengths**

- Family resource centers can provide education services to the right communities
- Community gardens—can help with healthy behaviors and lifestyle
- High quality child care services
- The Wolfe Center, a County-based drug and alcohol abuse out-patient treatment program for teens and their families
- Progressive Board of Supervisors

**CHALLENGES**

**Top Challenges**

- Diminishing financial resources—hard to collaborate without funding
  - Agencies can be territorial; lack of ability to share funding
- Health care reform will require the need for more primary doctors; concern that Napa County is not prepared to meet the demand
- Lack of public transportation system to connect individuals and families to services
  - Issue in Calistoga—lack of a link between cities outside of Napa
- Providing services that reach communities outside of central Napa area in

less populous regions (e.g., Calistoga, American Canyon)

- Limited mental health services for population because of financial constraints (lack of insurance coverage) or geographical location
- Lack of innovation among agencies to address pressing issues
- Health care provider network—less availability for low-income families
  - No local HMOs

**Secondary Challenges**

- Financial disincentives to deliver preventative services (e.g., Medi-Cal is limited in what it pays for)
- Lack of leadership outside of nonprofits
- Connecting with underserved population—engagement on a cultural and linguistic level
- Distinction between the "haves" and "have nots" and segregated communities based on ethnicity
- Changing the service delivery model
  - Among family resource centers, push to get away from case management and toward community engagement, but staff are trained as case managers or social workers

- Lack of involvement of the interfaith coalition (e.g., could hold town hall meetings or address particular health issues)
- Public opinion on affordable housing (e.g., Auction Napa Valley does not include housing organizations as beneficiaries)
- Lack of access to mental health services in Calistoga region; relies mostly on satellite services

**Trends**

- Diagnosing of diabetes at a younger age, resulting in individuals being in the medical system for longer and draining resources
- Middle class is getting phased out—very wealthy and very poor populations
- Shrinking HMO provider network
- Aging population
- Housing issues becoming increasingly worse
  - Lack of land to develop housing
- Growing Latino population with many low-income households
- Lower income population just starting to feel the recession
- Preparation for young veterans

# local public health system

## 1. PURPOSE

The Local Public Health System chapter is intended to provide an understanding of the capacity and capability of the network of organizations and entities that contribute to the public's health and wellbeing in the community. This chapter also identifies strengths and weaknesses in the system as well as opportunities for improvement.

### Local Public Health System

The Local Public Health System Assessment (LPHSA) provides key information on the following questions:

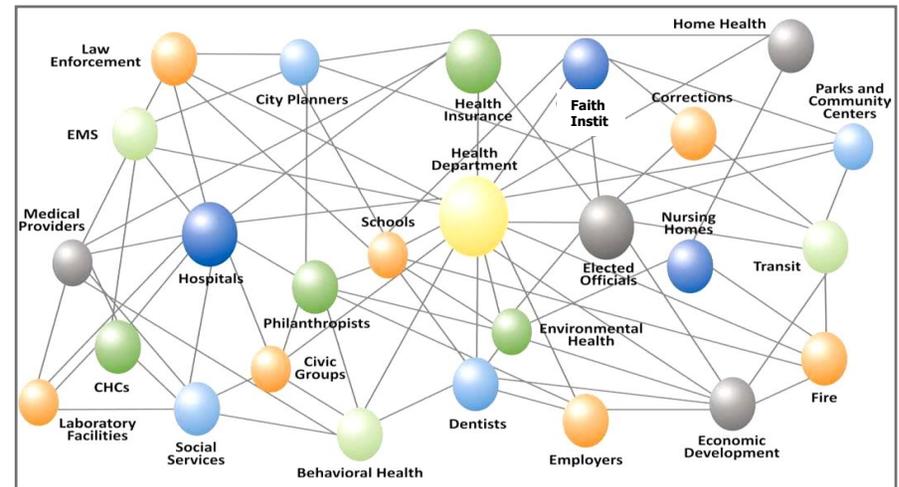
- What are the components, activities, competencies, and capacities of our local public health system?
- How are the Essential Public Health Services being provided in our community?

### Methodology

Data for the Local Public Health System (the system) was collected using the

National Public Health Performance Standards Program's (NPHPSP) local instrument. The instrument uses the "10 Essential Public Health Services (EPHS)", which are the core public health functions that should be undertaken in every community, as a framework to evaluate the system's performance. The system is measured against a set of model standards that describe the key aspects of an optimally performing system. The standards are intended to support a continual process of quality improvement for local public health system partners.

The LPHSA takes a systematic look at the broad set of the services provided within



the system. The system includes agencies, organizations, individuals and businesses that must work together on social, economic, environmental and individual factors to create conditions for improved health and wellbeing in a community. The illustration above shows the variety of

Chapter Contents:

1. Purpose .....	37
2. NPHPSP Assessment Results .....	38
3. NPHPSP Assessment Findings ...	40
4. Next Steps.....	48

entities that contribute to the local public health system and the interconnectedness of each to the other's work.

To conduct this assessment, Live Healthy Napa County's (LHNC) Local Public Health System Subcommittee organized and led a coordinated, countywide effort to assess the capacities of Napa County's Local Public Health System (the system). The goals of the assessment were: 1) to create stronger systems through collaboration; 2) to identify strengths and challenges; 3) to foster quality improvement by using national benchmarks; 4) to more fully inform community health improvement planning efforts; 5) and, ultimately, to positively impact health outcomes for all Napa County residents.

The assessment was conducted on December 7, 2012 by bringing together approximately 55 representatives from diverse community organizations and the general public to discuss the current system, including assets, barriers and opportunities for improvement. Attendees included representatives from the local Health and Human Services Agency, hospitals, community health centers,

social service providers, county office of education, faith-based organizations, local governmental agencies, and many others.

The process used to generate responses included several steps and was the same for each workgroup. The group read the essential service description, activities, and model standard for each indicator. Discussion time followed during which participants shared how their division/organization contributed to meeting the standard and Napa County's overall performance in the area under consideration. A recorder captured the highlights of the discussion. Assessment questions were then read

aloud by the facilitator. Participants used handheld key pads to cast their votes anonymously. The response options are listed in the table below.

## 2. NPHPSP ASSESSMENT RESULTS

The completed assessment was submitted to the NPHPSP at the Centers for Disease Control (CDC) and a standard report was provided. The results answer the questions:

- How well did the system perform the 10 Essential Public Health Services (EPHS)?
- How well did the system perform on specific Model Standards?
- Overall, how well is the system achieving optimal activity levels?

FIGURE 3-1: LPHSA RESPONSE OPTIONS

<b>NO ACTIVITY</b>	0% or absolutely no activity.
<b>MINIMAL ACTIVITY</b>	Greater than zero, but no more than 25% of the activity described within the question is met.
<b>MODERATE ACTIVITY</b>	Greater than 25%, but no more than 50% of the activity described within the question is met.
<b>SIGNIFICANT ACTIVITY</b>	Greater than 50%, but no more than 75% of the activity described within the question is met.
<b>OPTIMAL ACTIVITY</b>	Greater than 75% of the activity described within the question is met.

**FIGURE 3-2: SUMMARY OF PERFORMANCE SCORES BY ESSENTIAL PUBLIC HEALTH SERVICE (EPHS)**

EPHS		Score
1	Monitor Health Status To Identify Community Health Problems	68
<b>2</b>	<b>Diagnose And Investigate Health Problems and Health Hazards</b>	<b>77</b>
3	Inform, Educate, And Empower People about Health Issues	57
4	Mobilize Community Partnerships to Identify and Solve Health Problems	48
<b>5</b>	<b>Develop Policies and Plans that Support Individual and Community Health Efforts</b>	<b>70</b>
<b>6</b>	<b>Enforce Laws and Regulations that Protect Health and Ensure Safety</b>	<b>73</b>
7	Link People to Needed Personal Health Services and Assure the Provision of Health Care when Otherwise Unavailable	65
8	Assure a Competent Public and Personal Health Care Workforce	48
9	Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-Based Health Services	58
10	Research for New Insights and Innovative Solutions to Health Problems	39
Overall Performance Score		60

The assessment results highlight areas of relative strength and challenges for the system. Napa County scored highest for capacity and performance in the following EPHSs:

- EPHS 2: Diagnose and investigate health problems and health hazards (77%, optimal activity)
- EPHS 6: Enforce Laws and Regulations that Protect Health and Ensure Safety (73%, significant activity)

- EPHS 5: Develop policies and plans that support individual and statewide health efforts (70%, significant activity)

The following EPHSs had the lowest scores:

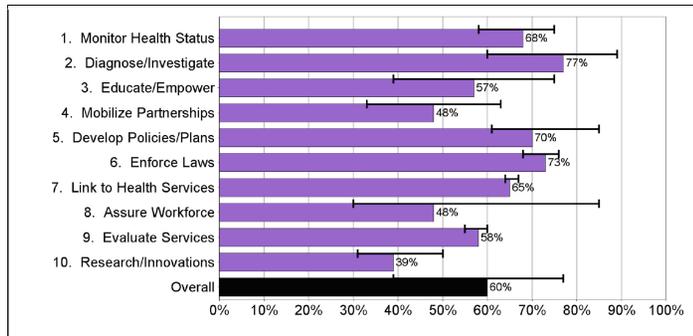
- EPHS 4: Mobilize Partnerships to Identify and Solve Health Problems (48%, moderate activity)
- EPHS 8: Assure a competent public health and personal health care workforce (48%, moderate activity)
- EPHS 10: Research for new insights and innovative solutions to health problems (39%, moderate activity)

The following figures are from the standard NPHPSP report for Napa County. An overview of the system's performance for each of the 10 EPHS is provided in Figure 3-2. Each EPHS score is a composite value determined by the scores given to those activities that contribute to each Essential Service. These scores range from a minimum value of 0% (no activity is performed pursuant to the standards) to a maximum of 100% (all activities associated with the standards are performed at optimal levels).

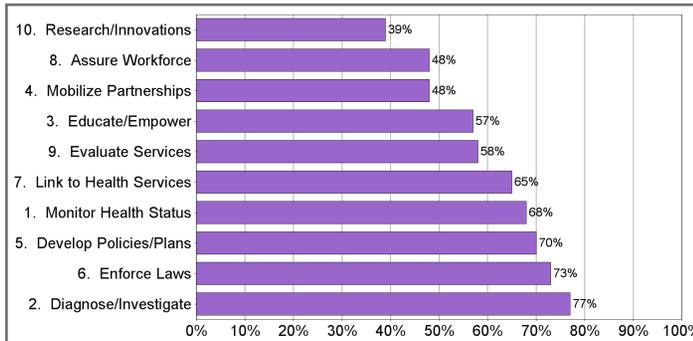
Figure 3-3 on the next page presents the same data as Figure 3-2, but with added information shown in range bars to show the minimum and maximum values of responses within the EPHS along with an overall score for Napa County. Figure 3-4 presents the EPHSs in rank order.

Figure 3-5 provides a composite picture of the previous two graphs. The range lines show the range of responses within each EPHS. The color coded bars make it easier to identify which of the EPHS fall in the five categories of performance activity.

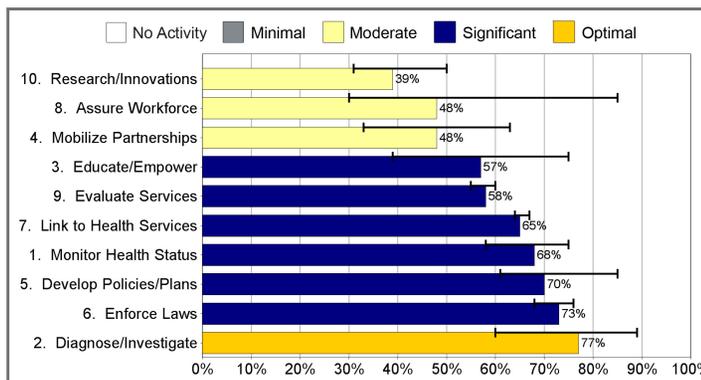
**FIGURE 3-3: SUMMARY OF EPHS PERFORMANCE SCORES AND OVERALL SCORE (WITH RANGE)**



**FIGURE 3-4: RANK ORDERED PERFORMANCE SCORES FOR EACH ESSENTIAL SERVICE**



**FIGURE 3-5: RANK ORDERED PERFORMANCE SCORES FOR EACH EPHS, BY LEVEL OF ACTIVITY**



### 3. NPHPSP ASSESSMENT FINDINGS

The following challenges and opportunities emerged from the assessment. These attributes, assets and areas for improvement will be considered: 1) when determining priorities, goals and strategies for the Community Health Improvement Plan (CHIP); 2) for developing performance indicators for the CHIP's action plan; 3) in selecting priorities in the Napa County Public Health Division's strategic plan; 4) and by numerous countywide programs in programmatic planning and quality improvement efforts.

#### Best Practices, Strengths, and Challenges by Essential Public Health Service (EPHS)

This section describes and highlights each EPHS, contains figures from the standard NPHPSP report for Napa County that show the range and results for each model standard, and the overall EPHS results. Each score is a composite value determined by the scores given to those activities that contribute to each Essential Service.

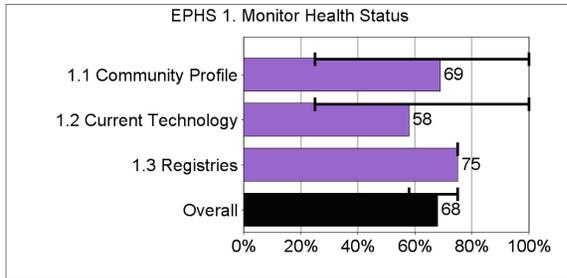
These scores range from a minimum value of 0% (no activity is performed pursuant to the standards) to a maximum of 100% (all activities associated with the standards are performed at optimal levels). Also included are highlights from each group's discussions related to the system's best practices, strengths and challenges related to each EPHS.

#### EPHS 1: MONITOR HEALTH STATUS TO IDENTIFY HEALTH PROBLEMS

This service includes:

- Accurate, periodic assessment of the community's health status, including:
  - Identification of health risks, determinants of health, and determination of health service needs
  - Attention to the vital statistics and health status indicators of groups that are at higher risk than the total population
  - Identification of community assets that support the LPHS in promoting health and improving quality of life

- Utilization of appropriate methods and technology, such as geographic information systems (GIS), to interpret and communicate data to diverse audiences
- Collaboration among all LPHS components, including private providers and health benefit plans, to establish and use population health registries, such as disease or immunization registries



According to the LPHSA Napa County has **significant activity** related to EPHS 1.

**BEST PRACTICES:**

- Collaboration with non-profit hospitals on Community Health Needs Assessment
- Community Health Needs Assessment used by many agencies for planning and policy decision making

**STRENGTHS:**

- Publishes and makes available health data both in the Community Health

Needs Assessment and Napa Health Matters

- Established surveillance and data communication systems
- Good representation on state population health registries

**CHALLENGES:**

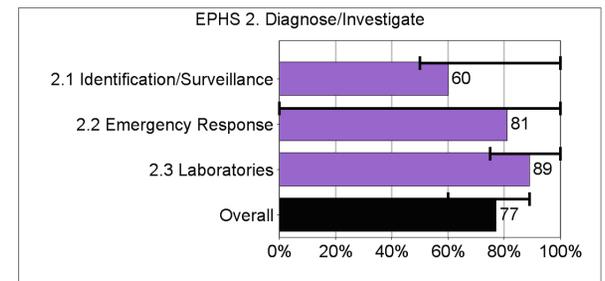
- Community Profile not rich in quality of life or environmental health indicators
- Capacity to map and analyze geocoded data
- Readability of Community Health Needs Assessment: 1) for the general public as a lot of the language is high level and scientific; 2) not available in Spanish
- Collecting data on large undocumented population
- Lack local health improvement plan
- Publication of health data in formats useful to media, system partners and community members
- Lack of detailed media strategy
- System-wide sharing of resources to monitor health status
- Connecting data systems, sharing data among agencies, partners (for example, data from the homeless management

system is available but hasn't been included)

**EPHS 2: DIAGNOSE AND INVESTIGATE HEALTH PROBLEMS AND HEALTH HAZARDS**

This service includes:

- Epidemiological investigations of disease outbreaks and patterns of infectious and chronic diseases and injuries, environmental hazards, and other health threats
- Active infectious disease epidemiology programs
- Access to a public health laboratory capable of conducting rapid screening and high volume testing



According to the LPHSA Napa County has **optimal activity** related to EPHS 2.

**BEST PRACTICES:**

- System-wide use of information technology to support surveillance activities

- Laboratory facilities and personnel that support diagnostic investigations
- Continuous review of public health emergency response effectiveness and opportunities for improvement.

**STRENGTHS:**

- Operate and maintain mechanisms through which partners are provided with information about possible health threats
- Developed plans to investigate and respond to public health threats
- All laboratories licensed
- Sharing of resources for a Regional Public Health Laboratory

**CHALLENGES:**

- Limited capacity and resources to monitor changes in the occurrence of health problems and hazards. For example high levels of violence are being tracked but are not included in surveillance system monitoring
- Sharing of system-wide resources to diagnose and investigate health hazards and problems
- Limited use of surveillance data for health problems and threats that are environmental, social or related to mental health issues

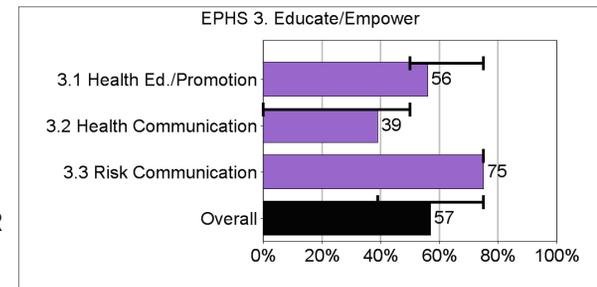
- Lack of awareness among public health system partners of the purpose and capabilities of surveillance and investigative functions of Public Health
- Timely reporting of reportable diseases by physician community
- Ability across the system to respond to disasters is limited

**EPHS 3: INFORM, EDUCATE, AND EMPOWER INDIVIDUALS AND COMMUNITIES ABOUT HEALTH ISSUES**

This service includes:

- Health information, health education, and health promotion activities designed to reduce health risk and promote better health
- Health education and health promotion program partnerships with schools, faith communities, work sites, personal care providers, and others to implement and reinforce health promotion programs and messages that are accessible to all populations
- Health communication plans and activities such as media advocacy and social marketing
- Accessible health information and educational resources

- Risk communication processes designed to inform and mobilize the community in time of crisis.



According to the LPHSA Napa County has **significant activity** related to EPHS 3.

**BEST PRACTICES:**

- Design and implementation of multidimensional health communication, health promotion and education programs for diverse audiences
- Exemplary emergency and crisis communication plans

**STRENGTHS:**

- Ability to deliver culturally and linguistically appropriate health education and promotion materials and activities to many target audiences
- Use of professional expertise in the development of health communications,

health education and promotion interventions

- Ability to communicate across the system in emergencies

**CHALLENGES:**

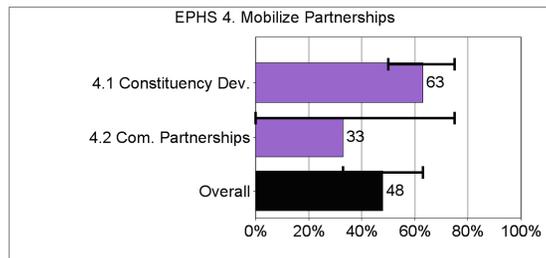
- Involving limited media outlets in health communication
- Assuring that residents are aware of services
- Assisting partners in the development of effective health communications and health education/promotion initiatives
- System fragmentation
- Health education and health promotion not viewed as priorities for funding

**EPHS 4: MOBILIZE COMMUNITY PARTNERSHIPS TO IDENTIFY AND SOLVE HEALTH PROBLEMS**

This service includes:

- Identifying potential stakeholders who contribute to or benefit from public health and increase their awareness of the value of public health
- Building coalitions and working with existing coalitions to draw upon the full range of potential human and material resources to improve community health

- Convening and facilitating partnerships and strategic alliances among groups and associations (including those not typically considered to be health-related) in undertaking defined health improvement activities, including preventive, screening, rehabilitation, and support programs, and establishing the social and economic conditions for long-term health



According to the LPHSA Napa County has **moderate activity** related to EPHS 4.

**BEST PRACTICES:**

- Napa Health Matters Resource Directory

**STRENGTHS:**

- Stakeholder/partner development by organizations (e.g., On the Move's McPherson School Initiative, Clinic Ole and COPE Family Center)

- System-wide partnerships for emergency preparedness and disaster response.
- Strong partnerships between nonprofits and County government
- Community partnerships developed around homeless population work

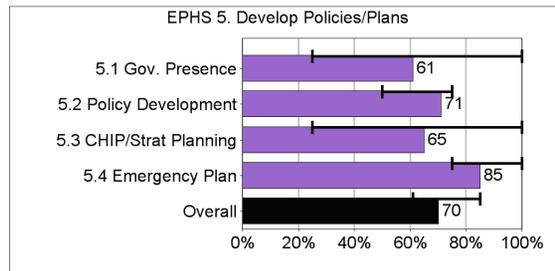
**CHALLENGES:**

- Partnerships with community members
- Making relevant information easily accessible for community members
- System-wide partnership development challenged by geography, isolating Calistoga, St. Helena, Angwin, and American Canyon from the City of Napa
- Connection between business community and nonprofits
- Sharing system-wide resources to develop partnerships
- Strategies to leverage and capitalize on partnerships in times of resource shortages and budget cuts
- Makeshift, reactive approach to mobilizing partnerships
- Inefficiencies in reaching target populations
- Lack of over-arching committee to look at global issues

### EPHS 5: DEVELOP POLICIES AND PLANS THAT SUPPORT INDIVIDUAL AND COMMUNITY HEALTH EFFORTS

This service includes:

- An effective governmental presence at the local level
- Development of policy to protect the health of the public and to guide the practice of public health
- Systematic community-level planning for health improvement and public health emergency response in all jurisdictions
- Alignment of local public health system (LPHS) resources and strategies with a community health improvement plan



According to the LPHSA Napa County has **significant activity** related to EPHS 5.

#### BEST PRACTICES:

- Advocacy for policies that will improve public health, such as bans on smoking in parks in Napa, American Canyon and St. Helena and efforts to reduce secondhand smoke exposure in multi-unit housing
- Healthy Aging Population Initiative Committee (HAPI) policy platform

#### STRENGTHS:

- HHS Alcohol and Drug Services engaging constituents in identifying issues to inform program planning, policy development and advocacy efforts
- Planning for public health emergencies

#### CHALLENGES:

- System-wide collaboration and sharing of resources to conduct health planning and policy development
- Workforce capacity and expertise for planning and policy development
- Using workforce expertise in development of health policy
- Availability of pertinent data for policy development
- Policy work siloed through implementation

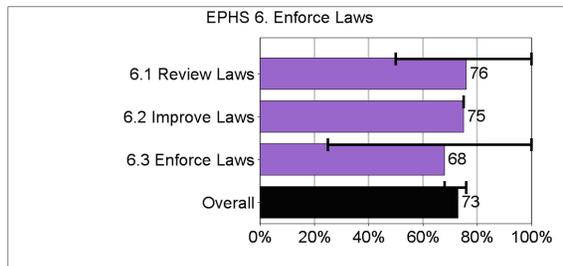
- Assisting with integration of health issues and strategies into local community development plans
- Program or issue specific planning conducted in isolation
- Capacity and funding for Chronic Disease management programs (e.g., obesity and asthma prevention)
- Availability of funding for policy work and budget cuts

### EPHS 6: ENFORCE LAWS AND REGULATIONS THAT PROTECT HEALTH AND ENSURE SAFETY

This service includes:

- The review, evaluation, and revision of laws, regulations, and ordinances designed to protect health and safety to assure that they reflect current scientific knowledge and best practices for achieving compliance
- Education of persons and entities obligated to obey or to enforce laws, regulations, and ordinances designed to protect health and safety in order to encourage compliance
- Enforcement activities in areas of public health concern, including, but not limited to the protection of drinking water; enforcement of clean air standards;

emergency response; regulation of care provided in health care facilities and programs; re-inspection of workplaces following safety violations; review of new drug, biologic, and medical device applications; enforcement of laws governing the sale of alcohol and tobacco to minors; seat belt and child safety seat usage; and childhood immunizations



According to the LPHSA Napa County has **significant activity** related to EPHS 6.

**BEST PRACTICES:**

- Local and state forum provided by California Conference of Local Health Officers (CCLHO) for the discussion of significant health issues in order to develop recommendations for appropriate health policy (including legislative and regulatory review)
- Written guidelines for administration of enforcement activities

**STRENGTHS:**

- Identifying local public health issues that are not adequately addressed in existing laws, regulations and ordinances (e.g., Climate Action Plan and mixed-use building)
- Technical assistance available on enforcing laws, developing ordinances, and with complex enforcement operations

**CHALLENGES:**

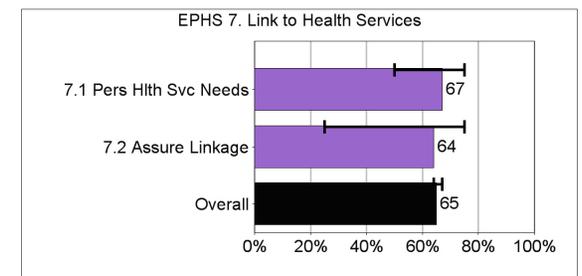
- More effective use of workforce expertise to educate the public about public health laws and regulations
- Reactive system
- Lack of understanding of public health and its functions by community at large
- Budget cuts

**EPHS 7: LINK PEOPLE TO NEEDED PERSONAL HEALTH SERVICES AND ASSURE THE PROVISION OF HEALTH CARE WHEN OTHERWISE UNAVAILABLE**

This service includes:

- Identifying populations with barriers to personal health services
- Identifying personal health service needs of populations with limited access to a coordinated system of clinical care

- Assuring the linkage of people to appropriate personal health services through coordination of provider services and development of interventions that address barriers to care (e.g., culturally and linguistically appropriate staff and materials, transportation services)



According to the LPHSA Napa County has **significant activity** related to EPHS 7.

**BEST PRACTICES:**

- Assessments of vulnerable populations and their needs included in public health preparedness and emergency plans

**STRENGTHS:**

- Collaboration with health care providers to assure access to health care
- Multidisciplinary teams for case management

- Seek and use input on accessibility and availability of services from consumers of personal health care services.
- Workforce skilled in linking people to services
- Local assessments conducted regularly to assess health care service needs

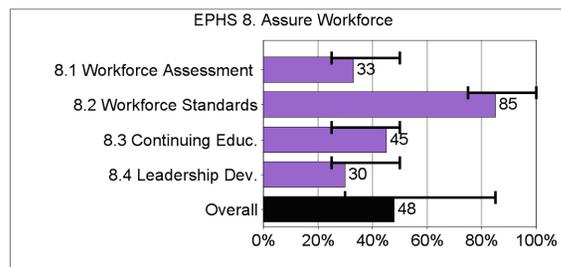
**CHALLENGES:**

- Transportation, immigration status, aging baby boomers, seniors, veterans, and people with mental illness
- Ensuring that information is available in English and Spanish
- Lack of prevention resources and programs
- Sharing system-wide resources to increase access to services
- Coordination between health and social services in the private sector
- Primary care providers disconnected from community
- Fragmented system: Sharing data on health care services, providers, shortage areas, barriers
- Lack of medical home
- Linking to and/or providing health, dental, and social services outside the City of Napa

**EPHS 8: ASSURE A COMPETENT PUBLIC AND PERSONAL HEALTH CARE WORKFORCE**

This service includes:

- Assessment of all of the workers within the LPHS (including agency, public, and private workers, volunteers, and other lay community health workers) to meet community needs for public and personal health services
- Maintaining public health workforce standards, including efficient processes for licensure/credentialing of professionals and incorporation of core public health competencies needed to provide the Essential Public Health Services into personnel systems
- Adoption of continuous quality improvement and life-long learning programs for all members of the public health workforce, including opportunities for formal and informal public health leadership development



According to the LPHSA Napa County has **moderate activity** related to EPHS 8.

**BEST PRACTICES:**

- Leadership Napa Valley: a program designed to identify, train and inspire current and future community leaders from all segments of Napa County
- Standards and mechanisms in place to ensure that professionals meet all competencies required by law
- Required food handling course completed by all food businesses
- Employee satisfaction surveys regularly conducted
- Napa County Caregiver Permit ordinance the first of its kind in the state

**STRENGTHS:**

- Some system partners conducting workforce analyses to allocate resources to fill present gaps and prevent duplication of services
- Leveraging low and no cost on-line educational opportunities
- Napa Valley Coalition of Non-Profit Agencies providing leadership development training

**CHALLENGES:**

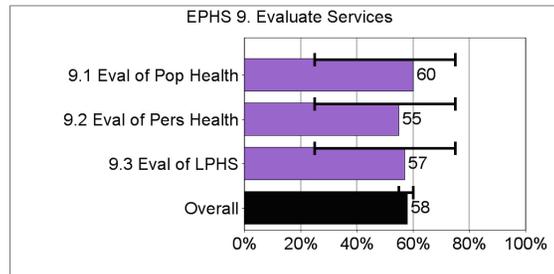
- No mechanism in place for all organizations to communicate and collaborate
- Lack of resources for training, continuing education, recruitment, and retention

- Lack of succession planning, career ladders and advancement/leadership opportunities
- Inefficient, ineffective leveraging of partnerships among agencies and institutions of higher learning to enhance and improve current workforce capacity and support education of future system professionals
- Lack of diverse and culturally competent workforce that mirrors the community
- Budget cuts

**EPHS 9: EVALUATE EFFECTIVENESS, ACCESSIBILITY, AND QUALITY OF PERSONAL AND POPULATION-BASED HEALTH SERVICES**

This service includes:

- Evaluating the accessibility and quality of services delivered and the effectiveness of personal and population-based programs provided
- Providing information necessary for allocating resources and reshaping programs



According to the LPHSA Napa County has **significant activity** related to EPHS 9.

**BEST PRACTICES:**

- Collaborative process for Napa County's Community Health Needs Assessment with the three hospitals: St. Helena Hospital, Kaiser, Queen of the Valley Medical Center, Public Health, Community Health Clinic Ole, Napa Valley Vintners and the Napa Valley Coalition of Non-Profit Agencies participating
- Client satisfaction surveys regularly conducted, with results incorporated into quality improvement plans

**STRENGTHS:**

- Nonprofit organizations collaboration.
- Programs using "gatekeeper" approach so that service providers can assess and link community members to additional services

- Leveraging technology to deliver health services-with electronic health records and e-mail surveys
- Collaboration and enthusiasm around LHNC

**CHALLENGES:**

- Lack of prevention programs and school policies to support healthy eating and physical activity
- Managing and sharing of evaluation resources and results
- Lack of resources for evaluation
- Healthcare accessibility during non-traditional business hours
- Workforce reductions
- Budget cuts leading to: 1) reduced healthcare coverage options for employees, 2) elimination of Physical Education teachers, and 3) reduction of school nurses
- Public and private sector partnerships

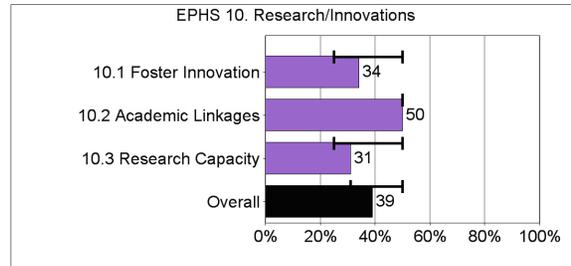
**EPHS 10: RESEARCH FOR NEW INSIGHTS AND INNOVATIVE SOLUTIONS TO HEALTH PROBLEMS**

This service includes:

- A continuum of innovative solutions to health problems ranging from practical field-based efforts to foster change

in public health practice, to more academic efforts to encourage new directions in scientific research.

- Linkages with institutions of higher learning and research
- Capacity to undertake timely epidemiological and health policy analyses and conduct health systems research



According to the LPHSA Napa County has **moderate activity** related to EPHS 10.

**BEST PRACTICES:**

- Napa Health Matters-Healthy Communities Promising Practices Directory

**STRENGTHS:**

- Working with interns from local colleges and universities
- Research initiated for recent local studies including "A Profile of Immigrants in Napa County," "Napa

County Asian Pacific Islander Study," "Closing the Achievement Gap In Napa County," and the "Healthy Aging Needs Assessment"

**CHALLENGES:**

- Sharing of system-wide resources for research
- Focus of funding opportunities on evidence-based practices doesn't allow for innovation
- Relationships among system partners, institutions of higher learning, and research organizations

- Set goals, identify strategies, develop action plans, and design processes for monitoring progress and evaluation for the CHIP action cycle.

**4. NEXT STEPS**

Assessment results indicate that Napa County's local public health system demonstrates moderate to optimal activity on national benchmarks for performance of the EPHS. However, results also point to areas in which the system can focus on performance improvement. LHNC's next steps toward system wide improvement include the following:

- Broadly disseminate and share the LPHSA results with system partners.
- Use the results in the priority setting process for the CHIP.

# napa county community health status assessment

Improving the health of individuals, families, and communities requires a framework that considers all of *the conditions in which people are born, grow, live, work and age, including the health system*. The Community Health Status Assessment (CHSA) takes a comprehensive look at the health status of Napa County and helps identify community health and quality of life issues and strengths. This CHSA addresses two main questions: **How healthy are Napa County residents? What does the health status of Napa County look like?**

The CHSA provides data for 120 indicators in eight broad-based categories related to health and wellbeing. A subset of indicators is highlighted in the following narrative report and the remaining indicators are available in a data book as an appendix. Indicator data are grouped into categories for organizational purposes, but it is important to recognize that indicators may relate to more than one facet of health and

therefore may be relevant across multiple data categories. The data categories included in this CHSA are as follows:

- Socioeconomic Characteristics
- Quality of Life
- Social and Mental Health
- Maternal, Child and Adolescent Health
- Healthcare and Preventive Services
- Behavioral Risk Factors
- Illness and Injury
- Causes of Death

## 1. METHODS AND LIMITATIONS

The Napa County Public Health Division, in collaboration with Harder+Company and a subcommittee of Napa County stakeholders (the CHSA subcommittee), conducted a comprehensive review of secondary data sources to obtain the most current and reliable data for the CHSA. Secondary data sources and resources include, but are not limited to, the U.S. Census, the

American Community Survey, the California Department of Public Health (CDPH), the California Department of Education (CDE), the California Health Interview Survey (CHIS), the California Healthy Kids Survey (CHKS), the Behavioral Risk Factor Surveillance System (BRFSS), the CDC National Center for Health Statistics, the California Department of Justice, Healthy People 2020 (HP 2020), and the 2012 County Health Rankings and Roadmaps. Data collected through the Napa County Public Health Vital Statistics Office and the Public Health Communicable Disease Control program are also utilized in this

### Chapter Contents:

1. Methods and Limitations .....	49
2. Socioeconomic Characteristics .....	50
3. Quality of Life .....	56
4. Social and Mental Health .....	57
5. Maternal, Child, and Adolescent Health .....	72
6. Healthcare and Preventative Services .....	76
7. Behavioral Risk Factors .....	79
8. Illness and Injury .....	85
9. Causes of Death .....	97

report. In all cases, the CHSA presents the most current data and analyses available at the time this report was written. When needed, raw data were exported in database formats, cleaned, and basic descriptive statistics were calculated. SAS and EpiInfo were utilized for data analysis.

Data considered for inclusion in this report were carefully reviewed by the CHSA subcommittee to ensure that they met specific criteria with respect to data quality, availability and relevance to health in Napa County. Sample sizes for datasets were examined to ensure that they were large enough for analyses, particularly for sub-populations. If sample sizes were not large enough, results were either aggregated over several years, were not presented, or the indicator was presented as “statistically unstable.”

For community health surveys such as CHIS and BRFSS, many survey questions are rotated and/or asked in alternate years; therefore, results from those sources may be presented in varying years or in multi-year estimates. When differences over time or between groups are statistically significant they are noted as such.

A limitation of the cross-sectional data currently available is that it does not allow for examination of the cumulative or interactive effects of various factors that may impact health status. For example, being poor, female, Latino, and living in a certain neighborhood may have cumulative effects on health outcomes that are not reflected in individual indicators. In addition, while geographic boundaries do not necessarily reflect residents’ personal definitions of neighborhood, geographic data are presented in the format in which they are available (i.e., census tract). Finally, population descriptions (e.g., demographic categories) may vary slightly throughout the report based on the source of the data.

## 2. SOCIOECONOMIC CHARACTERISTICS

The first section of the Community Health Status Assessment focuses on the socioeconomic status (SES) of Napa County residents. SES determines a person’s access to resources that are important for health, like material goods, money, power, friendship networks, healthcare, leisure time, safe and affordable housing, food and recreation and educational opportunities. It is access

to such resources that makes it possible for people to have good health and wellbeing.

This section highlights a range of social and economic factors that contribute to individual and population health. These data reflect the evidence that improving the overall health of a population depends on improvements in underlying health factors, including meaningful employment, income security, educational opportunities, and an engaged, active community. These factors are in part responsible for the unequal differences in health status within and between communities. The information below highlights key socioeconomic characteristics. A complete list of indicators can be found in the data book (Appendix B).

### Poverty: Individual

Between 2006 and 2010, 10.0% of Napa residents were living below the federal poverty level (FPL) and 26.4% were living below 200% FPL. The following groups of people, which are not mutually exclusive, exhibited higher than average rates of poverty: **females, people under 18 years old, Hispanics/Latinos, female householders with no husband present, people in other living arrangements (e.g., single or**

**FIGURE 4-1: POVERTY STATUS BY SEX, AGE, RACE/ETHNICITY, LIVING ARRANGEMENT, EDUCATIONAL ATTAINMENT, AND CITIZENSHIP STATUS. (2006-2010)**

	Total Estimate	Percent living below the FPL (estimates that exceed the Napa average are bold)
<i>Population for whom poverty status is determined</i>	130,057	10.0%
<b>Sex</b>		
Male	64,340	9.8%
Female	65,717	<b>10.1%</b>
<b>Age</b>		
Under 18 years	30,684	<b>12.0%</b>
18 to 64 years	79,716	9.9%
65 years and over	19,657	7.2%
<b>Race/Ethnicity</b>		
Hispanic or Latino origin (of any race)	40,226	<b>14.1%</b>
White alone, not Hispanic or Latino	76,119	8.0%
<b>Living Arrangement</b>		
In family households	107,806	8.2%
In married-couple family	84,693	4.9%
In Female householder, no husband present households	14,472	<b>22.3%</b>
In other living arrangements*	22,251	<b>18.4%</b>
<b>Educational Attainment</b>		
Population 25 years and over**	88,980	8.8%
Less than high school graduate	15,474	<b>17.1%</b>
High school graduate (includes equivalency)	18,031	<b>10.4%</b>
Some college or associate's degree	28,345	7.7%
Bachelor's degree or higher	27,130	4.2%
<b>Citizenship Status</b>		
Native	100,448	8.8%
Foreign born	29,609	<b>13.9%</b>
Naturalized citizen	11,206	7.8%

Source: American Community Survey, 2006-2010, 5 yr, S1703

Note: Data not presented for all race/ethnic groups due large margin of errors (>30%) of estimates

\* Other single or non-family households

\*\*Educational attainment is assessed on population that is 25 years and over.

**non-family households), people with a high school degree or less, and foreign born individuals.** Figure 4-1 details the poverty status for Napa residents by sex, age, race/ethnicity, living arrangements, educational status, and citizenship status.

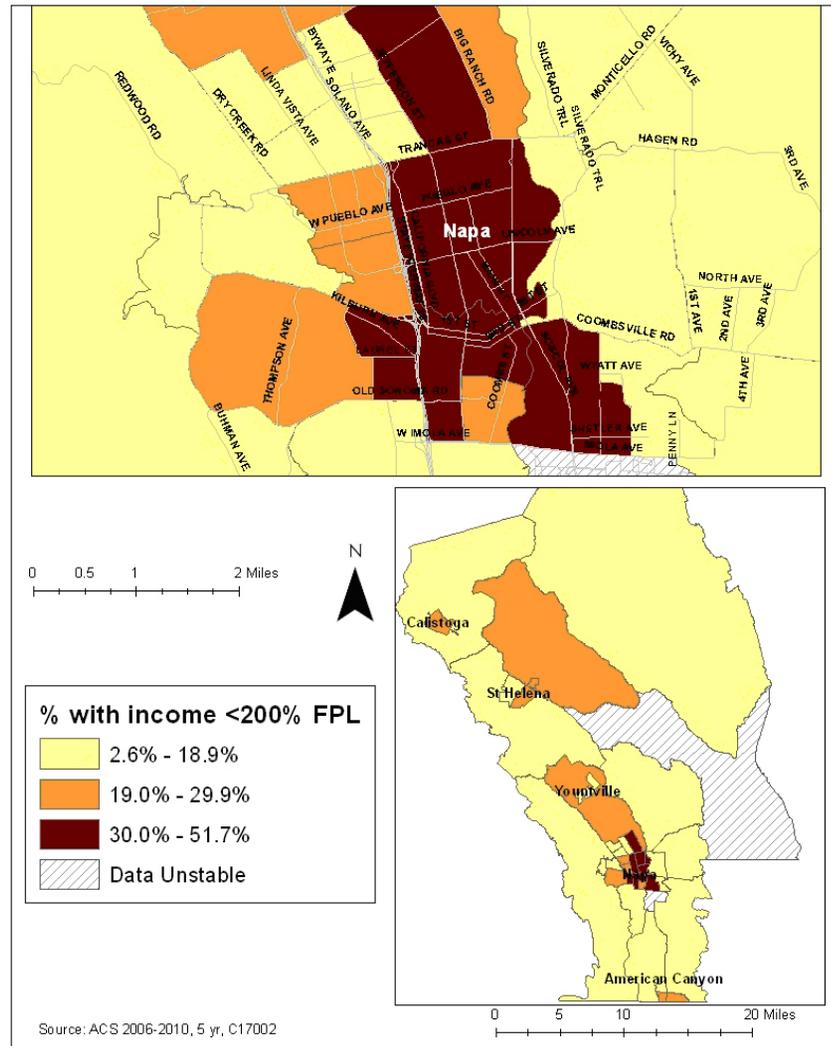
Figure 4-2 on the next page illustrates geographically the percent of individuals earning less than \$20,800 a year,<sup>1</sup> or living below 200% of the federal poverty level.<sup>2</sup> The areas in red are the census tracts with the highest concentration of people living in poverty. In these census tracts between **30% and 52%** of the population earns below \$20,800. Income below 200% FPL comes closer to estimating the true extent of poverty in the County as it is double the poverty level (\$10,400 for an individual) and comparable to the living wage or self sufficiency standard for an individual resident of Napa County, which is estimated to be \$23,400 annually.<sup>3</sup> Living wage takes into account costs for housing, food, health care, taxes and other living expenses in a region and is thus generally regarded as a better measure of poverty than the federal standard, but in this case living wage and income less than 200% of federal poverty level are very similar. It should be noted that there is not a standard model for calculating living wage or the self-sufficiency standard and therefore available calculators provide different estimates of costs of living in Napa County. The estimates for living wage cited in this report provide a minimum estimate of the cost of living for low wage individuals and families and do not reflect a middle class standard of living.

<sup>1</sup> U.S. Department of Health & Human Services, 2008 Federal Poverty Guidelines, <http://aspe.hhs.gov/poverty/08poverty.shtml>

<sup>2</sup> The data presented in the maps is organized by geographic regions designated by the census, also known as a census tract.

<sup>3</sup> Poverty in America Living Wage Calculator, Massachusetts Institute of Technology, <http://livingwage.mit.edu>

Figure 4-2: NAPA COUNTY RESIDENTS LIVING BELOW 200% OF THE FEDERAL POVERTY LEVEL (FPL) BY CENSUS TRACT, 2006-2010



### Poverty: Children and Families

Approximately 34% of Napa County families with children under 18 were living below 200% FPL between 2006 and 2010. A family of four is below 200% FPL if their annual income is under \$42,400.<sup>4</sup> In contrast, the estimated annual living wage for a family with two adults and two children is \$46,675 in Napa County; this estimate assumes that one adult in the household provides childcare and therefore the cost of childcare is not included in the estimate.<sup>5</sup> However, there is a large gap between living wage and 200% FPL for single parent households primarily due to the costs of childcare. The living wage for a household with one adult and two children is \$55,400, but a family of three is considered to be below 200% FPL only if they make less than \$38,180 per year. This suggests that using a threshold of 200% FPL, twice the federal poverty level, still substantially underestimates the financial burdens of single parent households in Napa County.

The map in Figure 4-3 on the next page illustrates the percentage of families living below 200% of the federal poverty level (FPL). The City of Calistoga and the City of Napa each had census tracts with higher numbers (39% and 54%, respectively) of families living below 200% FPL; these are shown in red. Of note, **79.4%** of students in the Calistoga Joint Unified School District are eligible to receive free or reduced lunch, indicating that nearly 80% of the student population had a family income below 185% of the federal

<sup>4</sup> U.S. Department of Health & Human Services, 2008 Federal Poverty Guidelines, <http://aspe.hhs.gov/poverty/08poverty.shtml>

<sup>5</sup> Poverty in America Living Wage Calculator, Massachusetts Institute of Technology, <http://livingwage.mit.edu>

FIGURE 4-3: FAMILY POVERTY LEVEL BY CENSUS TRACT, NAPA COUNTY, 2006-2010

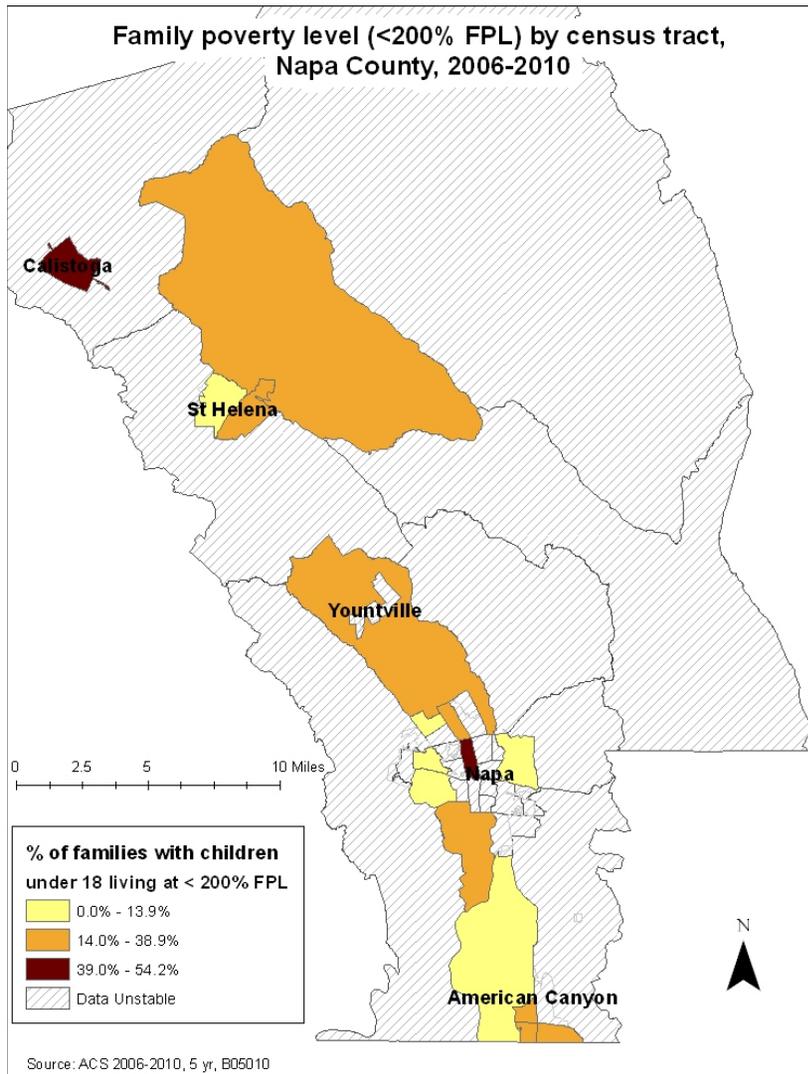


FIGURE 4-4: STUDENTS ELIGIBLE TO RECEIVE FREE OR REDUCED PRICE LUNCH, 2010-2011

School District	Percent
Calistoga Joint Unified	79.4%
Howell Mountain Elementary	62.4%
Napa County Office of Education	64.1%
Napa Valley Unified	40.5%
Pope Valley Union Elementary	34.3%
Saint Helena Unified	39.0%

Source: As cited on kidsdata.org, California Dept. of Education, Free/Reduced Price Meals Program & CalWORKS Data Files, <http://www.cde.ca.gov/ds/sh/cw/filesafdc.asp> (Feb. 2012); U.S. Dept. of Education, NCES Common Core of Data, <http://nces.ed.gov/ccd/bat/index.asp> (Feb. 2012).

poverty level.<sup>6</sup> Figure 4-4 details the percentage of students who are eligible for free or reduced price meal by school district. Families living in poverty struggle to pay for basic necessities like rent, food, childcare, health care, and transportation and the data often fail to capture the difficult choices and tradeoffs families endure.

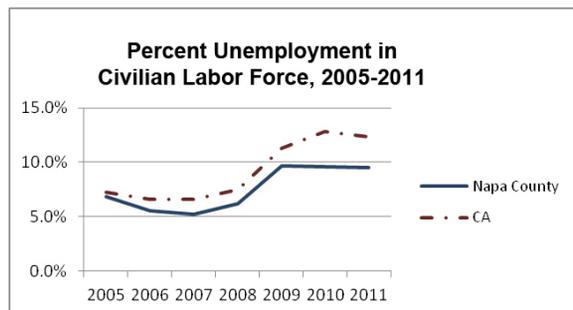
### Employment

Having a job that pays well makes it easier for workers to maintain good health because they have the ability to live in healthier neighborhoods, access quality education for their children, secure child care services, and buy healthy food. Job loss and unemployment are associated with a variety of negative health effects.<sup>7</sup>

<sup>6</sup> To be eligible to receive free or reduced price meals a child's family income must fall below 130% of the federal poverty level (\$29,055 for a family of four in 2011) to qualify for free meals, or below 185% of the federal poverty guidelines (\$41,348 for a family of four in 2011) to qualify for reduced-cost meals.

<sup>7</sup> Robert Wood Johnson Foundation, Health Policy Snapshot, Public Health and Prevention, Policy Brief December 2012, "How Does Employment—or Unemployment—Affect Health?" [http://www.rwjf.org/content/dam/farm/reports/issue\\_briefs/2012/rwjf403360](http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2012/rwjf403360)

**FIGURE 4-5: PERCENT UNEMPLOYMENT IN CIVILIAN LABOR FORCE, 2005-2011**



**FIGURE 4-6: PERCENT OF THE CIVILIAN LABOR FORCE THAT IS UNEMPLOYED BY RACE/ETHNICITY, 2006-2010**

Race/Ethnicity	Unemployment Rate (rates that exceed Napa average are bold)
Hispanic/Latino	<b>9.7%</b>
Two or more races	<b>8.4%*</b>
Black or African American	7.0%*
Asian	6.5%*
Non-Hispanic White	6.3%
<b>Napa County</b>	<b>7.4%</b>

Source: ACS 2006-2010, 5 year estimates, DP03

\* Estimate is statistically unstable (MOE >30% of estimate)

Note: Data not available for American Indian and Alaska Native or for Native Hawaiian and Other Pacific Islander because the number of sample cases is too small.

Between 2006 and 2010, Napa County’s unemployment rate averaged 7.4%. The unemployment rate in Napa County peaked in 2009 at 9.7% and decreased slightly to 9.5% in 2011 (see Figure 4-5). Unemployment was **highest** among Hispanic/Latino residents and those who identify with “two or more races,” and

**lowest** among non-Hispanic white and Asian residents. The table below (Figure 4-6) provides Napa County’s unemployment rates broken out by race and ethnicity.

Figure 4-7 shows the percent of unemployment in the civilian labor workforce in Napa County by census tract. The civilian labor workforce refers to people who identify themselves as being in the labor force, are eligible to work and are at least sixteen years old, are not serving in the military and are not institutionalized. In addition, the civilian labor workforce does not include people who are not seeking employment including students, retired people, stay-at-home parents, and people in prisons or jails. American Canyon and Yountville had the lowest percentage of people employed, with **10% to 15%** of their workforce unemployed.

### Educational Attainment

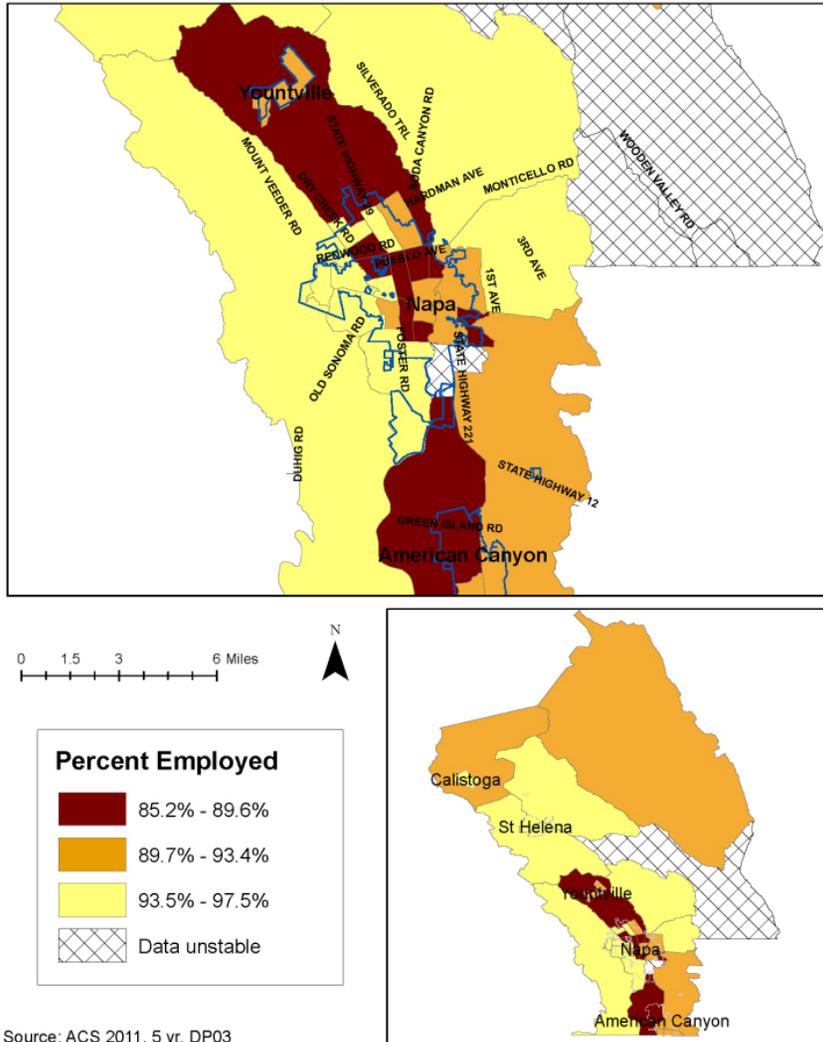
People who receive quality education tend to have better jobs, higher income and live longer, healthier lives than those

with less education.<sup>8</sup> Educational attainment, or the highest level of school completed, is an important determinant of a person’s overall health. Completion of formal education (e.g., high school) is a key pathway to employment and access to healthier and higher paying jobs that can provide food, housing, transportation, health insurance, and other basic necessities for a healthy life.

In the 2010-2011 academic year, the Napa County High School dropout rate was **13.3%**. Dropout rates were higher among **Hispanic/Latino, English Language Learners, special education and socio-economically disadvantaged students**. According to the California Department of Education, students are considered socio-economically disadvantaged if they receive free and reduced-price lunches or if neither parent graduated from high school. Figures 4-8 and 4-9 display countywide public high school dropout rates by race/ethnicity and by program.

<sup>8</sup> Robert Wood Johnson Foundation, Health Policy Snapshot, Public Health and Prevention, Policy Brief December 2012, “Why Does Education Matter So Much to Health?” <http://www.rwjf.org/content/dam/farm/reports/issue-briefs/2012/rwjf403347>

FIGURE 4-7: PERCENT OF CIVILIAN LABOR FORCE EMPLOYED, 2007-2011



Source: ACS 2011, 5 yr, DP03

FIGURE 4-8: HIGH SCHOOL DROPOUT RATES BY RACE/ETHNICITY, 2010-2011

	Number of dropouts	Percent
California	72,314	14.4%
Napa County	221	13.3%
Hispanic/Latino	122	16.6%
Non-Hispanic White	66	9.7%

Source: California Department of Education

Note: Data not presented for other race/ethnic groups due to small numbers (10 or fewer)

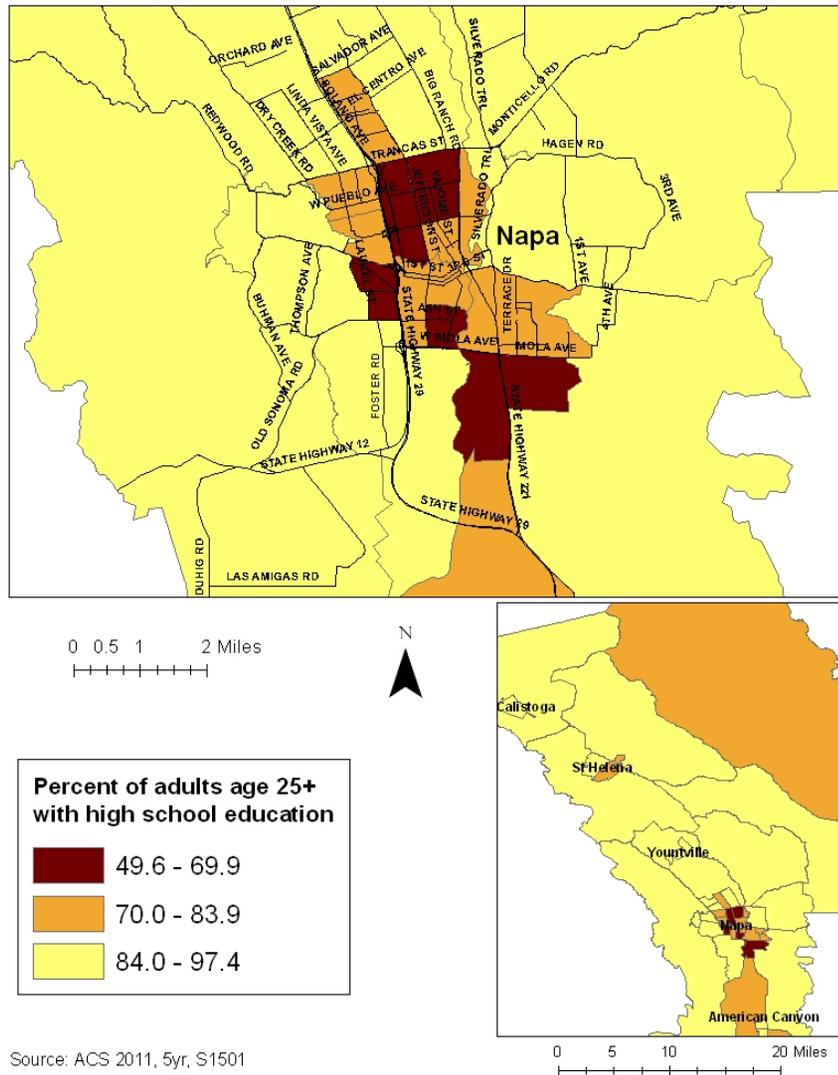
FIGURE 4-9: HIGH SCHOOL DROPOUT RATES BY PROGRAM, NAPA COUNTY, 2010-2011

	Number of dropouts	Percent
All Students	221	13.3%
English Learners	95	28.6%
Migrant Education	29	21.6%
Special Education	37	20.2%
Socioeconomically Disadvantaged	153	19.1%

Source: California Department of Education

Figure 4-10 on the next page shows the percentage of Napa County adults who have a high school level education or higher by census tract. Darker color census tracts have a higher percentage of adults who have not completed high school. In some census tracts within the City of Napa, only 50% to 70% of adults have completed a high school education. Lower educational attainment is associated with poorer self-rated health status, higher infant mortality rates, lower cancer screening rates, and

**FIGURE 4-10: EDUCATIONAL ATTAINMENT BY CENSUS TRACT, NAPA COUNTY, 2007-2011**



Source: ACS 2011, 5yr, S1501

many other health outcomes and health behaviors.<sup>9</sup> It is estimated that raising the health of all Americans to that of college educated Americans would result in annual gains of over 1 trillion dollars of increased health value.<sup>10</sup>

### 3. QUALITY OF LIFE

For an individual, quality of life includes a person’s overall sense of wellbeing, whereas the quality of life for a community refers to the supportive environment that surrounds individuals within their community. Factors related to quality of life affect both physical and mental health, influencing whether a person is able to engage with the community by attending school, exercising, playing/recreating outdoors, and accessing nutritious food as well as participating in other activities.

The physical environment, or place in which we live, also affects the health status of a community and influences quality of life, years of healthy life lived, and the magnitude of health disparities. Factors such as clean air and the availability of open space for recreation are essential to physical health.

The following data are examples of factors affecting the quality of life and health status of a community.

#### Pollution

Clean air is important for physical health and for the overall quality of life. Air pollution from fixed and mobile sources

<sup>9</sup> Egerter S, Braveman P, Sadegh-Nobari T, Grossman-Kahn R, Dekker M. Issue Brief 6: Education and Health. Robert Wood Johnson Foundation Commission to Build a Healthier America. September 2009.

<sup>10</sup> Galea S, Tracy M, Hoggatt KJ, DiMaggio C, Karpati A. Estimated deaths attributable to social factors in the United States. Am J Public Health 2011;101(8):1456-1465.

(e.g., factories and cars, respectively) is a complex mixture of gases, fumes, and particles released into the atmosphere from the combustion of fossil fuels and evaporation of solvents. Ozone that forms at the ground-level and fine particulate matter are two indicators of air pollution that are linked to short-term and long-term adverse health effects. Consequences of short-term exposure to ozone and fine particulate matter include decreased lung function and respiratory tract symptoms like coughing, throat irritation, and chest pain; long-term effects of exposure have been linked to death due to lung cancer, heart disease, respiratory disease, and acute respiratory infections in children.<sup>11</sup>

Ozone levels are measured by examining the number of days from May to October that exceed the eight-hour federal ozone standard of 0.075 parts per million (ppm). An unhealthy day is defined as a day (from May to October) in which the daily maximum value exceeded the federal

<sup>11</sup> Particulate Matter Integrated Science Assessment Project Team. Integrated Science Assessment for Particulate Matter. EV. Research Triangle Park, NC: U.S. Environmental Protection Agency; 2009. <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=216546#Download>. Accessed on January 4, 2013.

standard. The Napa County average is 0.21 days, which is **lower** than the state average of 11.8 days (see Figure 4-11). Places within Napa County with a higher average number of days of ozone exposure compared to the County overall include American Canyon, Moskowite Corner, Oakville, Silverado Resort and the City of Napa, although the differences are extremely small and amount to an average of less than one day per year of unhealthy ozone exposure.

The amount of particulate matter in the air, particularly fine particulate matter, is another indicator of air quality. Particulate matter that has an aerodynamic diameter of 2.5 microns or less is called PM2.5 and is capable of reaching deep into the lungs and contributing to health problems such as decreased lung function and respiratory tract symptoms like coughing, throat irritation, and chest pain; long-term effects of exposure to pollution have been linked to death due to lung cancer, heart disease, respiratory disease, and acute respiratory infections in children. The annual average of ambient fine particulate matter in Napa County is **8.5 mg/m<sup>3</sup>** which is **lower** than the California average

FIGURE 4-11: MEAN NUMBER OF UNHEALTHY DAYS\* OF OZONE EXPOSURE, NAPA COUNTY, 2007-2009

Place	Mean # of days
California Average	11.8
Napa County	0.21
American Canyon	0.33
Moskowite Corner	0.33
Oakville	0.33
Silverado Resort	0.33
City of Napa	0.22
Rutherford	0.05
Angwin	0
Calistoga city	0
Deer Park	0
St. Helena	0
Yountville	0
Source: Air Monitoring Network, Air Resources Board (CARB); CDPH Office of Health Equity *Days May to October that exceed 8-hour federal ozone standard of 0.075 ppm.	

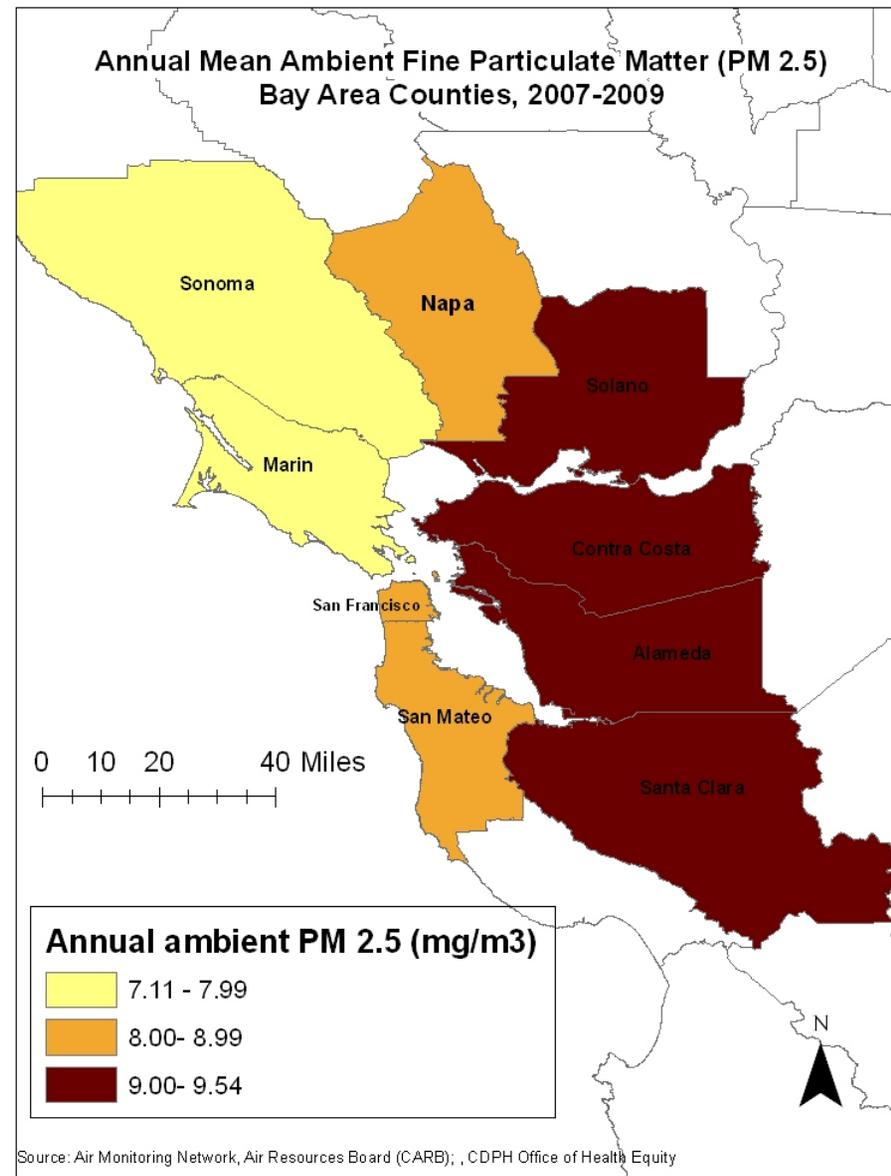
of 11.7 mg/m<sup>3</sup>. Places within the County that are higher than the Countywide PM2.5 average include **American Canyon and the City of Napa** (see Figure 4-12 on the next page).

FIGURE 4-12: ANNUAL AMBIENT FINE PARTICULATE MATTER, NAPA COUNTY, 2007-2009

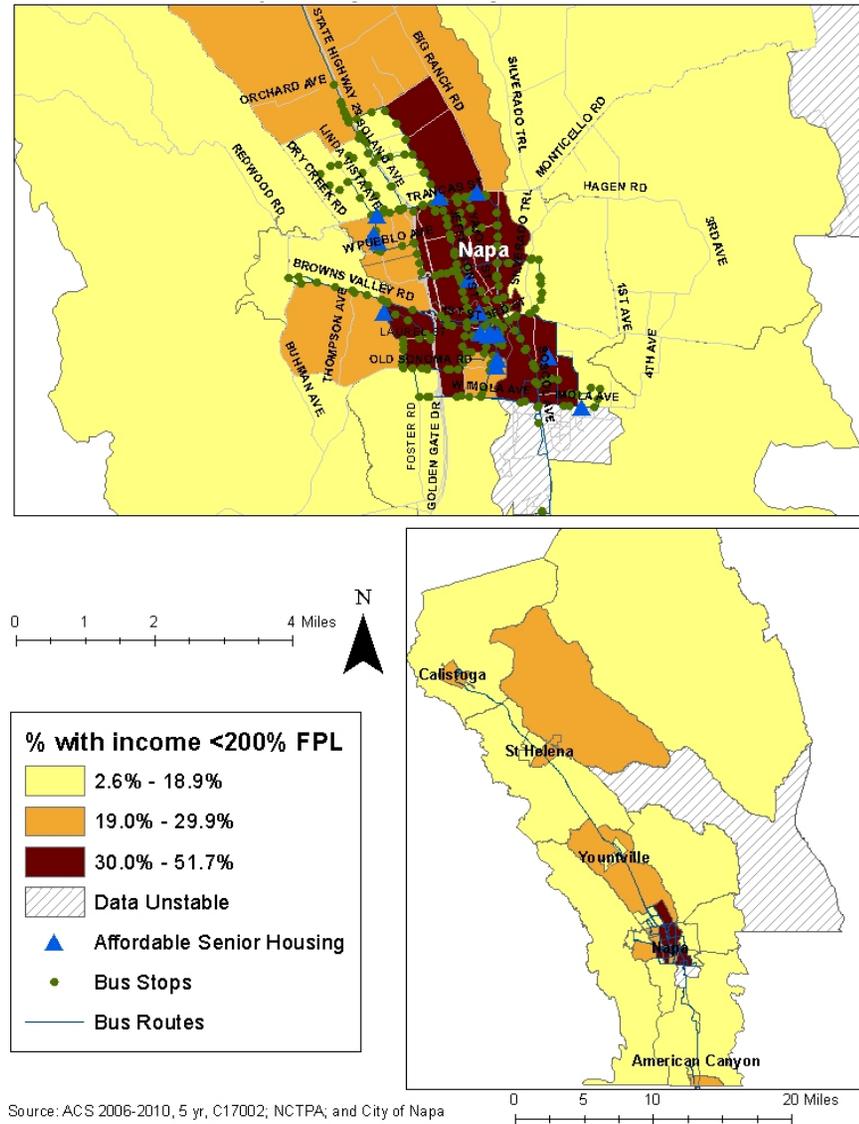
Place	PM2.5 (mg/m3)
California Average	11.7
Napa County	8.5
American Canyon	9.2
City of Napa	8.6
Silverado Resort	8.4
Oakville	8.4
Moskowite Corner	8.4
Yountville	8.3
Rutherford	8
St. Helena	7.9
Deer Park	7.8
Angwin	7.6
Calistoga	7.1
Source: Air Monitoring Network, Air Resources Board (CARB); CDPH Office of Health Equity	

In terms of fine particulate matter pollution throughout the nine County Bay Area region, the map in Figure 4-13 indicates that Napa County falls somewhere in the middle in terms of average annual PM2.5 levels. Sonoma and Marin counties have lower annual PM2.5 levels, whereas Napa County, San Mateo County and San Francisco have similar levels of fine particulate matter pollution based on data collected between 2007 and 2009.

FIGURE 4-13: ANNUAL MEAN AMBIENT FINE PARTICULATE MATTER (PM 2.5), BAY AREA COUNTIES, 2007-2009



**FIGURE 4-14: BUS ACCESS AND FEDERAL POVERTY LEVEL (FPL) OF NAPA COUNTY RESIDENTS BY CENSUS TRACT**



### Access to Transportation

Individuals who live close to transit are more likely to be transit users and drive their cars less than people residing far from transit. Increased access to active and public transit is associated with increases in physical activity, which reduces risks of chronic disease and obesity.<sup>12</sup> The creation of walkable and bikeable communities through the construction and maintenance of adequate sidewalks, crosswalks, and safe bicycle routes can make a significant contribution to overall community health by promoting more active lifestyles. This is especially significant within cities, particularly in the City of Napa, which, due to its relatively flat terrain, is well situated to accommodate significantly expanded pedestrian and cycling infrastructure. All local governments in Napa County have formal "Complete Streets" policies that mandate that walking and cycling be considered in all transportation infrastructure projects. In addition, increased use of public transportation has environmental health benefits, including reductions in air pollution, greenhouse gases and noise pollution. Access to public transportation is also especially important for low-income and elderly individuals who may not have access to a car.

Napa County is geographically spread out, with Calistoga located in the northern part of the County approximately 40 miles from American Canyon at the southern end of the County. Vine Transit, the Napa County public transportation service, provides thirteen bus routes for County residents. Of the thirteen bus lines, eight serve the City of Napa specifically and two bus lines connect to areas north of the City of Napa including St. Helena, Yountville,

<sup>12</sup> Frank LD, Andresen M, Schmid T. Obesity relationships with community design, physical activity, and time spent in cars. Am J Prev Med 2004;27:87-96.

and Calistoga. In 2013, bus frequency was increased from once an hour to once every 30 minutes. Currently, populations located in the Northeastern region of the County including Pope Valley, Lake Berryessa, and Angwin do not have access to public transportation service.<sup>13</sup>

Low-income and elderly individuals are groups that may benefit the most from accessibility to public transportation. As displayed in Figure 4-14, the highest concentration (shown in red) of individuals living below 200% of the federal poverty level (FPL) is located within the City of Napa. There are a total of 776 affordable senior housing units in the City of Napa and the locations of these housing facilities are also displayed on the map. Sixteen out of 16 (100%) of senior affordable housing locations are within the City of Napa. With eight out of thirteen bus lines serving the City of Napa, and a high concentration of bus stops throughout the city, the transit system appears to be serving those who might need it most. However, it is important to note that this does not take into account frequency of bus service and does not necessarily mean that a high number of

<sup>13</sup> Source: Napa County Transportation and Planning Agency

seniors or low-income individuals are using public transit. Another consideration related to transportation is access to regional buses and rails since many Napa County residents commute out-of-County for work. Currently Vine Transit does offer limited regional routes to Solano and Sonoma Counties, as well as an express route to the BART station in El Cerrito.

### English Reading Proficiency

Reading scores at an early age are highly correlated with later academic success. One study found that students who do not read proficiently by third grade are four times more likely to leave high school without a diploma than proficient readers.<sup>14</sup> By third grade, students are expected to know the fundamentals of reading and be able to apply their reading skills throughout the school curriculum. This shift from “learning to read” to “reading to learn” is extremely difficult for children who have not mastered basic reading skills.<sup>15</sup> State and national

<sup>14</sup> Hernandez, Donald J. Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation, *The Annie E. Casey Foundation; Center for Demographic Analysis, University at Albany, State of New York; Foundation for Child Development*, 2012

<sup>15</sup> Musen, L. (2010). Early reading proficiency. New York, NY: Annenberg Institute for School Reform at Brown University. Retrieved from: [http://www.annenberginstitute.org/pdf/LeadingIndicator\\_Reading.pdf](http://www.annenberginstitute.org/pdf/LeadingIndicator_Reading.pdf)

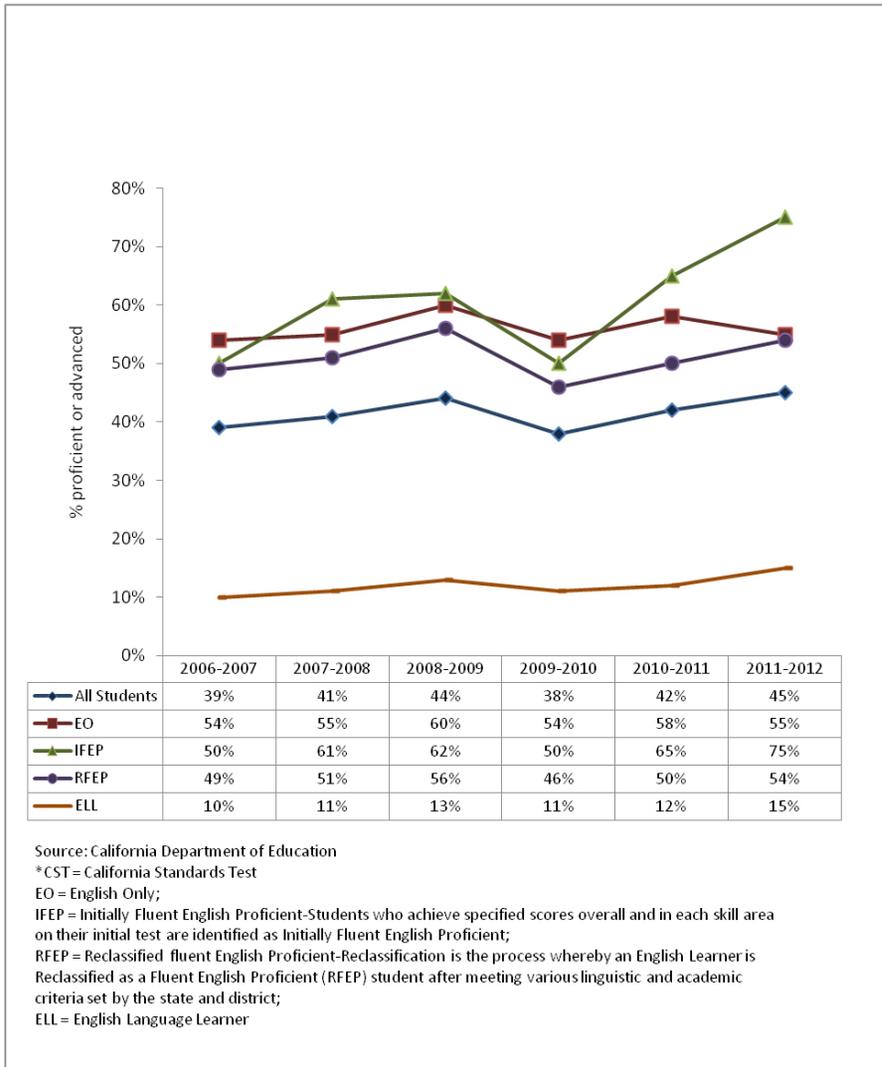
data consistently shows an achievement gap in reading proficiency between particular racial/ethnic groups and based on English Language Learner status, but it is important to recognize that a range of socioeconomic factors contribute to the achievement gap.<sup>16</sup>

In Napa County, between 2006 and 2012, the percentage of third graders who received proficient or advanced scores in English Language Arts (ELA) on the California Standards Test (CST) ranged from 38% to 45%.<sup>17</sup> Among fourth graders, between 68% and 78% of students received a proficient or advanced score. Some educators believe that fourth grade reading levels provide a better measure of reading proficiency. Third graders are taking the CST for the first time on their own without a teacher reading the prompts. For this reason the scores tend to fall in the third grade, but by fourth grade they are almost double.

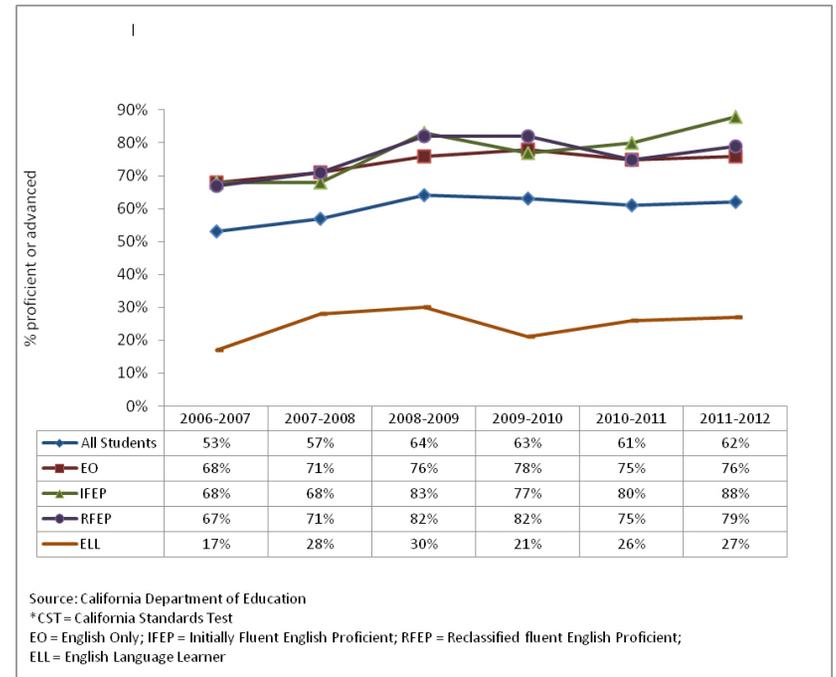
<sup>16</sup> Lara-Cinisomo, S., et al. (2004). A matter of class: Educational achievement reflects family background more than ethnicity or immigration. *Rand Review*, 28(3). Retrieved from: <http://www.rand.org/publications/randreview/issues/fall2004/class.html>

<sup>17</sup> California Department of Education

**FIGURE 4-15: PERCENT OF THIRD GRADE STUDENTS PROFICIENT/ADVANCED IN ENGLISH LANGUAGE ARTS ON THE CST BY LANGUAGE STATUS, NAPA COUNTY**

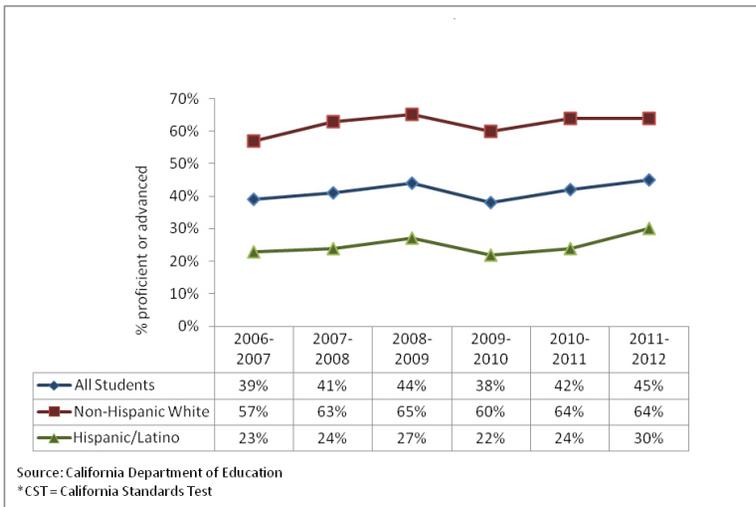


**FIGURE 4-16 PERCENT OF FOURTH GRADE STUDENTS PROFICIENT/ADVANCED IN ENGLISH LANGUAGE ARTS ON THE CST BY LANGUAGE STATUS, NAPA COUNTY**



In the 2011-2012 school year, only 15% of third grade English Language Learner (ELL) students earned a proficient or advanced score on their exam; in comparison 75% of Initial Fluent English Proficient (IFEP) students received a proficient or advanced score (see Figure 4-15). Students who were classified as IFEP actually had higher rates of proficiency than English only (EO) students. Although the overall percentages of students who are proficient/advanced increases when third and fourth grade reading scores are compared (45% of third grade students verses 62% of fourth grade students

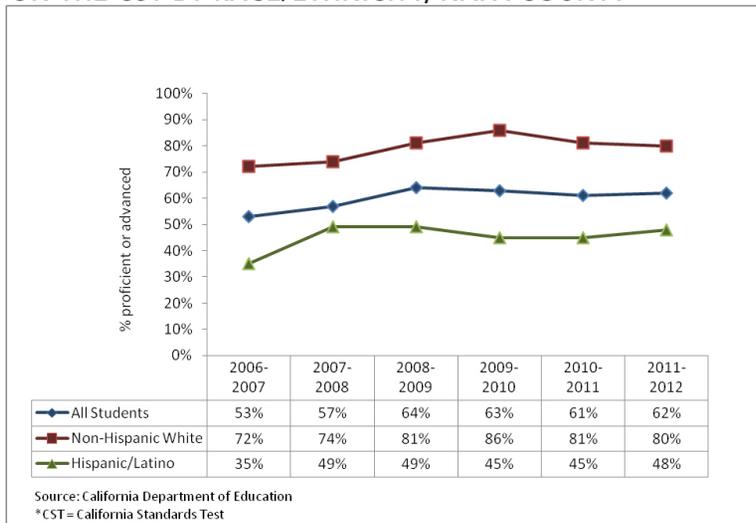
**FIGURE 4-17 PERCENT OF THIRD GRADE STUDENTS PROFICIENT/ADVANCED IN ENGLISH LANGUAGE ARTS ON THE CST BY LANGUAGE STATUS, NAPA COUNTY**



were proficient or advanced in 2011-2012), the achievement gap between ELL students compared to other groups remained very wide. Over the last six years, the gap in reading scores between ELL students and students who are fluent in English has remained consistently large with minimal progress made to close the gap.

Figures 4-16 and 4-17 show the percents of students who are proficient/advanced in English Language Arts (ELA) by race and ethnicity. As discussed in the Napa County Community Profile (see Chapter One: Introduction), approximately one third (33%) of the population in Napa County identifies as Hispanic/Latino, the second largest population in the County following non-Hispanic whites. In the 2011-2012 academic year, 30% of Hispanic/Latino third graders received a proficient or advanced score compared to 64% of non-Hispanic white students (see Figure 4-18). A similar gap was observed between Hispanic/Latino and non-Hispanic white fourth grade students.

**FIGURE 4-18: PERCENT OF FOURTH GRADE STUDENTS PROFICIENT/ADVANCED IN ENGLISH LANGUAGE ARTS ON THE CST BY RACE/ETHNICITY, NAPA COUNTY**



## Safety

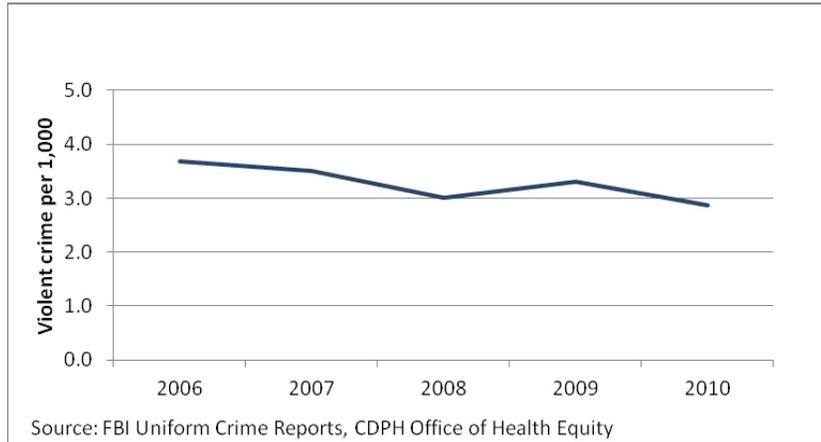
### VIOLENT CRIME

Examining violent crimes in a community can highlight places where maintaining a safe environment may be more difficult. **Violent crimes discussed in this section include murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault.**

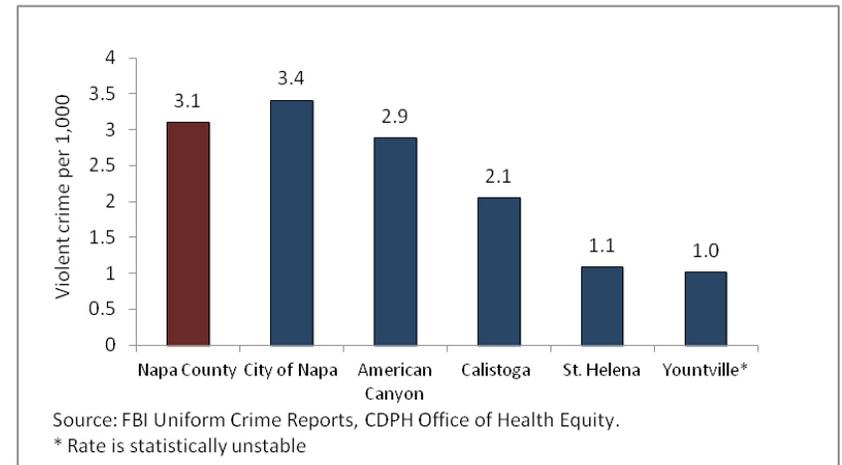
From 2008 to 2010, the violent crime rate in Napa County was 3.1 crime reports per 1,000 persons, which was **lower** than the Bay Area rate during the same time period which was 4.9 violent crime reports per 1,000.<sup>18</sup> Napa County also experienced an overall

<sup>18</sup> Source: FBI Uniform Crime Reports, CDPH Office of Health Equity

**FIGURE 4-19: VIOLENT CRIMES PER 1,000 RESIDENTS, NAPA COUNTY, 2006-2010**



**FIGURE 4-20: RATE OF VIOLENT CRIMES PER 1,000 RESIDENTS, 2008-2010**



decline in the violent crime rate between 2006 and 2010 (Figure 4-19). The City of Napa, the County’s largest city with approximately 78,000 residents,<sup>19</sup> has the highest violent crime rate in the County. Between 2008 and 2010, the City of Napa’s violent crime rate was 3.4 per 1,000 compared to the Napa County average during that time period of 3.1 violent crimes per 1,000 people (see Figure 4-20).

**GANG INVOLVEMENT**

Gang involvement among youth is another important measure of safety and the risk for violence. Gangs were responsible for

approximately 20% of homicides in the 88 largest cities in the U.S. from 2002-2006 and research shows gang members are more likely than their non-gang affiliated peers to engage in crime and violence, which increases their risk of violence-related injuries and death.<sup>20</sup>

During the 2011-2012 academic year, between six and eight percent of seventh, ninth and eleventh grade students in Napa County reported current gang involvement (see Figure 4-21 on the following page). Gang involvement was

higher among non-traditional students in Napa County, with 13% reporting current gang involvement. In Napa County, non-traditional students are those who are in continuation school, court school, community school or independent study. Non-traditional students were also more likely to report that they had carried a gun onto school property in the past 12 months; nine percent of non-traditional students said they had carried a gun two or more times compared to two percent of students from the seventh, ninth and eleventh grades.<sup>21</sup>

<sup>19</sup> U.S. Census Bureau, 2011

<sup>20</sup> Pyrooz D. Structural covariates of gang homicide in large U.S. cities. *Journal of Research in Crime and Delinquency* 2011;48:1-30.

<sup>21</sup> California Healthy Kids Survey, Napa County, 2011-2012

**FIGURE 4-21: PERCENTAGE OF STUDENTS REPORTING CURRENT GANG INVOLVEMENT, NAPA COUNTY, 2011-2012**

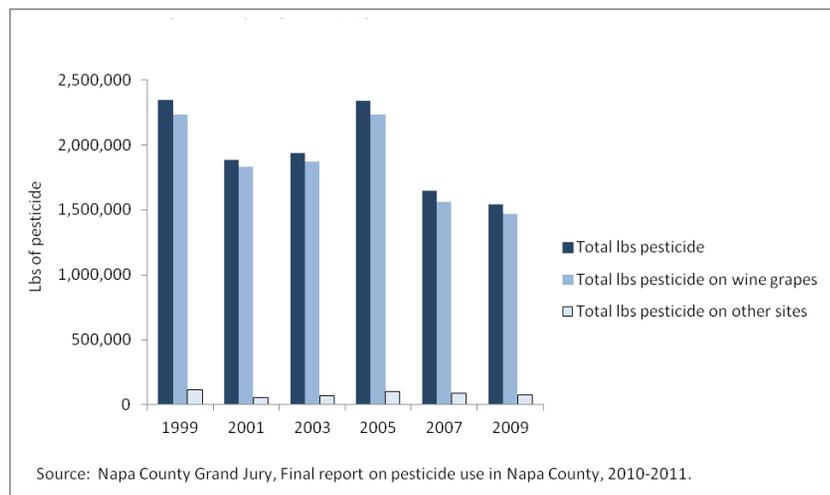
Grade 7 (n=1233)	6%
Grade 9 (n=1277)	8%
Grade 11 (n=1159)	7%
Non-traditional students (n=271)	13%

Source: California Healthy Kids Survey, 2011-2012

### PESTICIDES

Pesticides are defined as any substance used to control a pest. The general term "pesticide" also includes more specific terms describing what type of pest is being controlled, such as insecticide, fungicide and herbicide, etc. Pesticides are one of only a few known toxic materials that are

**FIGURE 4-22: TOTAL POUNDS OF PESTICIDE, NAPA COUNTY, 1999-2009**



intentionally released into the environment for a specific purpose. Because of this, pesticides are heavily regulated, and use of the most hazardous pesticides is strictly controlled. Agriculture is the largest user of pesticides in Napa County. In 2009, there were 43,031 acres of wine grapes in Napa County. Just over 95% of all pesticides used in Napa County are applied to wine grapes, although the use of pesticides on wine grapes has declined over time (Figure 4-22), and there has also been a substantial shift in the types of pest control used in vineyards.<sup>22</sup>

Because of the use of pesticides in agriculture, the local pesticide regulatory

<sup>22</sup> Napa County Grand Jury, Final report on pesticide use in Napa County, 2010-2011

program implemented by the Napa County Agricultural Commissioner's office has focused its work on this sector. One aspect of this work is a focus on safety for agricultural workers. The prevalence of workers in local vineyards wearing protective clothing is an achievement on the part of local efforts to enforce state laws, regulations, and precautionary statements on labels. It is not necessarily related to the relative toxicity of the materials being applied.

The top five pesticides used in Napa County in 2009 were sulfur, petroleum distillates (refined), mineral oil, glyphosate, and lime sulfur (Figure 4-23 on the previous page).<sup>23</sup> Although these pesticides can cause adverse health effects if direct exposure occurs during application, none are known to be carcinogenic, cancer causing, or to cause reproductive or developmental toxicity.<sup>24, 25</sup>

<sup>23</sup> California Department of Pesticide Regulation

<sup>24</sup> National Pesticide Information Center (NPIC), <http://npic.orst.edu/ingred/specchem.html>, accessed 2/21/13

<sup>25</sup> Reproductive toxicity has been defined as "any effect of chemicals that would interfere with reproductive ability or capacity," including effects on lactation (UNECE, 2004). The definition of developmental toxicity is very broad, so the Globally Harmonized System (GHS) considers the following definition sufficient for classification purposes: "adverse effects induced during pregnancy, or as a result of parental exposure," that "can be manifested at any point in the life span of the organism" (UNECE, 2004), <http://www.alttox.org/trc/toxicity-tests/repro-dev-tox/>, accessed 3/12/2013

Sulfur is the most commonly used pesticide in Napa County, accounting for approximately 70% of pesticide use. Sulfur is known to be of low toxicity, and poses very little, if any, risk to human health. Short-term studies show that sulfur is of very low acute oral toxicity and does not irritate the skin. However, sulfur can cause some eye irritation, skin toxicity and inhalation hazards immediately during direct exposure (it has been placed in Toxicity Category III for these effects).<sup>26</sup>

While the use of some pesticides has increased since 1999, as shown by the trend arrows in Figure 4-23, the use of more hazardous pesticides greatly decreased between 1999 and 2009. Methyl bromide, which depletes the ozone layer and is both highly toxic and potentially carcinogenic, was among the top five pesticides used in the County in 1999 (180,897 pounds applied), but by 2009 its use had been almost completely phased out. Use of simazine, a pesticide with reproductive and developmental toxicity, was also reduced by approximately 80% between 1999 and 2009. Finally, sodium tetrathiocarbonate,

<sup>26</sup> Pesticides and Toxic Substances, Sulfur, R.E.D. Facts, U.S. Environmental Protection Agency. May 1991. www.epa.gov

a pesticide that is highly toxic if direct exposure occurs and that posed a substantial risk to field workers, was in the top five pesticides used in 1999 (approximately 17,000 pounds applied).<sup>27</sup> By 2009, only about 1,700 pounds of sodium tetrathiocarbonate were applied in Napa County.

While a small number of pesticides used in Napa County are known or suspected

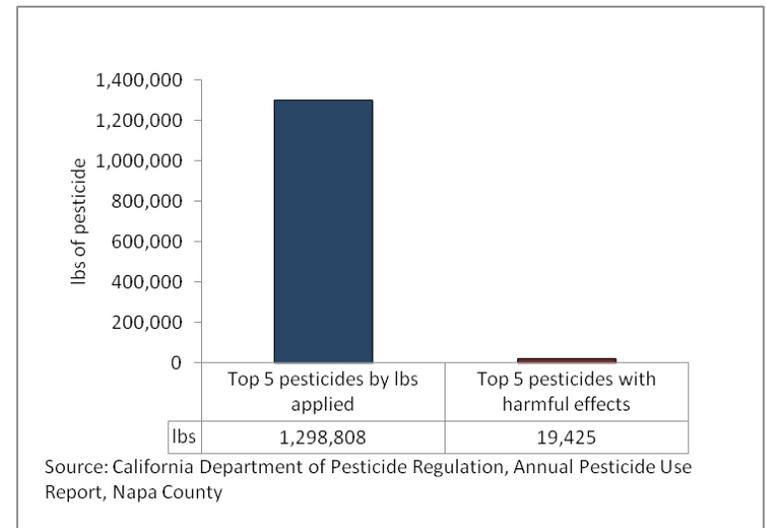
<sup>27</sup> Environmental Protection Agency (EPA), Chemical Search

**FIGURE 4-23: PESTICIDE USE IN NAPA COUNTY—POUNDS APPLIED IN 1999 AND 2009 BY ACTIVE INGREDIENT**

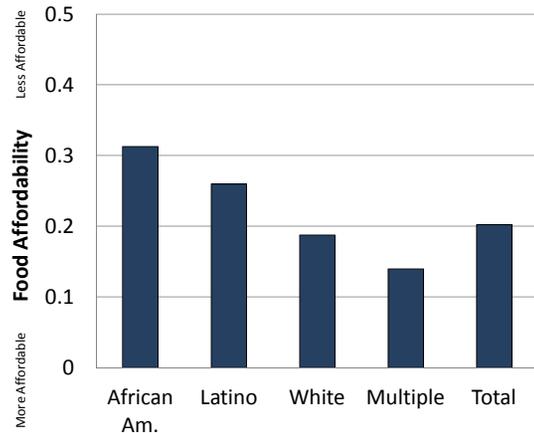
Active Ingredient	Lbs applied 1999	Lbs applied 2009	Trend 1999 to 2009
Total pesticide use in Napa County	2,347,153	1,542,059	↓
<b>Top 5 pesticides by pounds applied</b>			
Sulfur	1,973,323	1,051,267	↓
Petroleum distillates (refined)	7,472	115,296	↑
Mineral Oil	138	79,482	↑
Glyphosate (Round Up)	32,350	31,360	↑
Lime sulfur	5,239	21,403	↑
<b>Top 5 pesticides with known/potential carcinogenic effects or human toxicity</b>			
Oxyfluorfen	8,286	6,482	↓
Chlorpyrifos (organophosphate)	679	4,925	↑
Methyl bromide	180,900	3,410	↓
Oryzalin	10,020	2,349	↓
Simazine	10,969	2,259	↓

Source: California Department of Pesticide Regulation (CDPR), Annual Pesticide Use Report, Napa County, 1999 and 2009.

**FIGURE 4-24: PESTICIDE USE BY POUNDS APPLIED, NAPA COUNTY, 2009**



**FIGURE 4-25: FOOD AFFORDABILITY (COST/INCOME) FOR A FEMALE-HEADED HOUSEHOLD WITH CHILDREN UNDER 18 YEARS OF AGE BY RACE/ETHNICITY, NAPA COUNTY, 2006-2010**



Data Source: USDA Low Cost Meals Eaten at Home, American Community Survey, 2006-2010

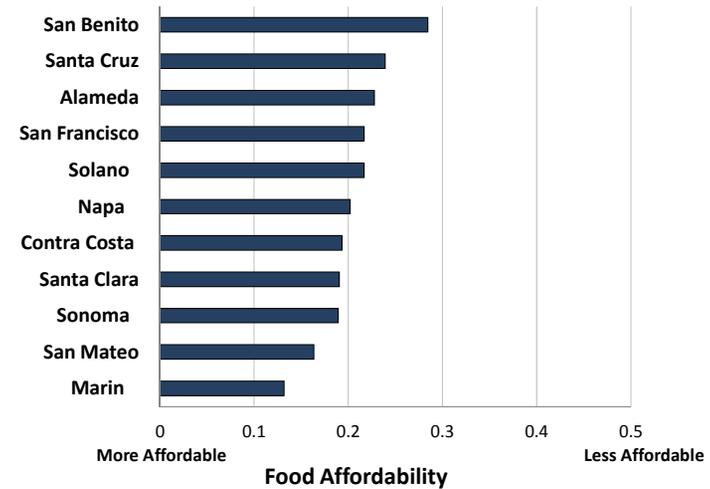
\* Ratio of annual food costs for a nutritionally adequate diet (numerator) to annual median income (denominator), which approximates the proportion of annual income that would have to be spent to have a nutritionally adequate diet

Note: Asian, Native Hawaiian and Other Pacific Islander, American Indian/Alaska Native, Other Race did not have statistically reliable data and are not presented

carcinogens or cause reproductive/developmental toxicity, the use of these pesticides is limited. The use of most of these pesticides has also decreased over time, as shown in the bottom half of Figure 4-23. The exception to this is use of chlorpyrifos, an organophosphate, which showed some increase in use since 1999 because of the appearance of a new invasive mealy bug species in Napa County (Napa County Grand Jury, Final Report on Pesticide Use in Napa County, 2010-2011). However,

chlorpyrifos use is currently being phased out due to the development of more sustainable methods for mealy bug control in vineyards. The graph in Figure 4-24 on the previous page shows that, in terms of total pounds applied, use of these more harmful pesticides in the County in 2009 was quite small (19,425 pounds) compared to use of the most common pesticides (1,298,808 pounds).

**FIGURE 4-26: FOOD AFFORDABILITY (COST/INCOME) FOR A FEMALE-HEADED HOUSEHOLD WITH CHILDREN UNDER 18 YEARS OF AGE, BAY AREA COUNTIES, 2006-2010**



Data Source: USDA Low Cost Meals Eaten at Home, American Community Survey, 2006-2010

\* Ratio of annual food costs for a nutritionally adequate diet (numerator) to annual median income (denominator), which approximates the proportion of annual income that would have to be spent to have a nutritionally adequate diet

### Food Affordability

An adequate, nutritious diet is a necessity at all stages of life—eating healthfully plays a significant role in preventing cardiovascular disease, some cancers, obesity, type II diabetes, and anemia, and influences the course of recovery in those requiring medical treatment. Furthermore, an inadequate diet can impair intellectual performance and has been linked to more frequent school absences and poorer

educational achievement for children.<sup>28</sup> According to the 2009 California Health Interview Survey, 52.2% of households in Napa County with incomes below 200% of the federal poverty level reported being food insecure, indicating that normal eating patterns were disrupted because the household could not afford enough food or lacked access to other food resources. The World Food Summit of 1996 defined food security as existing “when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life”. Commonly, the concept of food security is defined as including both physical and economic access to food that meets people's dietary needs as well as their food preferences.<sup>29</sup>

Food affordability and families’ dietary choices are influenced by two primary factors: food cost and family income. To calculate food affordability, the California

Department of Public Health developed an indicator ratio expressing the annual cost of food (numerator) relative to annual household inflation-adjusted income (denominator).<sup>30</sup> The indicator assumes food cost to be the amount needed to sustain a nutritionally adequate diet for meals eaten at home. Due to the limitations of the data, the indicator must be calculated for specific family configurations; as shown here, it assumes a female-headed household with children under 18 years of age (average number of children in female headed households by place is used in this calculation). The lower the food affordability ratio (closer to 0), the more affordable food is considered to be. Overall Napa County’s food affordability for a female-headed household with children is 0.2 (see Figure 4-25 on the previous page); this means, that a single mother with children under 18 has to spend 20% of the family’s income just to meet minimal nutritional requirements. Compared to other counties in and near the Bay Area region, Napa County falls in the middle range with San Benito County

having the least affordable food (.28) and Marin County having most affordable food (.13). Within Napa County, **African American/Black (.31)** and **Latino (.25)** households exceeded the county average (see Figure 4-26 on the previous page), indicating that food is less affordable for these populations since they are spending more of their total income toward food purchases.

#### 4. SOCIAL AND MENTAL HEALTH

Mental health is essential to a person’s wellbeing, family and interpersonal relationships, and ability to live a full and productive life. People, including children and adolescents, with untreated mental illness are at higher risk for unsafe behaviors, including alcohol or drug abuse, other self-destructive behaviors, and suicide. Social factors, such as feeling isolated and experiencing racism or bias-motivated harassment, also impact both mental and physical health.

This section presents select data related to mental health and social factors that affect health.

<sup>28</sup> Agricultural Research Service. Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2010. Washington, DC: Department of Agriculture and United States Department of Health and Human Services; May 2010. <http://www.cnpp.usda.gov/Publications/DietaryGuidelines/2010/DGAC/Report/2010DGACReport-camera-ready-Jan11-11.pdf>. Accessed January 20, 2013.

<sup>29</sup> World Health Organization

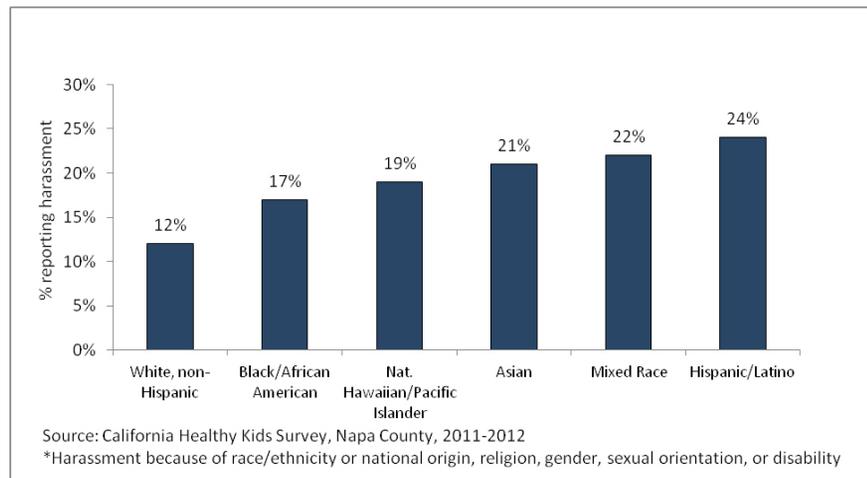
<sup>30</sup> California Department of Public Health, Office of Health Equity, Healthy Community Indicators project

**FIGURE 4-27: PERCENT OF STUDENTS REPORTING ANY HARASSMENT OR BULLYING ON SCHOOL PROPERTY DURING THE PAST 12 MONTHS BY REASON FOR HARRASSMENT, NAPA COUNTY, 2011-2012**

Bias-Motivated Reasons for Harassment	Grade 7	Grade 9	Grade 11	Non-traditional student
Any harassment	35%	33%	27%	32%
Race, Ethnicity or National Origin	16%	16%	12%	18%
Religion	9%	7%	6%	12%
Gender	9%	8%	6%	12%
Sexual Orientation	8%	9%	8%	17%
Physical/Mental Disability	5%	5%	4%	15%
Any other reason	23%	20%	15%	17%

Source: California Healthy Kids Survey, Napa County, 2011-2012

**FIGURE 4-28: ELEVENTH GRADE STUDENTS REPORTING HARASSMENT FOR BIAS-MOTIVATED\* REASON BY RACE/ETHNICITY, NAPA COUNTY, 2011-2012**



### Bullying and Harassment in School

Bullying and harassment among youth is a widespread issue in the United States. In a 2011 nationwide survey, 20% of high school students reported being bullied on school property in the previous 12 months.<sup>31</sup> In Napa County, the California Healthy Kids Survey (CHKS) found that, during the 2011-2012 school year, 27% of eleventh graders and 33% of ninth graders reported being harassed on school property during the previous 12 months (Figure 4-27). Bullying and harassment were even higher among seventh graders, with 35% of students reporting harassment on campus. Non-traditional students in Napa County (those attending continuation school, community school, court school or independent study) were more likely than traditional students (those listed in seventh, ninth or eleventh grade categories) to report that they had been harassed for bias-motivated reasons such as race, religion, gender, sexual orientation, or physical/mental disability. Eleventh grade Hispanic/Latino students and students in other minority groups also reported harassment for bias-motivated reasons more frequently than non-Hispanic white eleventh graders in Napa County (Figure 4-28).

### Linguistic Isolation

In Napa County, 8.3% of the population is linguistically isolated, meaning they have no one in their household 14 years or older who speaks English or speaks English very well.<sup>32</sup> While neighborhoods where English is not commonly spoken can be a source of support and build a sense of community, they can also

<sup>31</sup> Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance—United States, 2011. MMWR, Surveillance Summaries 2012;61(no. SS-4). Available from [www.cdc.gov/mmwr/pdf/ss/ss6104.pdf](http://www.cdc.gov/mmwr/pdf/ss/ss6104.pdf)

<sup>32</sup> American Community Survey (ACS), 2007-2009

create an environment where, for example, Latino students who are English Language Learners (ELL) have very limited exposure to English. This can result in challenges related to being successful in school.<sup>33</sup> Linguistic isolation and limited English proficiency can also add to low health literacy. Health literacy is a person’s ability to navigate the health care system, including filling out forms, locating providers and services, and engaging in self-care and chronic disease management. Individuals with low health literacy may find it challenging to navigate the predominantly English-speaking health system, which can result in difficulty understanding health directives in English related to managing one’s own health and preventing disease.<sup>34</sup>

Figure 4-29 highlights census tracts in Napa County with a higher percentage of people who are linguistically isolated (shown in red). There appears to be substantial overlap between areas with higher linguistic isolation and those with higher concentrations of poverty (see Socioeconomics section). It is important to note, however, that the linguistic isolation data by census tract is statistically unstable and should be interpreted with caution.

### Mental Health

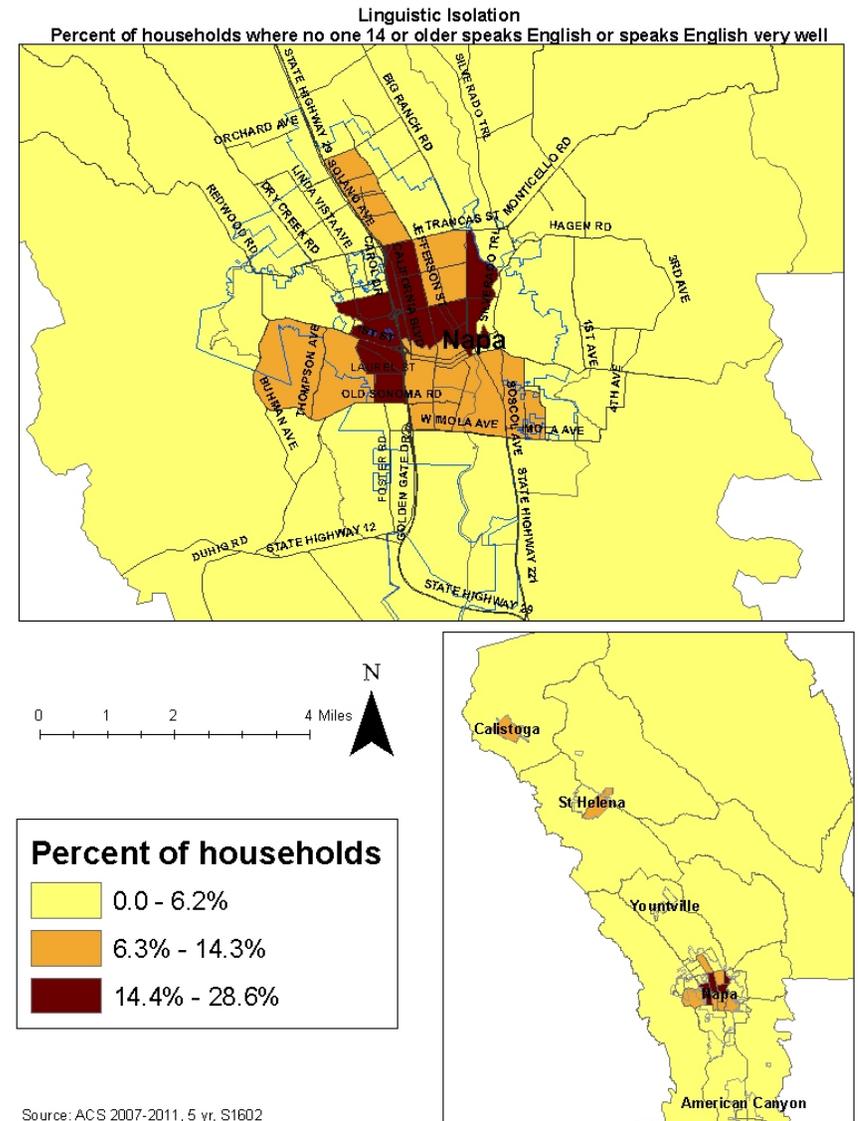
Mental health is “a state of wellbeing in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.”<sup>35</sup> Among adults

<sup>33</sup> Arias, M. B. School Desegregation, Linguistic Segregation and Access to English for Latino Students. Journal of Educational Controversy Vol. 2 University of Washington, 2007

<sup>34</sup> Agency for Healthcare Research and Quality (AHRQ), <http://www.ahrq.gov/research/findings/factsheets/literacy/healthlit/index.html>, accessed 3/4/12

<sup>35</sup> World Health Organization. *Strengthening Mental Health Promotion*. Geneva, World Health Organization (Fact sheet no. 220), 2001.

FIGURE 4-29: LINGUISTIC ISOLATION, NAPA COUNTY



**FIGURE 4-30: SUICIDE DEATHS BY AGE GROUP, NAPA COUNTY, 2008-2010**

Age	N	Population	Rate/100,000
0-14	0	79,062	--
15-24	6	51,814	11.6
25-44	12	102,656	11.7
45-64	16	113,264	12
65+	13	60,315	21.6
<b>Total*</b>	<b>47</b>	<b>407,111</b>	<b>11.5</b>

Source: California Department of Public Health, California Injury Data Online, <http://epicenter.cdph.ca.gov>

\*Denominator (407,111) is the sum of County population estimates for all age groups for each year between 2008-2010.

**FIGURE 4-31: NON-FATAL EMERGENCY DEPARTMENT VISIT FOR SELF-INFLICTED INJURY BY AGE GROUP, NAPA COUNTY, 2009-2011**

Age	N	Population	Rate/100,000
0-9	0	49,386	--
10-14	22	28,842	76.3
15-19	58	29,182	198.8
20-24	33	23,522	140.3
25-44	125	104,073	120.1
45-64	77	115,075	66.9
65+	11	62,005	17.7
<b>Total*</b>	<b>326</b>	<b>412,085</b>	<b>79.1</b>

Source: California Department of Public Health, California Injury Data Online, <http://epicenter.cdph.ca.gov>

\*Denominator (412,085) is the sum of County population estimates for all age groups for each year between 2008-2010.

in the U.S., only about 17% are estimated to be in an optimal state of mental health.<sup>36</sup>

Mental illness, which is characterized by alterations in thinking, mood, or behavior, is associated with significant morbidity and disability. By 2020 it is estimated that depression, which currently affects 26% of the U.S. adult population,<sup>37</sup> will be second only to heart disease in causes of disability worldwide.<sup>38</sup>

In Napa County, 15.6% of adults reported needing help for emotional/mental health problems, or for substance use, which is similar to the statewide average of 15.4%. Among adults in Napa County who reported needing help, 68.6% reported that they saw a healthcare provider for a mental health/emotional and/or substance use problem, which is higher than the statewide average of 56.3%.<sup>39</sup>

In a 2011-2012 California Healthy Kids Survey of Napa County students, 21% of seventh graders, 28% of ninth graders, 33% of eleventh graders, and 42% of non-traditional students<sup>40</sup> reported feeling sad or hopeless almost every day for two weeks or more, to the extent that they stopped doing some usual activities.<sup>41</sup> In

<sup>36</sup> U.S. Department of Health and Human Services. Mental Health: A Report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services; Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, 1999.

<sup>37</sup> Kessler RC, Chiu WT, Demler O, Walters EE. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry* 2005;62:617-627.

<sup>38</sup> Murray CJL, Lopez AD. *The Global Burden of Disease: A Comprehensive Assessment of Mortality and Disability from Diseases, Injuries and Risk Factors in 1990 and Projected to 2020*. Geneva, Switzerland; World Health Organization, 1996.

<sup>39</sup> California Health Interview Survey (CHIS), 2007 and 2009 pooled data

<sup>40</sup> Non-traditional students in Napa County are students who are in continuation school, community school, court school or independent study.

<sup>41</sup> Source: California Healthy Kids Survey, Napa County, 2011-2012

the same survey, 17% of ninth graders, 17% of eleventh grades, and 30% of non-traditional students indicated that they seriously considered attempting suicide within the past 12 months (this question was not administered to seventh grade students).

Between 2008 and 2010, there were 47 suicides in Napa County, a rate of 11.5 suicide deaths per 100,000 people (Figure 4-30). The suicide death rate in Napa County is **higher** than both the statewide rate of 9.7 suicide deaths per 100,000 and the Healthy People 2020 objective of 10.2 or fewer suicides per 100,000.

Napa County adults age 65+ had the highest rate of suicide deaths (21.6/100,000) during this time period, although age-specific suicide death rates should be interpreted with caution because even when summing the data over three years calculations are based on fewer than 20 deaths in each age group.

Non-fatal hospitalizations and emergency department (ED) visits for self-inflicted injuries, which are classified separately from unintentional injuries, are also important

**FIGURE 4-32: NON-FATAL HOSPITALIZATION FOR SELF-INFLICTED INJURY BY AGE GROUP, NAPA COUNTY, 2009-2011**

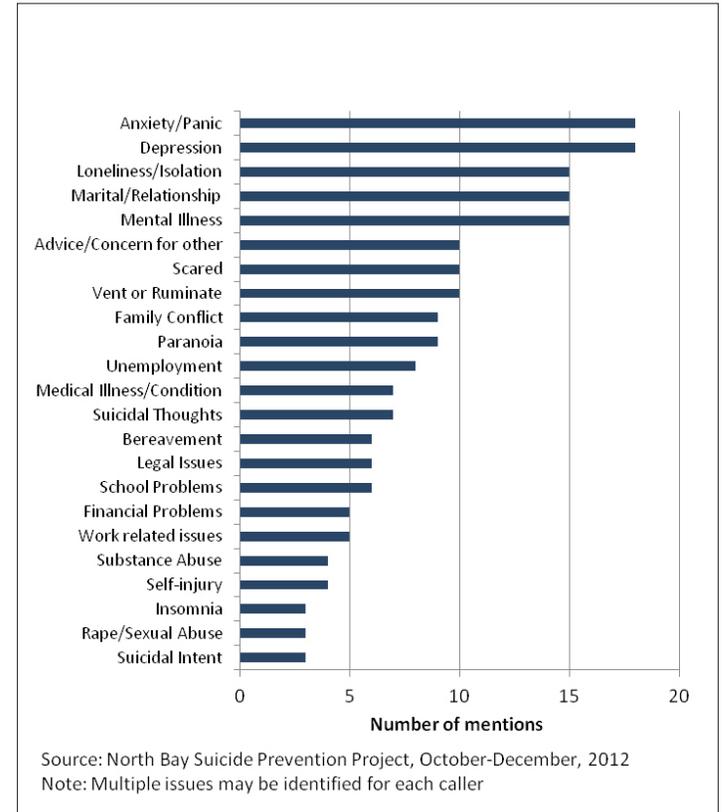
Age	N	Population	Rate/100,000
0-9	0	49,386	--
10-14	4	28,842	*
15-19	15	29,182	51.4
20-24	11	23,522	46.8
25-44	69	104,073	66.3
45-64	42	115,075	36.5
65+	15	62,005	24.2
<b>Total**</b>	<b>156</b>	<b>412,085</b>	<b>37.9</b>

Source: California Department of Public Health, California Injury Data Online, <http://epicenter.cdph.ca.gov>  
 \*Rate not calculated if based on fewer than 5 cases  
 \*\*Denominator (412,085) is the sum of County population estimates for all age groups for each year between 2008-2010.

indicators of mental health need and risk for suicide. In Napa County, youth age 15 to 19 years and young adults 20 to 24 years had the highest rates of ED visits for self-inflicted injuries (Figure 4-31 on the previous page), while adults age 25 to 44 years had the highest hospitalization rate for self-inflicted injuries (Figure 4-32).

The North Bay Suicide Prevention Project tracks basic data on callers from North

**FIGURE 4-33: IDENTIFIED ISSUES AND PRESENTING PROBLEMS, SUICIDE PREVENTION LIFELINE CALLS, NAPA COUNTY, FALL 2012**



Bay counties to the National Suicide Prevention Hotline.<sup>42</sup> During the call the counselor notes issues and presenting problems discussed by clients. From October to December, 2012, there were

<sup>42</sup> <http://www.fsamarin.org/suicide-prevention-crisis-hotline/>

99 calls from Napa County residents. The top five issues mentioned by callers from Napa County were anxiety/panic, depression, isolation, relationships, and mental illness (Figure 4-33 on the previous page).

### 5. MATERNAL, CHILD, AND ADOLESCENT HEALTH

The wellbeing of mothers, infants, and children determines the health of the next generation and can help predict future public health challenges for families, communities, and the healthcare system. Moreover, healthy birth outcomes and early identification and treatment of health conditions among infants and children can prevent death or disability and enable children to reach their full potential.

This section presents select data on mothers and young children, with a focus on maternal health and factors that influence infant health outcomes, such as breastfeeding.

#### Breastfeeding

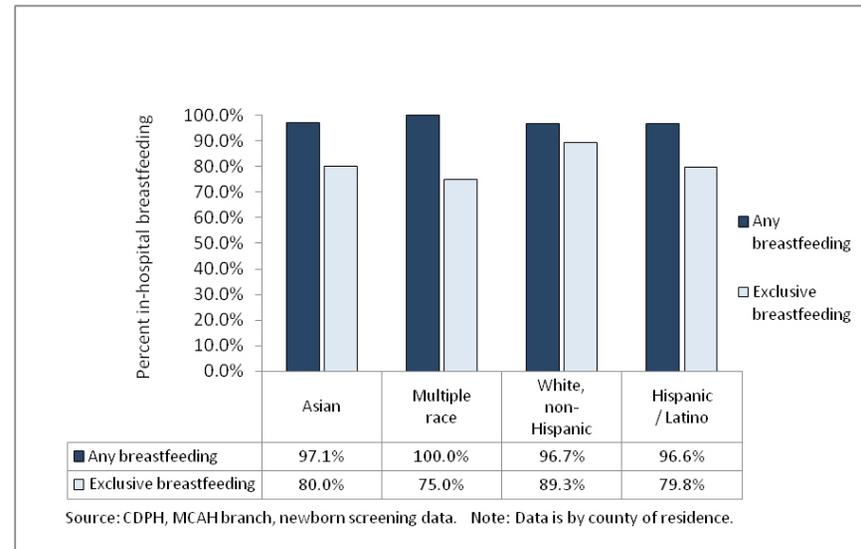
Breastmilk is widely acknowledged to provide the most complete form of nutrition for infants, with a range of benefits impacting health, growth, immunity and development.<sup>43</sup> The American Academy of Pediatrics has recommended exclusive breastfeeding for the first six months of an infant’s life and breastfeeding in conjunction with introduction of complementary foods until at least one year of age. Feeding only breastmilk for at least the first three months of life has been associated with significantly fewer ear infections, respiratory tract infections and gastrointestinal tract

<sup>43</sup> U.S. Department of Health and Human Services (HHS), Office on Women’s Health. HHS blueprint for action on breastfeeding. Washington: HHS; 2000.

FIGURE 4-34: NAPA COUNTY NEWBORN SCREENING BREASTFEEDING DATA, 2011

	Exclusive Breastfeeding	Any Breastfeeding
<b>Total</b>	<b>82.9%</b>	<b>96.8%</b>
St. Joseph Health, Queen of the Valley (SJH – QOV)	80.2%	96.6%
St. Helena Hospital	91.1%	97.5%

FIGURE 4-35: IN-HOSPITAL BREASTFEEDING BY RACE/ETHNICITY, NAPA COUNTY, 2011



infections.<sup>44</sup> Breastfed babies also have a reduced risk for obesity and type II diabetes later in life, and mothers who breastfeed have lower risks for breast and ovarian cancers.<sup>45</sup>

In Napa County, 96.8% of mothers initiated breastfeeding in the hospital in 2011. The percentage of mothers initiating breastfeeding, meaning that they exclusively or partially breastfed their infant within approximately the first 48 hours of birth, **exceeded** statewide (91.7%) and national (76.9%) averages for breastfeeding initiation, as well as the Healthy People 2020 goal of 81.9% of new mothers initiating breastfeeding.<sup>46</sup> In addition, approximately 83% of newborns in Napa County were exclusively breastfed in the hospital in 2011, meaning that they did not receive any formula. A higher percentage of newborns at St. Helena Hospital were exclusively breastfed (91.1%) compared to newborns at St. Joseph Health, Queen of the Valley (80.2%) (Figure 4-34 on the previous page). Asian mothers, Hispanic/Latino mothers, and mothers identifying as more than one race exclusively breastfed at lower rates than non-Hispanic white mothers in the hospital (Figure 4-35 on the previous page).

Although a high percentage of newborns in Napa County are breastfed during their hospital stay, breastfeeding rates decrease dramatically after mothers and babies leave the hospital.<sup>47</sup>

**FIGURE 4-36: BREASTFEEDING AMONG NAPA COUNTY WIC PARTICIPANTS BY AGE OF BABY, 2010 AND 2011**

	Napa 2010	Napa 2011	Healthy People 2020
Exclusive breastfeeding at <b>4 months</b>	27%	34%	NA
Exclusive breastfeeding at <b>6 months</b>	21%	29%	25.5%
Exclusive breastfeeding at <b>1 year</b>	18%	23%	NA
Any breastfeeding at <b>1 year</b>	48%	54%	34.1%

Source: Napa County WIC program; Healthy People 2020 Objectives, <http://healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=26>

Although data on breastfeeding during the first year of life is not currently available for a representative sample of women in Napa County, the Napa County Women, Infants and Children (WIC) program does collect data on breastfeeding among its participants. A family’s income must fall below 185% of the federal poverty level (\$42,643 for a family of four for April 2012-June 2013) to be eligible for the WIC program.<sup>48</sup> In 2011, only 34% of four month old infants enrolled in the WIC program in Napa County were exclusively breastfed (Figure 4-36) and at six months that number drops to 29%. However, the proportion of Napa County WIC participants who breastfed their babies increased in every age category from 2010 to 2011 and Napa County WIC is exceeding Healthy People 2020 objectives for exclusive breastfeeding at six months and any breastfeeding at one year.

### Postpartum Depression

Postpartum depression can influence a mother’s success with breastfeeding and, conversely, problems with breastfeeding can contribute to a mother’s postpartum depression. In Napa County,

<sup>44</sup> Agency for Healthcare Research and Quality, Evidence Report/Technology Assessment, *Breastfeeding and Maternal and Infant Health Outcomes in Developed Countries*, 2007; <http://www.cdph.ca.gov/HealthInfo/healthyliving/childfamily/Documents/MO-BFP-16HLW-BBC03-lpAHRO2007ExecutiveSummary.pdf>

<sup>45</sup> CDC Vital signs, Hospital Support for Breastfeeding: Preventing Obesity Begins in Hospitals, August, 2011.

<sup>46</sup> <http://healthypeople.gov/2020/>

<sup>47</sup> U.S. Department of Health and Human Services. Executive Summary: The Surgeon General’s Call to Action to Support Breastfeeding. Washington, DC, January 20, 2011.

<sup>48</sup> California Department of Public Health, WIC Appendix 980-1060, WIC Income Guideline Table, <http://www.cdph.ca.gov/programs/wicworks/Documents/WPM/WIC-IncomeGuidelines-WIC.pdf>

**FIGURE 4-37: NUMBER AND PERCENT OF BIRTHS THAT ARE CESAREAN TO LOW RISK WOMEN GIVING BIRTH FOR THE FIRST TIME BY RACE/ETHNICITY, CALIFORNIA AND NAPA COUNTY, 2010**

Race/Ethnicity	Napa County			California		
	N	Denominator	%	N	All Births	%
Hispanic/Latino	53	221	24.0	17,256	68,494	25.2
Non-Hispanic White	48	227	21.1	12,809	49,721	25.8
Non-Hispanic Black	--	--	--	2,370	7,762	30.5
Non-Hispanic Asian/Pacific Islander	16	38	42.1	6,214	22,759	27.3
Non-Hispanic Other Race	5	21	23.8	2,007	7,248	27.7
Overall	123	512	24.0	40656	155,984	26.1

Births with unknown risk status, gestation, or delivery mode are not included.  
 Data in categories with less than 10 live births not shown.  
 Source: IPODR, California Department of Public Health, 2010 Birth Statistical Master File

14.6% of new mothers surveyed in 2011-2012 were identified as having postpartum depression or anxiety on the Edinburgh Postnatal depression scale.<sup>49</sup> This was slightly higher than the statewide estimate for postpartum depression (13.4% of new mothers).<sup>50</sup> Postpartum depression is a risk factor for poor attachment and bonding, as well as infant neglect and abuse. Untreated postpartum depression can also significantly impact cognitive and emotional development in children.<sup>51</sup>

### Cesarean Birth Deliveries

Cesarean delivery is major abdominal surgery that is associated with higher risks of surgical complications (e.g., maternal hemorrhage and infection) and maternal re-hospitalizations following birth, as well as with complications for the newborn (e.g.,

<sup>49</sup> St. Joseph Health, Queen of the Valley Community Outreach  
<sup>50</sup> California Department of Public Health, Maternal and Infant Health Assessment (MIHA)  
<sup>51</sup> Beck, CT. The effects of postpartum depression on child development: a meta-analysis, Arch Psychiatr Nurs. 1998 Feb;12(1):12-20

respiratory distress) potentially leading to neonatal intensive care unit admission. In addition, hospitalization charges for C-sections are almost double that for vaginal delivery, adding significant costs.<sup>52</sup>

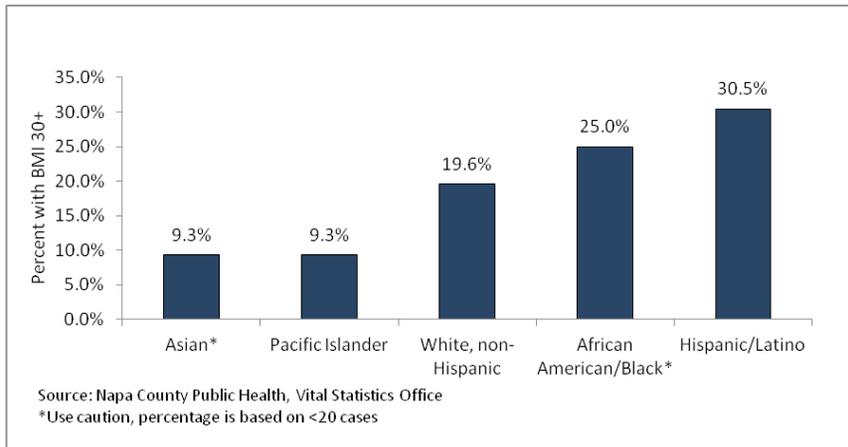
In 2010, 24% of Napa County women who were pregnant for the first time and had low risk pregnancies gave birth by cesarean delivery. The percentage of C-sections among low risk, first time mothers is **lower** in Napa County than in California (26.1%) or the U.S. overall (26.5%), but slightly **higher** than the Healthy People 2020 target of 23.9%. Since 2007, the proportion of Cesarean births to low-risk women has been increasing, and has now surpassed the Healthy People 2020 target (data not shown). In 2010, cesarean births to low risk first time mothers were lowest among non-Hispanic white women (21%) and highest among Native Hawaiian and other Pacific Islander women. Although the number of births to women identifying as Native Hawaiian or other Pacific Islander was small (n=38), 42.1% of those births were by C-section delivery (Figure 4-37).

### Obesity and Pregnancy

Recent studies suggest that the heavier a woman is before she becomes pregnant, the greater her risk of pregnancy complications, including preeclampsia, gestational diabetes, stillbirth and cesarean delivery.<sup>53</sup> Moreover, research by the CDC has shown that obesity during pregnancy is associated with an increased use of health care and physician services and longer hospital stays following delivery.<sup>54</sup> In 2011, 22.4% of Napa County mothers

<sup>52</sup> <http://www.cdc.gov/nchs/data/databriefs/db35.pdf>  
<sup>53</sup> <http://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregcomplications.htm#n5>  
<sup>54</sup> <http://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregcomplications.htm#n5>

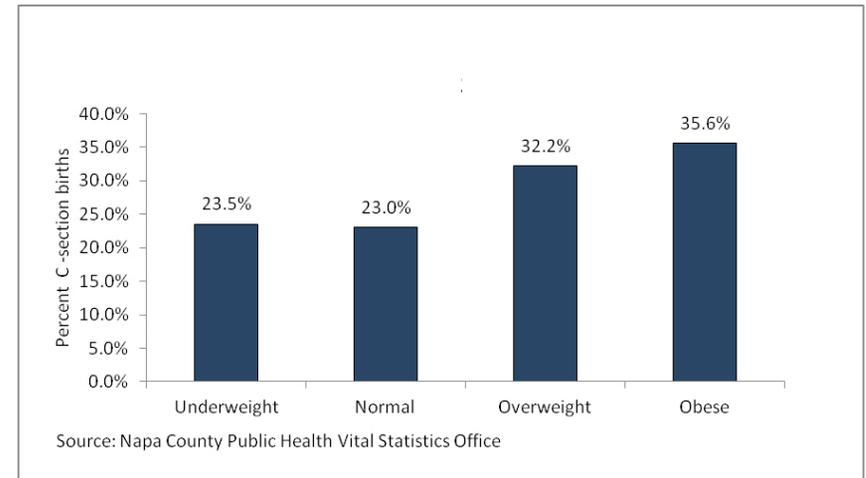
**FIGURE 4-38: MATERNAL OBESITY (PRE-PREGNANCY) BY RACE/ETHNICITY, NAPA COUNTY, 2010-2012**



were obese (BMI of 30 or above)<sup>55</sup> at the beginning of pregnancy, which was slightly **higher** than the state rate of 20.0%.<sup>56</sup> Pre-pregnancy body mass index (BMI) was 30 or higher in 30.5% of Hispanic/Latino mothers, 25% of African American/Black mothers, and 19.5% of non-Hispanic white mothers (Figure 4-38). New moms who identified as Asian or Pacific Islander had the lowest levels of pre-pregnancy obesity (9.3%).

Figure 4-39 shows the relationship between C-sections and weight. The proportion of C-section deliveries was higher among mothers who were overweight or obese than for mothers who were classified as underweight or normal weight. Furthermore, mothers who were obese or overweight had a higher proportion of babies weighing 4000 grams (8 pounds, 13 ounces) or more at birth than normal and underweight mothers (see Figure 4-40).

**FIGURE 4-39: ALL C-SECTION BIRTHS BY MATERNAL BMI, NAPA COUNTY, 2010-2012**



**FIGURE 4-40: BABIES WEIGHING 4000g (8lb 13oz) OR MORE AT BIRTH BY MATERNAL (PRE-PREGNANCY) BMI, NAPA COUNTY, 2010-2012**

BMI	Number	Total births	Percent
Underweight	3	102	2.9%
Normal	167	1970	8.5%
Overweight	123	1169	10.5%
Obese	160	1009	15.9%
Total	453	4250	10.7%

Source: Napa County Public Health Vital Statistics Office

Infants who are large for gestational age at birth are at increased risk for birth complications, such as obstructed labor, and for obesity later in life.<sup>57</sup> The association between maternal obesity and diabetes is particularly important. Maternal diabetes, especially if poorly controlled, leads to overproduction of insulin by

<sup>55</sup> Napa County Public Health

<sup>56</sup> California Department of Public Health, Maternal and Infant Health Assessment (MIHA)

<sup>57</sup> CDC Morbidity and Mortality Weekly Report, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5746a4.htm>

the fetus. This in turn leads to overgrowth of fat cells in the body and overproduction of leptin, a hormone that tells the brain to stop eating. The consequences of maternal diabetes in the fetus are thus to set up pathways that predispose a child to struggle with overweight and obesity, which some experts believe may be partially driving the childhood obesity epidemic.<sup>58</sup>

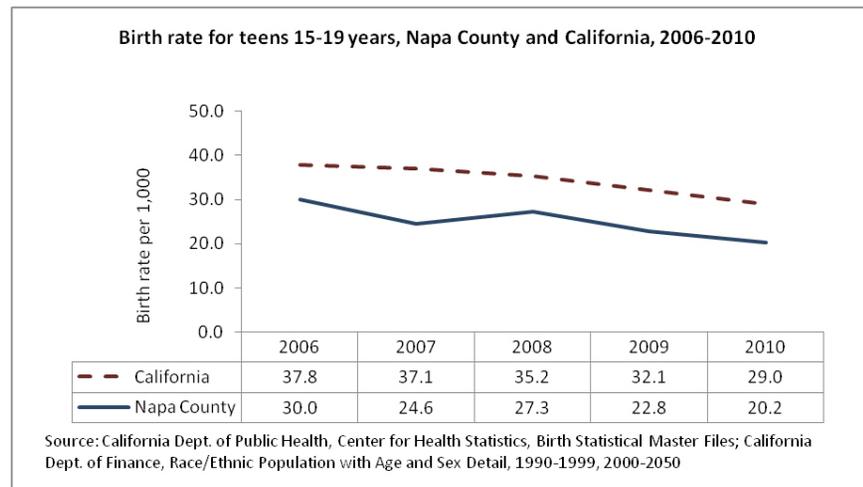
### Teen Pregnancy

Preventing teen pregnancies is considered to be an area where communities can make a significant impact through prevention programs. Births to teens under the age of 18 are especially concerning because of the impact early motherhood can have on educational attainment, an important social determinant of health. A mother’s reading skill is the greatest determinant of

her child’s academic success, even outweighing the impact of neighborhood income level on academic achievement.<sup>59</sup> In 2010, the Napa County birth rate for teens 15 to 17 years was 10.6 births per 1,000 females; this means that there were 32 births to teens 15-17 in 2010.<sup>60</sup> This is lower than the statewide rate of 15.2 births per 1,000 females 15-17. When 18 and 19 year olds are included, the teen birth rate in Napa County rises to 20.2 births per 1,000 females 15-19 years. However, in both Napa County and California overall, the teen birth rate for 15-19 year old females has been steadily declining (Figure 4-41).

<sup>58</sup> Michael C. Lu, MD, MPH, Racial and Ethnic Disparities in Birth Outcomes: A Life-Course Perspective, September 29, 2011.

**FIGURE 4-41: BIRTH RATE FOR TEENS 15-19 YEARS, NAPA COUNTY AND CALIFORNIA, 2006-2010**



## 6. HEALTHCARE AND PREVENTIVE SERVICES

Access to health services is important at every age. Health insurance provides access to a range of recommended services, from childhood vaccinations to screening tests for cancer and chronic diseases, such as diabetes and heart disease. Having access by way of health insurance also plays a vital role in preventing and addressing health issues in earlier and more treatable stages, as well as in managing and controlling chronic disease. Lacking access to health services, even for just a short period, can lead to poor health outcomes and substantial economic costs.

### Health Insurance Status

Access to comprehensive, quality health care services is important for achieving health equity. Health equity is achieved when people are able to reach their highest level of health. People can

<sup>59</sup> U.S. Department of Health and Human Services, NIH News, <http://www.nih.gov/news/health/oct2010/nichd-25.htm>

<sup>60</sup> California Department of Public Health, Center for Health Statistics, Birth Statistical Master Files

reach their highest levels of health when everyone has the opportunity to make the choices that allow them to live a long, healthy life, regardless of their income, education or ethnic background. Ensuring that people have access to these choices improves the quality of life for everyone in Napa County. People without health insurance often cannot afford medical treatment or prescription drugs. They are also less likely to seek preventative care such as routine checkups and screenings, so if they do become sick they may not seek treatment until the condition is more advanced and therefore more difficult and costly to treat. Having access to and using appropriate clinical and preventive services in a timely fashion can have important implications for the progression and treatment of many diseases. Individuals who receive services in a timely manner have greater opportunity to prevent disease or detect disease during earlier, treatable stages. A delay of necessary care can lead to an increased risk of complications.<sup>61</sup>

In Napa County 15.8% of the population is without health insurance; this is lower

<sup>61</sup> Napa Health Matters: <http://napa.networkofcare.org/ph/hcndata>, accessed 3/11/2013

than the state average of 18.1%, but higher than the national average of 15.1%.<sup>62</sup> The Healthy People 2020 objective is for 100% of people to have health insurance.<sup>63</sup>

The proportion of people who are uninsured in Napa County varies by demographic factors, such as race/ethnicity, gender, and employment status. The populations that exceed the County average of uninsured include adults 18-64 years, males, Hispanics/Latinos, unemployed individuals, and those who are foreign-born (Figure 4-42). Nearly half of the unemployed population (49.3%) and one third (32.9%) of the foreign-born population were uninsured in 2011.

### Clinical Preventive Services

Providing preventive services, such as routine disease screening and scheduled immunizations, is key to reducing death and disability and improving the health of a community. In some cases, these services may detect disease in an earlier, more treatable

<sup>62</sup> American Community Survey, 2011

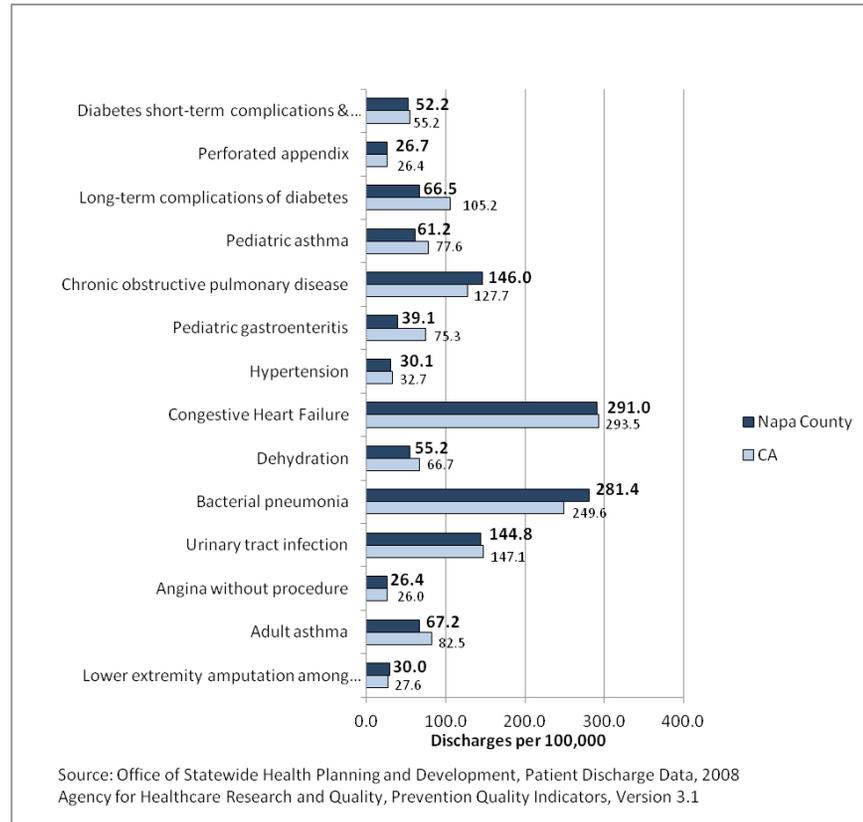
<sup>63</sup> <http://healthypeople.gov/2020/topics/objectives2020/objectiveslist.aspx?topicid=1>, accessed 3/5/13

FIGURE 4-42: NAPA COUNTY RESIDENTS WITHOUT HEALTH INSURANCE, 2011

	Estimated Number of Uninsured People	Percent uninsured
<b>Total</b>	<b>21,587</b>	<b>15.8%</b>
<b>Age group</b>		
<18 years	2,671	8.5%
18-64 years	18,714	22.2%
65+ years	202	1.0%
<b>Gender</b>		
Male	12,563	18.5%
Female	9,024	13.2%
<b>Race/Ethnicity*</b>		
Asian	1,506	14.7%
Hispanic/Latino	7,868	25.9%
White, non-Hispanic	11,673	10.4%
<b>Employment Status**</b>		
Employed	12,008	18.5%
Unemployed	2,996	49.3%
<b>Nativity</b>		
Native born	10,758	10.4%
Foreign born	10,829	32.9%
Source: American Community Survey, 2011		
*Data unstable for Black/African American, Pacific Islander, American Indian, and other or 2 or more races.		
**Among those in labor (N=71,541)		

stage and thus reduce morbidity and mortality. For example, regular colorectal cancer screening beginning at age 50 is the most effective way to reduce the risk

**FIGURE 4-43: PREVENTABLE HOSPITALIZATION RATES, NAPA COUNTY AND CALIFORNIA, 2008**



of developing colorectal cancer.<sup>64</sup> The most recent survey data on colorectal cancer screening indicates that 69.4% of Napa County adults 50+ years have had a colonoscopy or sigmoidoscopy, which is just slightly below the Healthy People 2020 objective of a screening rate of 70.5% or higher. In addition, 82.4% of women

<sup>64</sup> Division of Cancer Prevention and Control, Centers for Disease Control and Prevention. *Frequently Asked Questions About Colorectal Cancer*. Atlanta, GA: 2011. Available from [http://www.cdc.gov/cancer/colorectal/basic\\_info/faq.htm#6](http://www.cdc.gov/cancer/colorectal/basic_info/faq.htm#6)

age 55 and older have had a mammogram within the past two years, a screening rate which **exceeds** the Healthy People 2020 goal of 81.1%.<sup>65</sup>

Overall Napa County has very high routine disease screening and immunization rates. In 2010, 93.5% of all kindergarteners had received all required immunizations; this was higher than the state average of 90.7%.<sup>66</sup> Immunizations protect children from contracting and spreading communicable diseases such as measles, mumps, and whooping cough. These diseases can result in extended school absences, hospitalizations, and death. Childhood illnesses also have a significant financial impact on parents including costly medical bills and loss of work time.

Providing preventive oral health services is often taken for granted, but good oral health improves a person’s ability to speak, smile, smell, taste, touch, chew and swallow which is necessary for adequate nutrition.<sup>67</sup> In particular, oral diseases and conditions are common among seniors (65+ years) who grew up without the benefit of community water fluoridation and other fluoride products.<sup>68</sup> Older Americans with the poorest oral health are those who are economically disadvantaged, lack insurance, and are members of racial and ethnic minorities. Being disabled, homebound, or institutionalized also increases the risk of poor oral health.<sup>69</sup> In 2007, less than half of seniors (39.8%) reported having dental insurance

<sup>65</sup> California Health Interview Survey, 2007 and 2009 pooled data

<sup>66</sup> California Department of Public Health (CDPH), 2010

<sup>67</sup> U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General. *Oral health in America: A report of the Surgeon General*. Rockville, MD: National Institutes of Health, National Institute of Dental and Craniofacial Research; 2000, p. 33-59.

<sup>68</sup> [http://www.cdc.gov/oralhealth/publications/factsheets/adult\\_older.htm](http://www.cdc.gov/oralhealth/publications/factsheets/adult_older.htm)

<sup>69</sup> [http://www.cdc.gov/oralhealth/publications/factsheets/adult\\_older.htm](http://www.cdc.gov/oralhealth/publications/factsheets/adult_older.htm)

in the past year.<sup>70</sup> As discussed in the previous section, insurance serves as a gateway to accessing health care services, including oral healthcare services.

### Preventable Hospital Stays

Preventable hospitalizations can serve as a marker to assess the efficiency of the health care system. When patients have access to effective outpatient services for disease management, treatment can commence earlier in the disease process and hospitalizations can be prevented, resulting in cost-savings and better health outcomes for a community.

In 2007, adults aged 65 and over accounted for one third of all hospitalizations in the U.S.; the majority of these stays were paid for by Medicare.<sup>71</sup> For Medicare enrollees, preventable hospital stays refers to the hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees. In 2009, the Napa County rate of preventable hospital stays was 48 per 1,000 Medicare enrollees. For the state of

California the rate of preventable hospital stays was 52 per 1,000 Medicare enrollees.

Figure 4-43 displays the rates of potentially preventable hospitalizations. In 2008, the highest rates of preventable hospitalization were associated with bacterial pneumonia, congestive heart failure, and chronic obstructive pulmonary disease.

## 7. BEHAVIORAL RISK FACTORS

Behavioral risk factors are actions that can positively or negatively influence an individual's physical and mental health. Nutrition, physical activity and substance abuse are examples of behaviors that influence risk for chronic disease and contribute to social and mental health. While we often think of these behaviors as being solely under an individual's control, many social factors, outside of individual or family control, such as access to a good education, family income and neighborhood violence strongly impact a person's ability to make healthy choices.

FIGURE 4-44: PERCENT OF ADULTS 18 AND OLDER REPORTING LITTLE OR NO PHYSICAL ACTIVITY, NAPA COUNTY, 2007

	Percentages above County average are in bold
Napa County Average	57.5%
<b>Race/Ethnicity</b>	
Hispanic/Latino	55.6%
White, non-Hispanic/Latino	<b>59.7%</b>
<b>Federal Poverty Level</b>	
Below 200% of FPL	<b>68.7%</b>
200 % of FPL and higher	54.7%
<b>Age group</b>	
18-39 years	<b>58.5%</b>
40-59 years	51.9%
60+ years	<b>63.7%</b>

Source: CHIS, 2007

The following indicators highlight a small selection of behavioral risk factors. A more comprehensive list of indicators can be found in the data book (Appendix B).

### Physical Fitness and Nutrition

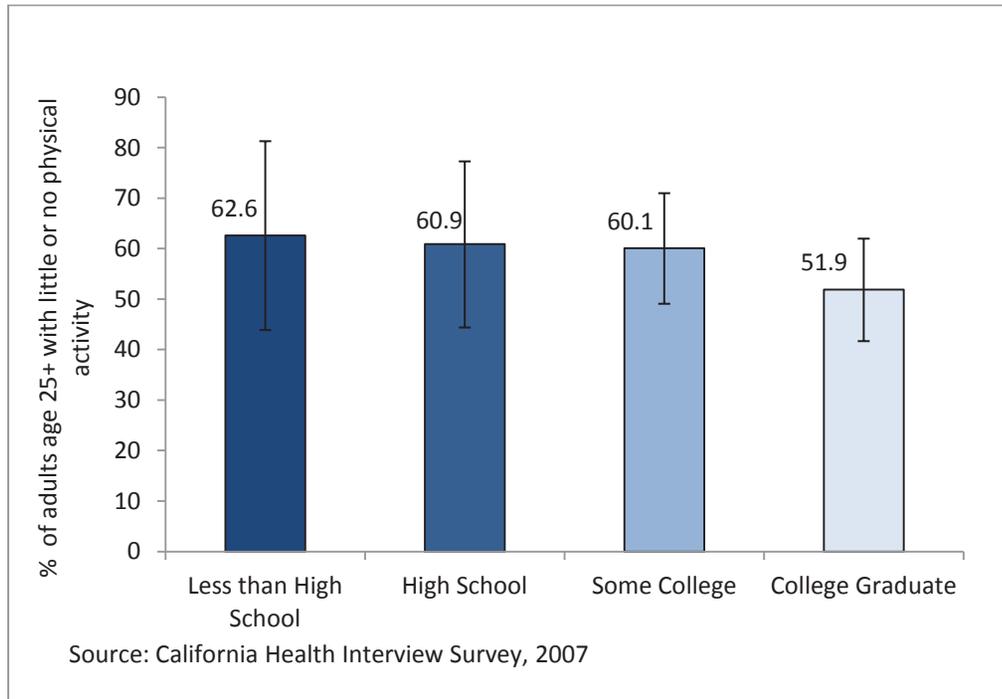
#### ADULTS

People who are physically active tend to live longer and have lower risk for heart disease, stroke, type II diabetes,

<sup>70</sup> California Health Interview Survey, 2007

<sup>71</sup> Levit K, Wier L, Stranges E, Ryan K, Elixhauser A. *HCUP Facts and Figures: Statistics on Hospital-based Care in the United States, 2007*. Rockville, MD: Agency for Healthcare Research and Quality, 2009 (<http://www.hcup-us.ahrq.gov/reports.jsp>).

**FIGURE 4-45: PHYSICAL ACTIVITY AND EDUCATIONAL ATTAINMENT, NAPA COUNTY**



Easy access to parks and recreational facilities is one factor influencing physical activity level. In Napa County, 57.6% of the population lives within ½ a mile of a park. Napa County also has 13.2 recreation facilities per 100,000 people, which is considerably better than the California average of 8.6 facilities/100,000. Among adults age 25 and over, lower educational attainment, which is often associated with lower income levels, correlated with higher levels of physical inactivity, although this trend was not statistically significant (Figure 4-45) in Napa County’s data. In addition, only about half of Napa County adults report eating five or more serving of fruits and vegetables each day;<sup>73</sup> a diet high in fruits and vegetables is associated with a decreased risk of chronic disease.<sup>74</sup>

depression, and some cancers.<sup>72</sup> Slightly more than half (57.5%) of all Napa County adults reported engaging in little or no physical activity each week. Figure 4-44 details the percent of adults reporting little or no physical activity by race, socioeconomic status, and age. The following groups reported higher levels of inactivity compared to the County average: **White, non-Hispanic/Latino residents, adults living below 200% of FPL, adults between 18 and 39, and older adults (60 years+).**

<sup>72</sup> Centers for Disease Control and Prevention, Facts about physical activity, <http://www.cdc.gov/physicalactivity/data/facts.html>, accessed 2/15/13

## YOUTH

Adequate physical activity among students is linked with improved academic achievement and also assists with weight control.<sup>75</sup> Public schools in California administer the Physical Fitness Test (PFT) to fifth, seventh, and ninth grade students once each academic year. Among Napa County children and youth, approximately two thirds

<sup>73</sup> California Health Interview Survey, 2005

<sup>74</sup> U.S. Department of Health and Human Services, U.S. Department of Agriculture. Dietary guidelines for Americans, 2005. 6th ed. Washington, DC: U.S. Government Printing Office; 2005.

<sup>75</sup> Centers for Disease Control and Prevention, Facts about physical activity, <http://www.cdc.gov/physicalactivity/data/facts.html>, accessed 2/15/13

(65.5%) are rated as physically fit according to PFT guidelines. **Female students, economically disadvantaged students, and students who identified as Latino or being from two or more racial groups** were less likely to be scored as physically fit (see Figure 4-46). Income level, for both adults and children in Napa County, also influences physical fitness. Almost 72% of students who are not economically disadvantaged scored as physically fit on the PFT compared to 59.6% of students who are economically disadvantaged.<sup>76</sup>

Only 55% of children in Napa County are estimated to eat the recommended amount of fruit and vegetables on a daily basis<sup>77</sup> and 41.5% of children between the ages of two and eleven years drink one or more sugar sweetened beverages every day.<sup>78</sup> High consumption of sugary drinks, which have few, if any, nutrients, has been associated with obesity.<sup>79</sup>

<sup>76</sup> Students are considered socioeconomically disadvantaged if they receive free and reduced-price lunches or if neither parent graduated from high school (California Department of Education)

<sup>77</sup> California Health Interview Survey, 2007 and 2009 pooled data

<sup>78</sup> California Health Interview Survey, 2005

<sup>79</sup> Vartanian LR, Schwartz MB, Brownell KD. Effects of Soft Drink Consumption on Nutrition and Health: A Systematic Review and Meta-Analysis. Am J Public Health 2007; 97(4):667-675.

## Substance Abuse: Adult

### ALCOHOL USE

Binge drinking is defined differently for males and females. For males, binge drinking is the consumption of five or more drinks within about two hours and for females, it is the consumption of four or more drinks in the same time period. In the 2005 California Health Interview Survey, one fifth (19.4%) of Napa County adults reported binge drinking one or more times in the past month.<sup>80</sup> In 2009 the survey question was changed to ask about binge

<sup>80</sup> California Health Interview Survey, 2005

**FIGURE 4-46: PERCENT OF FIFTH, SEVENTH AND NINTH GRADERS WHO ARE PHYSICALLY FIT\*, NAPA COUNTY, 2011-2012\*\***

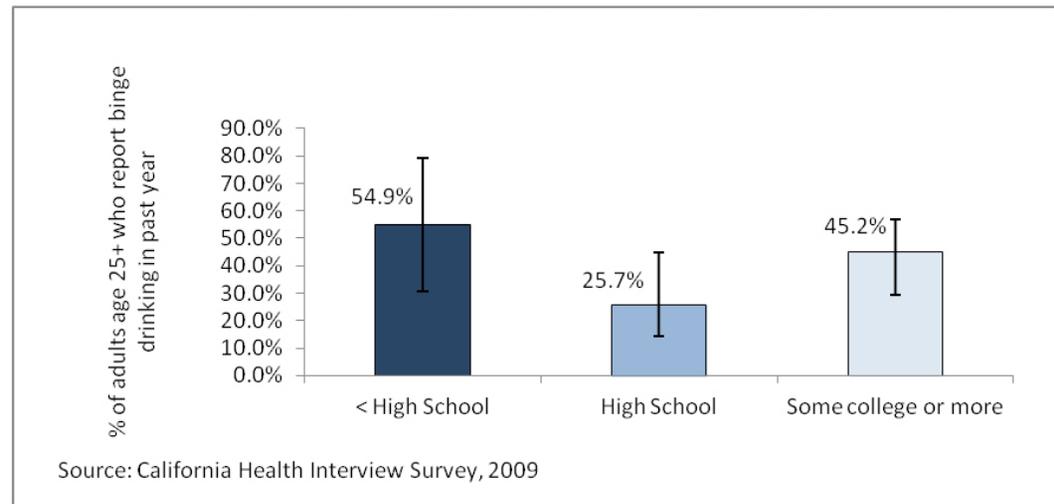
\*\*Percentages below overall averages are in bold

Napa County Youth Average	65.5%
<b>Gender</b>	
Male	73.0%
Female	<b>57.9%</b>
<b>Socioeconomic status</b>	
Economically disadvantaged	<b>59.6%</b>
Not economically disadvantaged	71.5%
<b>Race/Ethnicity</b>	
Asian	80.0%
Filipino	71.9%
White, non-Hispanic	71.2%
African American or black	66.0%
Two or more races	<b>65.3%</b>
Hispanic or Latino	<b>60.8%</b>

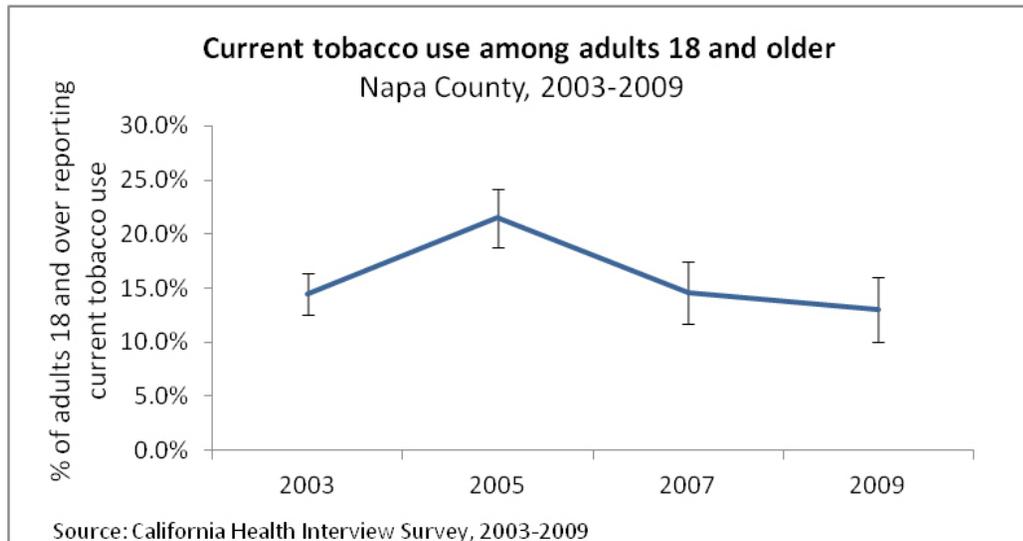
Source: California Department of Education

\*In the "healthy fitness zone" for aerobic capacity

**FIGURE 4-47: BINGE DRINKING AND EDUCATIONAL ATTAINMENT, NAPA COUNTY**



**FIGURE 4-48: CURRENT TOBACCO USE AMONG ADULTS 18 AND OLDER, NAPA COUNTY, 2003-2009**



drinking in the past year; at that time 38% of Napa County adults reported binge drinking at least once in the past year.<sup>81</sup> Individuals with a high school degree reported lower levels of binge drinking compared to both those with less than a high school level education and those with some college or more (Figure 4-47 on the previous page), although these differences were not statistically significant.

Binge drinking is associated with many health problems, including: unintentional injuries, intentional injuries, alcohol poisoning, liver disease, sexually transmitted diseases, and cardiovascular diseases among others.<sup>82</sup> In 2011, there were 330 non-fatal

<sup>81</sup> California Health Interview Survey, 2009

<sup>82</sup> Centers for Disease Control and Prevention, <http://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm>, accessed 2/7/13

ED visits (236.1 visits per 100,000 persons) and 135 non-fatal hospitalizations (96.6 per 100,000 persons) related to the use of alcohol in Napa County residents.<sup>83</sup> Excessive alcohol use also contributes to social issues such as domestic violence and other criminal offenses. In 2010, there were 400 calls (2.9 per 1,000 people) requesting law enforcement’s assistance with a domestic violence situation<sup>84</sup> and in 2008, the most recent year available, Napa County’s arrest rate for alcohol related offenses was 1,494 arrests per 100,000 people in the County. This was **higher** than the statewide rate of 1,203 alcohol related arrests per 100,000 persons.<sup>85</sup>

#### Tobacco Use

In Napa County, **13.8%** of adults reported being current tobacco users.<sup>86</sup> Tobacco use in Napa County is similar to the California state average (14%) and lower than the national average (18.2%), but remains above the Healthy People 2020 Objective of 12% or fewer adults using tobacco. Figure 4-48 shows the tobacco use trend in Napa County from 2003-2009; after an increase in 2005, tobacco use **declined** below the 2003 level.

<sup>83</sup> California Department of Public Health, California Injury Data Online, <http://epicenter.cdph.ca.gov/ReportMenus/AlcoholDrugTable.aspx>, accessed 2/19/13.

<sup>84</sup> California Department of Justice, 2010

<sup>85</sup> California Department of Alcohol and Drug Programs

<sup>86</sup> California Health Interview Survey, 2007 and 2009 pooled data

Compared to the County average, tobacco use was higher among males. Among individuals with an income below \$41,600, or 400% of the 2008 federal poverty level, 16.7% reported smoking compared to 9.9% at higher income levels; this is another example of the relationship between income and health (Figure 4-49). Individuals with a high school degree or less were also more likely to report being current smokers (Figure 4-50), although this difference was not statistically significant.

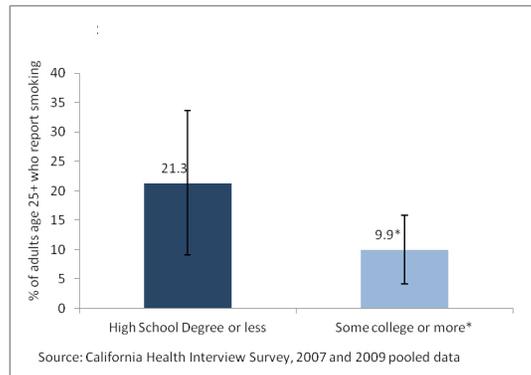
Smoking substantially increases the risk of many cancers, most notably lung cancer, and also contributes to stroke, coronary artery disease and chronic obstructive lung disease among other health conditions.<sup>87</sup> In Napa County, age-adjusted rates of lung cancer are significantly higher than the statewide rates for both men and women (see Illness and Injury section, page 89).

<sup>87</sup> U.S. Department of Health and Human Services. The Health Consequences of Smoking: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2004

**FIGURE 4-49: TOBACCO USE IN ADULTS BY GENDER AND FEDERAL POVERTY LEVEL (FPL) INCOME, NAPA COUNTY**

Male	<b>18.6%</b>
Female	<b>8.7%</b>
<b>Federal Poverty Level</b>	
Less than 400% FPL	<b>16.7%</b>
400% FPL and above	<b>9.9%</b>
Source: CHIS 2007/2009	

**FIGURE 4-50: SMOKING AND EDUCATIONAL ATTAINMENT, NAPA COUNTY**



**DRUG USE**

In 2011, there were 163 visits (116.6 visits per 100,000 people) to the emergency department (ED) and 72 hospitalizations (51.5 per 100,000 people) for non-fatal complications of drug use among adults in Napa County (Figure 4-51). Among the

emergency department visits for drug use, use of unspecified drugs or a mix of drugs was most commonly identified as the reason for the visit (Figure 4-52). There were also 41 ED visits related to the use of sedatives and 29 linked to use of opioids in 2011.

**FIGURE 4-51: NON-FATAL EMERGENCY DEPARTMENT VISITS AND HOSPITALIZATION FOR DRUG USE, NAPA COUNTY RESIDENTS, 2011**

	Number	Rate per 100,000
Non-fatal emergency department visits	163	116.6
Non-fatal hospitalization	72	51.5
Source: CDPH, EpiCenter, data on drug and alcohol consequences		

**FIGURE 4-52: NON-FATAL EMERGENCY DEPARTMENT VISITS BY DRUG TYPE, NAPA COUNTY RESIDENTS, 2011**

	Number	Rate per 100,000
Amphetamines	16	--
Cannabis	7	--
Cocaine	3	--
Hallucinogens	0	--
Opioids	29	20.8
Sedatives	41	29.3
Unspecified/mix drugs	67	47.9
Source: CDPH, EpiCenter. Data on drug and alcohol consequences		
Rate not calculated when number of events is <20		

FIGURE 4-53: ALCOHOL USE AMONG YOUTH

Napa County students...	7 <sup>th</sup> Grade	9 <sup>th</sup> Grade	11 <sup>th</sup> Grade
who have tried one or more servings of alcohol	20%	47%	64%
who have used alcohol within past 30 days	10%	25%	34%
who reported binge drinking within past 30 days	4%	12%	21%
who report very or fairly easy access to alcohol	30%	58%	74.0%
Source: California Healthy Kids Survey, Napa County, 2011			

FIGURE 4-54: NON-TRADITIONAL STUDENT\* ALCOHOL USE: LIFETIME AND CURRENT USE

	Lifetime	Past 30 Days
Alcohol	79%	52%
Binge Drink	66%	41%
Source: California Healthy Kids Survey, Napa County, 2011 Non-traditional student population = 271 in 2011 *Non-traditional students are those enrolled in Community Day Schools or Continuation Education.		

### Substance Abuse: Youth

#### ALCOHOL USE AND BINGE DRINKING

Among Napa County high school youth, one quarter (25%) of ninth grade students and one third (34%) of eleventh grade

FIGURE 4-55: TOBACCO USE AMONG YOUTH

Napa County students...	7 <sup>th</sup> Grade	9 <sup>th</sup> Grade	11 <sup>th</sup> Grade
who have tried one or more servings of tobacco	3%	7%	11%
who have used tobacco within past 30 days	2%	8%	11%
Source: California Healthy Kids Survey, Napa County, 2011			

students reported using alcohol within the past 30 days. More than half (58%) of ninth graders and three quarters (74%) of eleventh graders reported having very or fairly easy access to alcohol. Furthermore, **21%** of ninth graders and **25%** of eleventh graders reported driving after drinking or being in a car with a friend who had been drinking.<sup>88</sup> Figure 4-53 displays the alcohol use and accessibility among Napa County youth by seventh, ninth and eleventh graders. Non-traditional students reported even higher levels of current or past alcohol use (Figure 4-54), with more than half (52%) reporting that they had used alcohol within the past 30 days.

#### TOBACCO USE

Among Napa County students, 11% of eleventh graders reported trying tobacco within the past 30 days, followed by eight

percent of ninth graders, and only two percent of seventh graders. Figure 4-55 displays the tobacco use among Napa County youth as reported by seventh, ninth and eleventh graders.

#### DRUG USE

Between 17% and 24% of Napa County high school youth reported using marijuana within the past 30 days. This is more than double the number that report using tobacco within the past 30 days. More than half (58%) of ninth graders and three quarters (77%) of eleventh graders reported having very or fairly easy access to marijuana. Among younger students, the use of marijuana in the last 30 days was fairly low (three percent), but one quarter of them (25%) reported fairly easy access to marijuana. Students also noted that their primary source for marijuana was at parties or events outside of school. Nearly one third

<sup>88</sup> California Healthy Kids Survey, Napa County, 2011

FIGURE 4-56: DRUG USE AMONG YOUTH

Napa County Youth...	7 <sup>th</sup> Grade	9 <sup>th</sup> Grade	11 <sup>th</sup> Grade
who have used marijuana within past 30 days	3%	17%	24%
who reported very or fairly easy access to marijuana	24%	58%	77.0%
who have used inhalants within past 30 days	4.0%	3.0%	2.0%

Source: California Healthy Kids Survey, Napa County, 2011

FIGURE 4-57: NON-TRADITIONAL STUDENT\* ALCOHOL USE, LIFETIME AND CURRENT USE

	Lifetime	Past 30 Days
<b>Marijuana</b>	75%	49%
<b>Ecstasy</b>	28.0%	18.0%

Source: California Healthy Kids Survey, Napa County, 2011  
 Non-traditional student population = 271 in 2011  
 \*Non-traditional students are those enrolled in Community Day Schools or Continuation Education.

of youth (31%) reported driving or being in a car with a friend when he/she was using marijuana. Use of inhalants remains very low among all students, peaking at four percent among seventh graders. Among non-traditional students, nearly half (49%) reported use of marijuana and 18% reported use of ecstasy within the past 30 days.

FIGURE 4-58: SELF RATED HEALTH STATUS OF NAPA COUNTY RESIDENTS

Health Status	Napa County	Hispanic/Latino	White, Non-Hispanic	Below 200% FPL	Above 200% FPL	18 - 64 years	65+ years
Reported Excellent or Very Good Health	54.7%	38.0%	67.7%	42.4%	64.5%	55.0%	53.3%
Reported Good Health	30.1%	40.2%	24.4%	34.3%	28.5%	30.5%	28.5%
Reported Fair or Poor	15.2%	21.8%	7.9%	23.3%	7.1% *	14.5%	18.2%

Source: CHIS 2009; FPL=Federal Poverty Level  
 \*statistically unstable  
 Note: Data is unstable and therefore not presented for race/ethnic groups other than Latino and non-Hispanic white.

Figure 4-56 displays the marijuana and inhalants use and accessibility among Napa County youth as reported by seventh, ninth and eleventh graders, while Figure 4-57 shows current and past use of marijuana and ecstasy among non-traditional students.

### 8. ILLNESS AND INJURY

The burdens of chronic disease, communicable disease, and preventable injury are commonly used measures of community health status. In addition, assessing disparities in illness and injury across different population groups in relation to social determinants of health, such as income level and educational attainment, can

assist in developing targeted public health interventions and services.

This section presents select data on common causes of illness and injury.

#### Overall Health Status

Self-perception of health status and well-being is a powerful indicator of the health status of a community. In Napa County, **54.7%** of adults reported excellent or very good health, **30.1%** reported good health, and **15.2%** of adults reported that they are in “fair or poor health.” Hispanic/Latino residents of Napa County reported fair or poor health at nearly three times the frequency of non-Hispanic white residents (Figure 4-58). Fair or poor health was also

more commonly reported among residents whose income fell below 200% of the federal poverty level (FPL) than among those making over 200% FPL. Adults over age 65 also reported fair or poor health more frequently than adults 18-64, although this difference was small.

### Overweight and Obesity

#### ADULTS

Adult overweight and obesity, defined as having a body mass index (BMI) of 25 or higher, is associated with a number of serious health conditions including heart disease, diabetes, and some cancers.<sup>89</sup> In Napa County 8.4% of adults have diabetes and 8.1% of adults have coronary heart disease.<sup>90</sup> In 2009, nearly **60%** of Napa County adults age 20 years and above were considered **overweight or obese**, which is slightly higher than the statewide average of 57.8%.<sup>91</sup> In Napa County adults between the ages of 40 and 59 had the highest rate of overweight and obesity with an estimated 67.8% having a BMI of 25 or above (Figure 4-59).

<sup>89</sup> Center for Disease Control and Prevention, <http://www.cdc.gov/obesity/childhood/basics.html>, accessed 2/21/13

<sup>90</sup> California Health Interview Survey, 2009

<sup>91</sup> California Health Interview Survey, 2009

Obesity has been on the rise in the United States for the last 20 years. In 1990, among states participating in the Behavioral Risk Factor Surveillance System (BRFSS), no state had an obesity rate equal to or greater than 15%. In 2010, all 50 states had obesity prevalence rates based on self-report of more than 20%.<sup>92</sup> Experts predict that if current trends continue, by 2030 half of all Americans will be obese.<sup>93</sup> The increasing prevalence of obesity is most concerning when viewed in the context of its impact on overall health. Obesity increases the risk of many serious health conditions<sup>94</sup> including: coronary heart disease, stroke, high blood pressure, type II diabetes, cancer (such as endometrial, breast, and liver) and gallbladder disease. Obesity also increases the risk of sleep apnea, respiratory problems, osteoarthritis, reproductive health complications such as infertility and depression.

<sup>92</sup> CDC. Obesity and overweight: Trends by state, 1985-2010. [Animated map based on data collected through the CDC Behavioral Risk Factor Surveillance System (BRFSS).] Retrieved from <http://www.cdc.gov/obesity/data/trends.html>.

<sup>93</sup> Wang, Y.C., McPerson, K., Marsh, T., Gortmaker, S.L., & Brown, M. (2011). Health and economic burden of the projected obesity trends in the U.S.A and the UK. *Lancet*, 378: 815-825.

<sup>94</sup> CDC. Obesity and overweight: Health consequences, 2011. Retrieved from <http://www.cdc.gov/obesity/causes/health.html>.

**FIGURE 4-59: PERCENT OF ADULTS OVERWEIGHT OR OBESE (BMI 25+) BY AGE GROUP**

Age	Percent
<b>Total (20+ years)</b>	<b>59.8%</b>
20-39 years	53.0%
40-59 years	67.8%
60+ years	55.9%

Source: CHIS, 2009

Additionally, obesity and its associated health problems have a significant economic impact on the individual and the health care system.<sup>95</sup> The economic impact of obesity results from both direct medical costs (preventive, diagnostic, and treatment services related to obesity and resulting conditions) and the indirect costs that result from decreased productivity, disability, absenteeism, and loss of future income due to premature death.<sup>96, 97</sup>

An estimated 30% of Napa County adults are considered **obese**, with a BMI of 30 or

<sup>95</sup> U.S. Department of Health and Human Services. The Surgeon General's call to action to prevent and decrease overweight and obesity. [Rockville, MD] : U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General 2001.

<sup>96</sup> Wolf, A. What is the economic case for treating obesity? *Obesity Research*, 6(suppl): 2S-7S 1998.

<sup>97</sup> Wolf, A.M. . Economic outcomes of the obese patient. *Obesity Research*, 10, 58S-62S 2002.

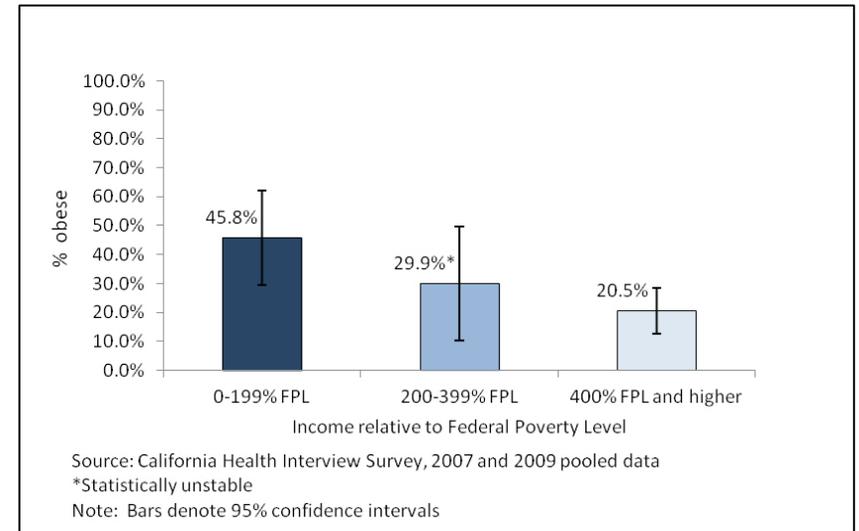
higher,<sup>98</sup> but there is significant variation in obesity rates by population demographics. Figure 4-60 on the previous page demonstrates that there is an inverse relationship between obesity and income level; Napa County adults with an income below 200% FPL were approximately two times as likely to be obese as adults with incomes greater than or equal to 400% FPL. Similarly, adults with less than a high school education were three times as likely to be obese as those with a college degree (Figure 4-61).

**YOUTH**

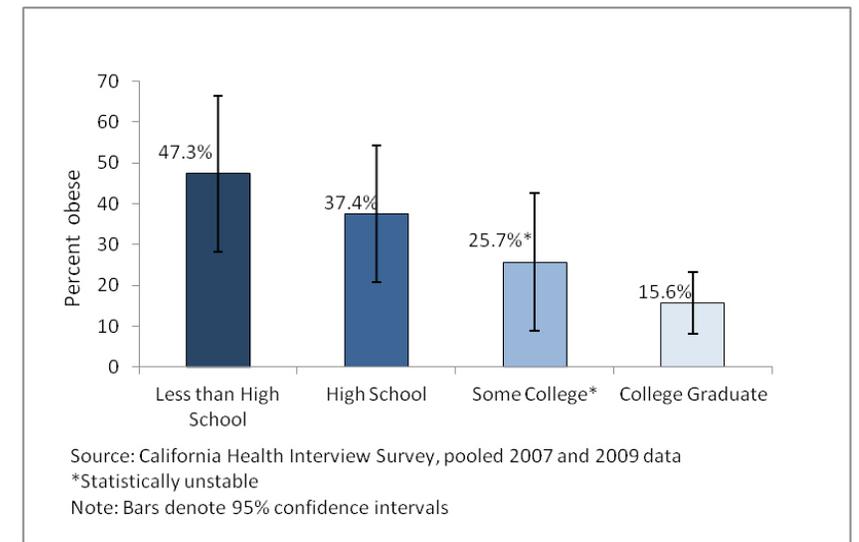
In the past 30 years obesity has more than doubled in children and tripled in adolescents.<sup>99</sup> Obese children are at high risk of becoming obese adults,<sup>100</sup> putting them at risk of chronic diseases occurring at an earlier age.

**Within Napa County more than 40% of fifth, seventh, and ninth graders are overweight or obese.**<sup>101</sup> Overweight and obesity rates among fifth, seventh and ninth grade students in Napa County increased 6.1% between 2005 and 2010; this was the largest increase observed among the nine Bay Area counties.<sup>102</sup> Nearly 50% of economically disadvantaged students were overweight or obese. Overweight and obesity were also higher than the County

**FIGURE 4-60: INCOME AND OBESITY, ADULTS AGE 20+, NAPA COUNTY**



**FIGURE 4-61: EDUCATIONAL ATTAINMENT AND OBESITY, ADULTS AGE 25+, NAPA COUNTY**



<sup>98</sup> California Health Interview Survey, 2007 and 2009 pooled data

<sup>99</sup> Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of obesity and trends in body mass index among U.S. children and adolescents, 1999-2010. *Journal of the American Medical Association* 2012; 307(5):483-490.

<sup>100</sup> Center for Disease Control and Prevention, <http://www.cdc.gov/obesity/childhood/basics.html>

<sup>101</sup> California Department of Education, 2011-2012

<sup>102</sup> UCLA Center for Health Policy Research, [http://www.publichealthadvocacy.org/research\\_patchworkprogress.html](http://www.publichealthadvocacy.org/research_patchworkprogress.html)

**FIGURE 4-62: PERCENT OF FIFTH, SEVENTH AND NINTH GRADERS WHO ARE OVERWEIGHT OR OBESE\* BY GENDER, SOCIOECONOMIC STATUS AND RACE/ETHNICITY (2011-2012)**

Total	42.0%
<b>Gender</b>	
Male	<b>44.7%</b>
Female	39.3%
<b>Socioeconomic status</b>	
Economically disadvantaged	<b>49.8%</b>
Not economically disadvantaged	33.9%
<b>Race/Ethnicity</b>	
Asian	29.8%
White, non-Hispanic	33.7%
Filipino	33.8%
Two or more races	41.2%
African American or black	<b>43.3%</b>
Hispanic or Latino	<b>48.5%</b>
Source: California Department of Education, 2011-2012	
*Not in the "healthy fitness zone" for body composition	
Percentages in bold exceed County average	

average among males (44.7% of male students), African-American students (43.3%), and Hispanic/Latino students (48.5%), as seen in Figure 4-62.

Obesity is also a growing concern among low-income preschoolers (ages 2-4); the U.S.DA reports that 18.3% of Napa County preschoolers are considered to be obese, which is **twice as high** as the Healthy People 2020 objective of 9.6%.<sup>103</sup> Furthermore, the obesity rate among this population has increased from 17.2% in 2008-2010 and 16.6% in 2007-2009.

### Asthma

Asthma is a chronic lung disease that affects an estimated 16.4 million adults (aged  $\geq 18$  years) and 7.0 million children (aged  $< 18$  years) in the United States (U.S.).<sup>104</sup> Air pollution and airborne allergens are two environmental triggers that can exacerbate asthma.<sup>105</sup> Within Napa County, 17.5% of adults and 17.5% of children have ever been diagnosed with asthma.<sup>106</sup>

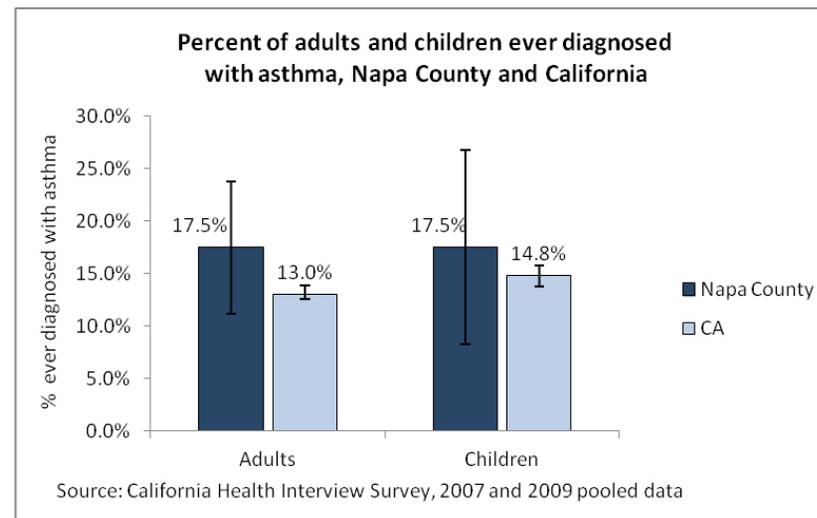
<sup>103</sup> U.S.DA, 2009-2011

<sup>104</sup> National Health Interview Survey (NHIS), 2008

<sup>105</sup> Office of Statewide Health Planning and Development, Preventable Hospitalizations in California, 1999-2008

<sup>106</sup> California Health Interview Survey, 2007 and 2009 pooled data

**FIGURE 4-63: PERCENT OF ADULTS AND CHILDREN EVER DIAGNOSED WITH ASTHMA, NAPA COUNTY AND CALIFORNIA**



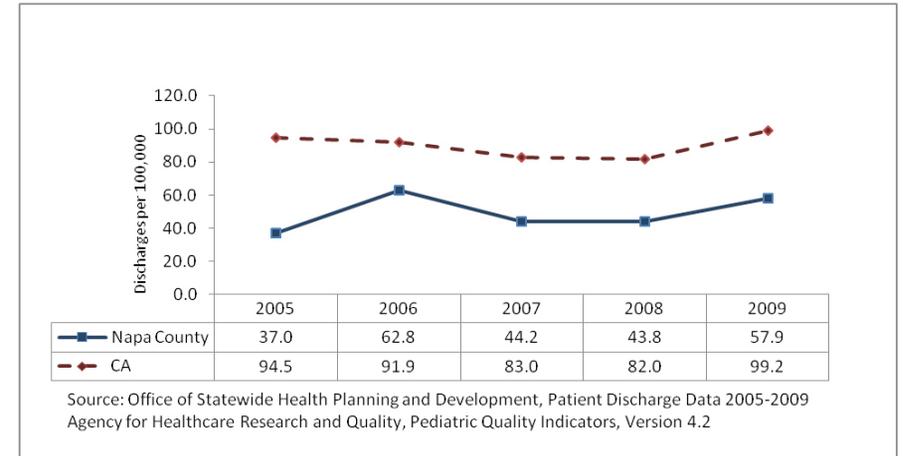
These percentages are **higher** than statewide averages (Figure 4-63 on the previous page), but the differences are not statistically significant.

Low income families are disproportionately exposed to asthma triggers inside their own homes, such as mold, mildew, and dust mites often because their landlords have not properly maintained their premises. Asthma is a chronic inflammatory disorder of the airways. Studies have found that economically disadvantaged children have immune systems that respond more aggressively to stimuli by producing greater quantities of a key protein implicated in inflammation and asthma called Th-2 cytokines. Psychological stress explains part of this effect – that is, these children experience greater stress in their day-to-day lives, and in turn, these stressful experiences are linked to greater stimulated Th-2 cytokine production.<sup>107</sup> Studies that look at diseases like asthma in the context of social conditions are generating a better understanding of how family and neighborhood circumstances, including chaos, instability, violence and stress, can contribute to illness as in asthma inflammatory processes. The work is not only leading to a more accurate understanding of why health patterns vary along class and racial lines, but why anti-poverty efforts, even more than drugs, offer the most promise for healthier communities.<sup>108</sup>

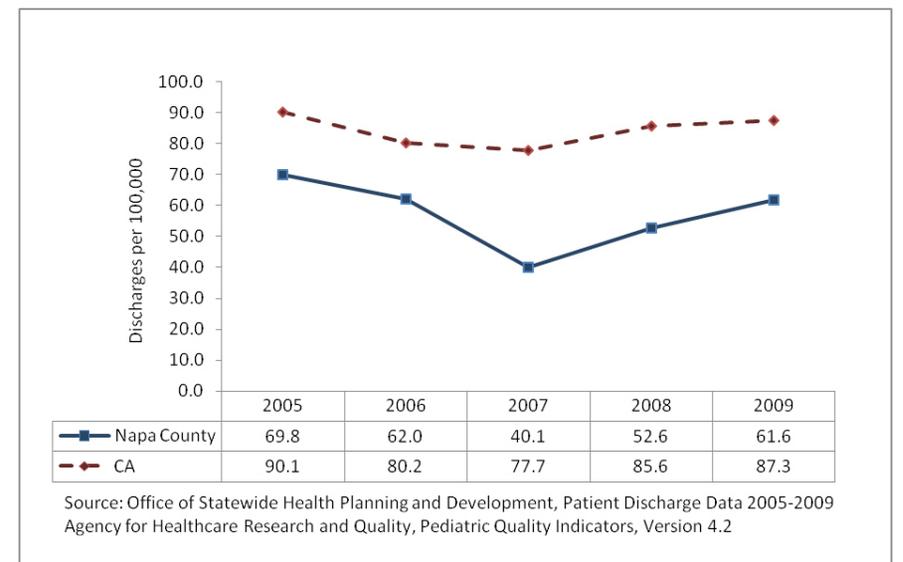
<sup>107</sup> Chen, E., Hanson, M. D., Paterson, L. Q., Griffin, M. J., Walker, H. A., & Miller, G.E. (2006). Socioeconomic status and inflammatory processes in childhood asthma: the role of psychological stress. *Journal of Allergy and Clinical Immunology*, 117, 1014-1020.

<sup>108</sup> Unnatural Causes Website: <http://www.unnaturalcauses.org/assets/uploads/file/Chen%20and%20asthma%20article.pdf> "THE BIGGEST ASTHMA TRIGGER OF THEM ALL? New studies indicate how poverty itself is inflammatory"

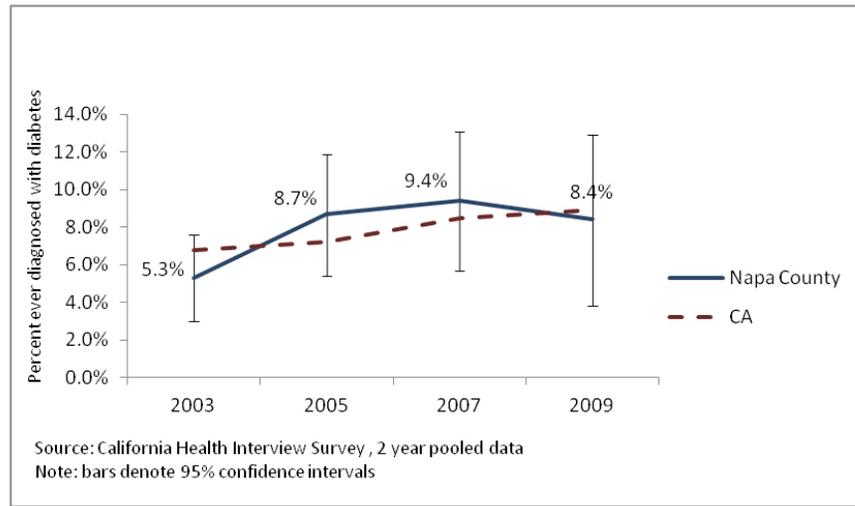
**FIGURE 4-64: PEDIATRIC ASTHMA HOSPITALIZATION, CHILDREN 2-17 YEARS, NAPA COUNTY, 2005-2009**



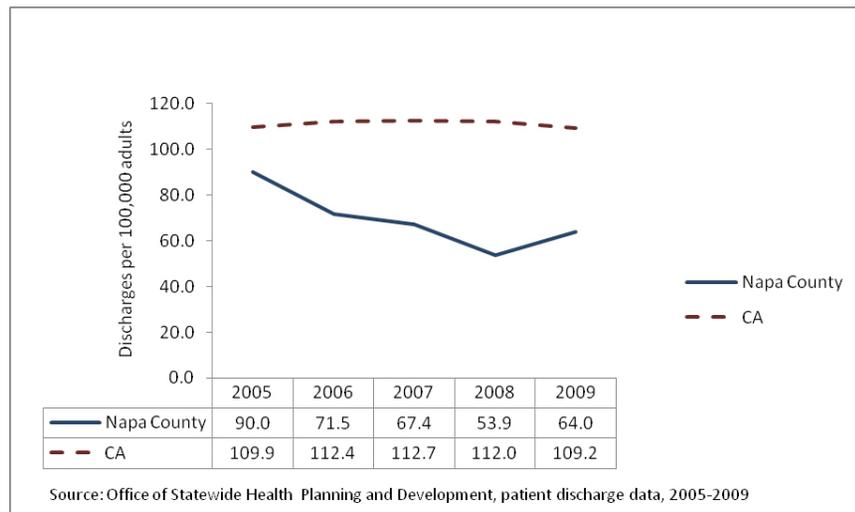
**FIGURE 4-65: ADULT ASTHMA HOSPITALIZATION, ADULTS 18+, NAPA COUNTY, 2005-2009**



**FIGURE 4-66: PERCENT OF ADULTS AGE 20+ WHO HAVE EVER BEEN DIAGNOSED WITH DIABETES, NAPA COUNTY AND CALIFORNIA**



**FIGURE 4-67: PREVENTABLE HOSPITALIZATIONS FOR LONG TERM COMPLICATIONS OF DIABETES, NAPA COUNTY AND CALIFORNIA**



Asthma hospitalization data provides another perspective in understanding the prevalence of asthma and its impact on the community. Hospital admission for a severe asthma attack is considered a preventable hospitalization by national and state agencies that monitor health care quality indicators because it is a possible indication that the disease is not being effectively managed in an outpatient setting.<sup>109</sup> Between 2005 and 2009, asthma hospitalizations among Napa County children and adults remained well **below** statewide asthma hospitalization rates (Figure 4-64 and Figure 4-65 on the previous page).<sup>110</sup>

### Diabetes

Diabetes increases the risk for serious health complications including heart disease, blindness, kidney failure, and lower-extremity amputations; it is the seventh leading cause of death in the United States and contributes significantly to the rate of five other leading causes of death.<sup>111</sup> In Napa County, an estimated 8.4% of the population has diabetes.<sup>112</sup> Overall, diabetes in Napa County has **increased** from 5.3% in the 2003 survey year to 8.4% in the 2009 survey year (Figure 4-66). Due to the relatively small sample size of the survey, the 95% confidence intervals around the estimates are very wide and none of the differences in diabetes prevalence between years can be considered statistically significant. Increasing age is an important risk factor for developing diabetes. Among adults age 65 and older in Napa County, an estimated 17.8%

<sup>109</sup> Office of Statewide Health Planning and Development

<sup>110</sup> Office of Statewide Health Planning and Development, Patient Discharge Data 2005-2009. Agency for Healthcare Research and Quality, Pediatric Quality Indicators, Version 4.2

<sup>111</sup> Centers for Disease Control and Prevention, <http://www.cdc.gov/diabetes/consumer/learn.htm>, accessed 2/22/13

<sup>112</sup> California Health Interview Survey, 2009

(3,000 individuals) have diabetes. Due to the small number of children sampled by the California Health Interview Survey, data on pediatric diabetes for Napa County is considered unreliable and is not presented here.

Like hospitalization for asthma, hospitalizations for long-term complications of diabetes are considered preventable hospitalizations. Long-term complications of diabetes include kidney failure, blindness, and nervous system and circulatory problems.<sup>113</sup> With good disease management, these complications are avoidable. Preventable hospitalization for long-term complications from diabetes **decreased** from 90 hospitalizations per 100,000 in 2005 to 64 hospitalizations per 100,000 in 2009 (Figure 4-67 on the previous page). Additional data on preventable hospitalizations for complications of diabetes is presented in the Healthcare and Preventative Services section of this report.

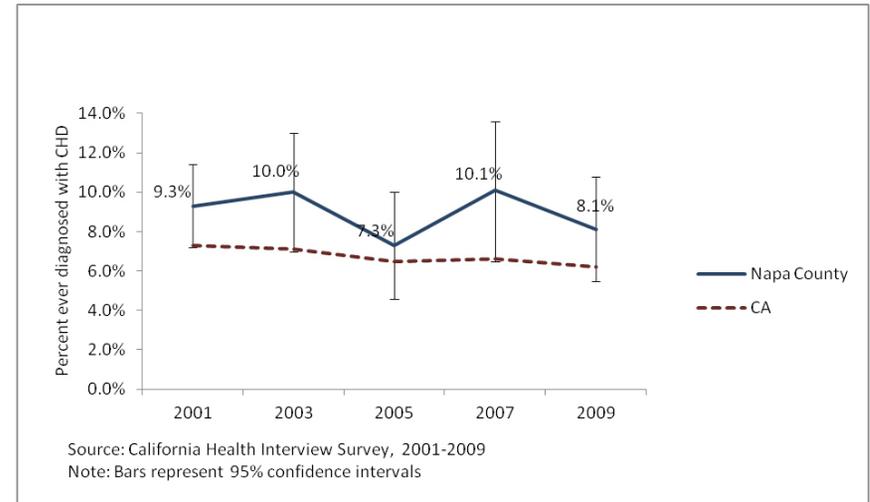
### Coronary Heart Disease

Heart disease is the leading cause of death for both men and women in the United States, where about one in every four deaths is the result of heart disease.<sup>114</sup> In Napa County, an estimated 8.1% of adults over the age of 20 had coronary heart disease in 2009, which means that approximately 7,000 adults in Napa County are living with heart disease. The prevalence of heart disease in Napa County is higher than the estimated statewide prevalence of 6.2%, but the difference is not statistically significant and it is important to note that these estimates are not

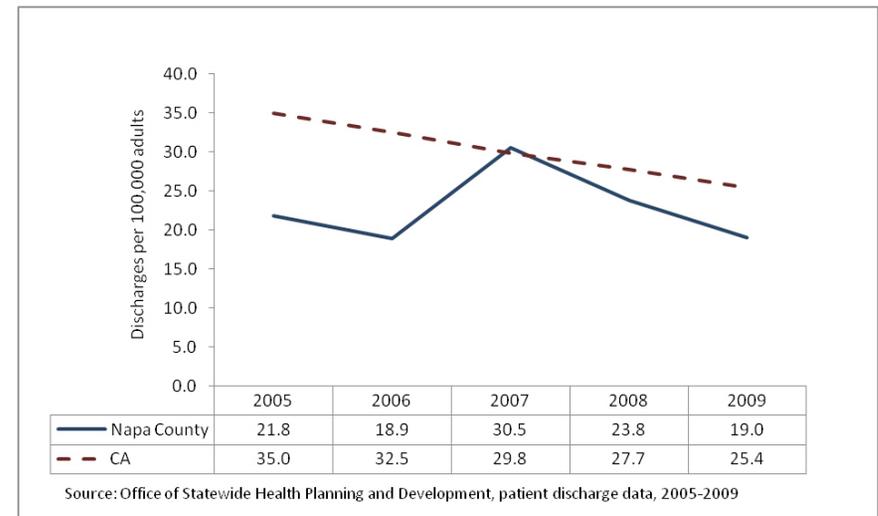
<sup>113</sup> Office of Statewide Health Planning and Development, Preventable Hospitalizations in California, 1999-2008

<sup>114</sup> Kochanek KD, Xu JQ, Murphy SL, Miniño AM, Kung HC. Deaths: final data for 2009. [PDF-2M] *National vital statistics reports*. 2011;60(3).

**FIGURE 4-68: PERCENT OF ADULTS AGE 20+ EVER DIAGNOSED WITH CORONARY HEART DISEASE, NAPA COUNTY AND CALIFORNIA**



**FIGURE 4-69: PREVENTABLE HOSPITALIZATIONS FOR ANGINA (WITHOUT PROCEDURE), NAPA COUNTY AND CALIFORNIA**



age-adjusted.<sup>115</sup> Age adjusting rates is a technique for removing the effects of age, which is an important risk factor for chronic disease, so that rates can be compared between populations with different age distributions. For example, a county having a higher percentage of elderly people may have a higher rate of death or hospitalization than a county with a younger population, merely because the elderly are more likely to die or be hospitalized. Age adjustment can make the different groups more comparable. Increasing age is an important risk factor for heart disease; in 2009, the prevalence of heart disease in Napa County residents age 65 and over was 27.1%, which means that there were approximately 5,000 seniors diagnosed with heart disease. In surveys conducted between 2001 and 2009 the estimated prevalence of coronary heart disease among all adults in Napa County (Figure 4-68) has varied between 7.3% and 10.1%, but there has not been a significant increasing or decreasing trend observed using the California Health Interview Survey (CHIS) during that time period.

<sup>115</sup> California Health Interview Survey, 2007 and 2009 pooled data; Behavioral Risk Factor Surveillance Survey (U.S. data)

Angina, a symptom of coronary heart disease, is a chest pain or discomfort that occurs when the heart muscle is not obtaining enough blood. When this chest pain occurs at rest without an apparent reason, this can lead to a medical emergency. Figure 4-69 shows the rate of preventable hospitalizations for angina (without procedures) for Napa County residents compared to statewide rates between 2005 and 2009. Preventable hospitalizations for angina (without procedure) are due to chest pain that is not associated with some other medical or surgical procedure, such as cardiac catheterization or angioplasty, and likely reflect poorly controlled coronary heart disease. In 2007, the rate of hospitalization due to angina (without procedure) increased sharply from 18.9 discharges per 100,000 to 30.5 discharges per 100,000, but has since decreased back to 2006 levels. The rate of preventable hospitalizations for angina is currently below the statewide rate; the reason for the brief increase in 2007 is unclear.

### Sexually Transmitted Infections

The sexually transmitted infections (STIs) covered in this report include chlamydia

and gonorrhea, two of the most common STIs that are caused by bacteria.

It is widely acknowledged that the number of STI cases reported to local health departments substantially underestimates the incidence of STIs as many cases are undiagnosed. The Centers for Disease Control and Prevention estimates that there are 19 million new cases of STIs every year with approximately half occurring in young people ages 15-24.<sup>116</sup> A 2007 report in the California Journal of Health Promotion estimated that there were 1,755 new cases of STIs in Napa County in 2005, including non-reportable STIs, with an estimated annual direct medical cost of \$1,400,000.<sup>117</sup>

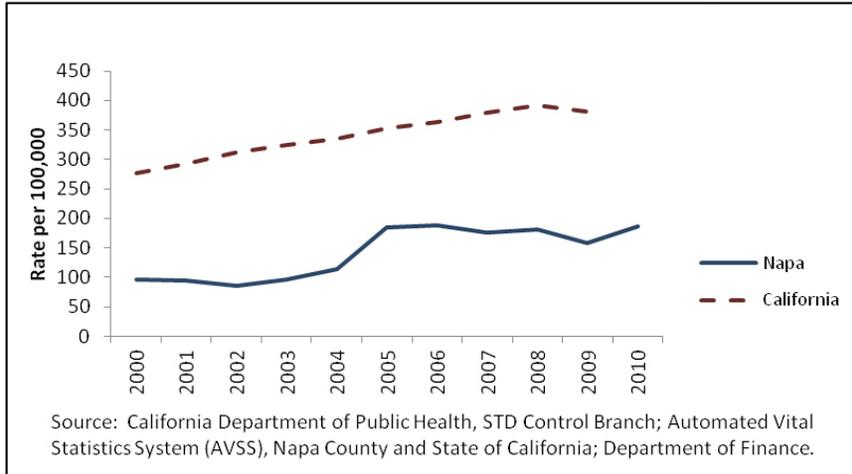
### CHLAMYDIA

Chlamydia trachomatis is the most commonly reported infectious disease in the United States. Since most infections do not cause symptoms, the infection is

<sup>116</sup> Weinstock H, et al. Sexually transmitted diseases among American youth: incidence and prevalence estimates, 2000. *Perspectives on Sexual and Reproductive Health* 2004; 36: 6-10.

<sup>117</sup> Jerman P, Constantine NA, Nevarez CR. Sexually Transmitted Infections Among California Youth: Estimated Incidence and Direct Medical Cost, 2005. *California Journal of Health Promotion*, 2007; 5: 80-91.

**FIGURE 4-70: CHLAMYDIA CASE RATES, NAPA COUNTY AND CALIFORNIA, 2000-2010**



substantially under diagnosed and under reported. Young women are the group most affected by chlamydia. Because infection is usually asymptomatic in males and because of increased screening in women younger than 26 years, chlamydia is more commonly reported in females. Long-term consequences of untreated infection in women can include Pelvic Inflammatory Disease (PID), ectopic pregnancy and infertility.

In 2010, 255 cases of chlamydia were reported to Napa County Public Health, representing a rate of 187 cases for every 100,000 persons. This is an 18% **increase** from 2009 when there were 159 cases/100,000 persons. Napa County’s rate was considerably lower than the State rate of 381 per 100,000 persons in 2009. However, Napa County’s rate has gradually **increased** over the last decade (see Figure 4-70).

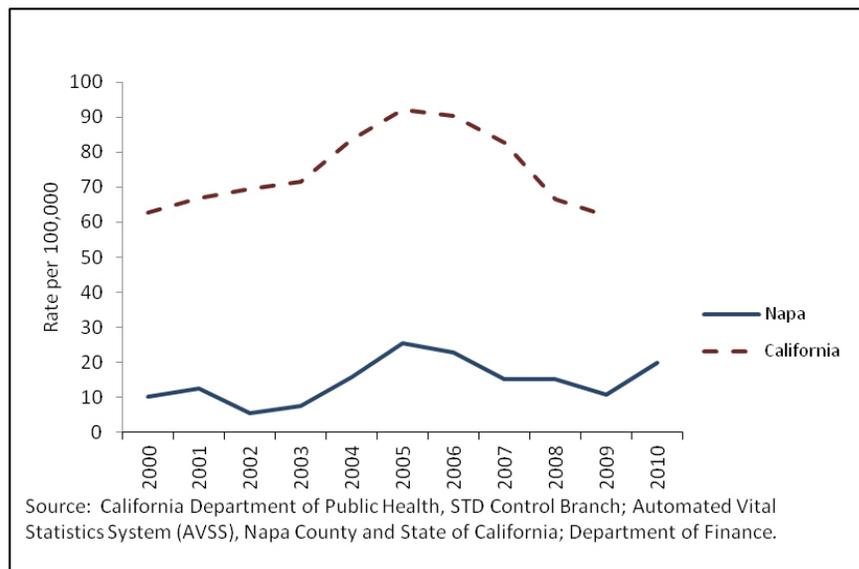
**FIGURE 4-71: RACE, ETHNICITY AND GENDER SPECIFIC CHLAMYDIA RATES FOR NAPA COUNTY. TOTAL CASES FOR YEARS 2008-2010**

	Cases	Percent	Rate	95% CI	2009 Population	Percent
<b>County Total</b>	<b>727</b>	<b>100.0%</b>	<b>180.5</b>	<b>167.4, 193.6</b>	140834	100.0%
Female	550	75.7%	278.5	255.2, 301.8	70640	50.2%
Male	177	24.3%	87.4	74.5, 100.2	70194	49.8%
White/Caucasian	218	30.0%	101.8	88.3, 115.4	83374	59.2%
Hispanic	249	34.3%	166.4	145.7, 187.0	44795	31.8%
Asian/Pacific Islander	25	3.4%	103.5	62.9, 144.1	7715	5.5%
African American	16	2.2%	287.5	146.6, 428.4	1693	1.2%
Other/Unknown	219	30.1%	--	--	NA	NA

Source: Automated Vital Statistics System (AVSS), Napa County and State of California, Department of Finance.  
Rates are not calculated when total cases are <10.

Figure 4-71 shows Napa County chlamydia rates from 2008-2010 by race, gender and ethnicity. For both women and men the highest case rates were observed in 20-24 year olds. There were 1,661 cases per 100,000 females age 20-24 and 418 cases per 100,000 males age 20-24. The rate of chlamydia in Hispanic/Latino residents of Napa County was approximately 65% greater than the rate for Whites (166.4 vs. 101.8 cases per 100,000). The rate for African American/Black residents of Napa County was nearly three times greater than the rate for white residents in Napa County (287.5 vs. 101.8 cases per 100,000).

**FIGURE 4-72: GONORRHEA CASE RATES, NAPA COUNTY AND CALIFORNIA, 2000-2010**



**FIGURE 4-73: GONORRHEA: RACE, ETHNICITY AND GENDER SPECIFIC RATES FOR NAPA COUNTY. TOTAL CASES FOR YEARS 2008-2010, RATES ARE AGE ADJUSTED PER 100,000 POPULATION.**

	Cases	Percent	Rate	95% CI	2009 Population	Percent
<b>County Total</b>	<b>63</b>	<b>100.0%</b>	<b>15.8</b>	<b>11.9, 19.7</b>	140834	100.0%
Female	31	49.2%	15.7	10.2, 21.2	70640	50.2%
Male	32	50.8%	15.8	10.3, 21.3	70194	49.8%
White/Caucasian	22	34.9%	10.3	6.02, 14.7	83374	59.2%
Hispanic/Latino	14	22.2%	9.7	4.60, 14.7	44795	31.8%
Asian/Pacific Islander	5	7.9%	--	--	7715	5.5%
African American	14	22.2%	260.9	124.4, 397.5	1693	1.2%
Other/Unknown	8	12.7%	--	--	NA	NA

Sources: Automated Vital Statistics System (AVSS), Napa County and State of California, Department of Finance.  
Rates are not calculated when total cases are <10.

These differences in chlamydia rates by age group and race/ethnicity mirror national and statewide trends.<sup>118, 119</sup>

### GONORRHEA

*Neisseria gonorrhoeae* is the agent of gonorrhea, the second most commonly reported notifiable disease in the United States. Like chlamydia, gonorrhea can lead to PID and infertility in women. In addition, infection with gonorrhea has been shown to facilitate the transmission of HIV infection.<sup>120</sup>

In 2010, 27 cases of gonorrhea were reported to Napa County Public Health. The case rate was 20 cases per 100,000 persons; this is an **increase** of 83% over the 2009 rate of 11 cases per 100,000. It is also the first increase in the case rate since 2005 (Figure 4-72), when reported cases reached a peak of 26 cases per 100,000 persons. However, Napa County's gonorrhea case rate continues to remain considerably **lower** than California's rate of 62 cases per 100,000 persons in 2009.

Due to the relatively small number of gonorrhea cases in the County, rates for specific populations were calculated over a three year period, 2008-2010. The gonorrhea case rate was highest among African American/black residents of Napa County during this time (Figure 4-73). The rate of gonorrhea in African Americans is 25 times greater than the rate for non-Hispanic

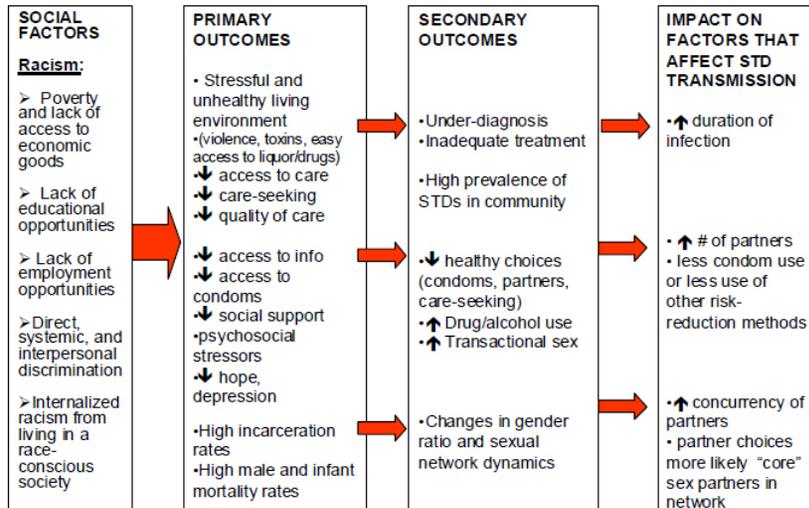
<sup>118</sup> Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance, 2009*. Atlanta, GA: U.S. Department of Health and Human Services; November 2010.

<sup>119</sup> *Sexually Transmitted Diseases in California, 2009*. California Department of Public Health, STD Control Branch, November 2010.

<sup>120</sup> Fleming DT, Wasserheit JN. From epidemiological synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection. *Sex Transm Infect*, 1999; 75: 3-17.

FIGURE 4-74: RACISM AND STD RISK

**RACISM AND STD RISK: POTENTIAL THEORETICAL MODEL**



Adapted from model created by Heidi Bauer, California Department of Public Health, Center for Infectious Disease, Division of Communicable Disease Control, STD Control Branch, 2007.

white residents in Napa County. While African Americans make up just 1.2% of the population in Napa County, 22% of reported gonorrhea cases between 2008 and 2010 were in African Americans. Napa County data is consistent with national data which reflects that the rate of gonorrhea in African Americans is 20 times greater than the rate in whites and the rate in Latinos/Hispanics is two times greater than in whites. Rates among Asian/Pacific Islanders are consistently lower than in white residents of the U.S.<sup>121</sup>

The relationship between race/ethnicity and STIs, including HIV, is multi-factorial and complex. The diagram in Figure 4-74 is a theoretical model that attempts to explain racial disparities in STIs. Poverty, historical laws, and the impact that racism has on stress, individual behavior and access to educational opportunities are hypothesized to be root causes of these disparities. The primary outcomes of these social factors are a stressful environment and a lack of access to health related information and services. In some populations, and specifically in some African American communities, there are also high rates of incarceration among males, which can lead to gender ratio imbalances that affect sexual networks. The result is an increase in the duration of infection (due to delay in treatment), a higher number of sexual partners and partner concurrency, and a decrease in condom use, all of which influence and help sustain higher levels STI transmission in a community.<sup>122</sup>

**Fall Related Injuries**

Each year, one in every three adults age 65 and older falls. Falls can cause moderate to severe injuries, such as hip fractures and head injuries, and can increase the risk of early death.<sup>123</sup> In Napa County, unintentional fall injuries were the leading cause of non-fatal emergency department visits for injuries among all age groups with a rate of 2,307 visits per 100,000 people in 2011.<sup>124</sup> Among seniors 65 years and older, there were 1,182 (5,557 per

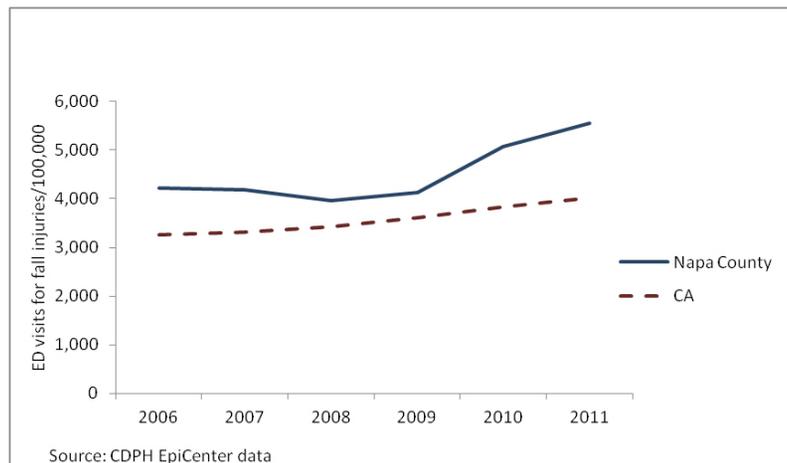
<sup>122</sup> Presenting on Sexually Transmitted Disease (STD) Racial Health Disparities: A Resource Guide for Facilitators. California Department of Public Health, Center for Infectious Diseases Division of Communicable Disease Control Sexually Transmitted Disease Control Branch, and California STD/HIV Prevention Training Center, 2008.

<sup>123</sup> Center for Disease Control and Prevention, <http://www.cdc.gov/homeandrecreational-safety/Falls/adultfalls.html>

<sup>124</sup> California Department of Public Health, EpiCenter, 2011

<sup>121</sup> Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance*, 2009. Atlanta, GA: U.S. Department of Health and Human Services; November 2010.

**FIGURE 4-75: NON-FATAL EMERGENCY DEPARTMENT VISITS FOR FALL-RELATED INJURIES IN PERSONS 65-106 YEARS**



**FIGURE 4-76: FALL RELATED INJURIES AND DEATHS AMONG SENIORS (AGE 65-106 YEARS), NAPA COUNTY, 2011**

	Napa County		California	
	Number	Rate per 100,000	Number	Rate per 100,000
Non-fatal emergency department visit	1,182	5,557	174,737	4,018
Non-fatal hospitalization	423	1,989	74,520	1,714
Deaths*	7	--	1,652	39

Source: California Department of Public Health, EpiCenter Injury Online data  
 \*Death data is for 2010; rate is not calculated because total falls are <20.

100,000 people) non-fatal emergency department (ED) visits for fall related injuries in 2011, which was higher than the state (4,018 visits per 100,000 people)<sup>125</sup> and national (5,235 visits per 100,000 people)<sup>126</sup> rates. The rate of non-fatal ED visits for fall related injuries among seniors has **increased** in Napa County since 2009 and remains higher than the statewide rate (Figure

<sup>125</sup> California Department of Public Health, EpiCenter, 2011

<sup>126</sup> Centers for Disease Control and Prevention, National Center for Health Statistics, 2007

4-75). In addition, there were 423 hospitalizations for fall related injuries in 2011 and seven deaths related to fall injuries in 2010 among Napa County residents age 65 and older (Figure 4-76).

### Cancer Incidence

Cancer at all sites (meaning malignancy anywhere in the body) is the leading cause of death in Napa County.<sup>127</sup> The cancer incidence rate in Napa County is higher than the state rate for **prostate cancer, lung cancer, colon cancer, female melanoma and for cancers of all sites** (Figure 4-77 on the previous page).

Among males, prostate cancer, lung/bronchus cancer, and colon/rectum cancer rates were **significantly higher** than statewide rates; among females, lung/bronchus cancer and melanoma cancer rates were significantly higher than the statewide average.

Figure 4-78 on the previous page shows the estimated number of new cancer cases and cancer deaths among Napa County residents in 2011 (official data for 2011 was not yet released at the time of this assessment). Data on cancer mortality is discussed in more detail in the Causes of Death section of this report.

We do not know for certain why the incidence rates for certain cancers are higher in Napa County than in other geographic locations in California, but we do have some data on factors that are likely contributors to cancer in the County. For example, we know that the risk of developing lung cancer is about 23 times higher among men who smoke cigarettes and about 13 times higher among

<sup>127</sup> Napa County Mortality Report, <http://Countyofnapa.org/publichealth/data/>

**FIGURE 4-77: AGE-ADJUSTED INCIDENCE RATES FOR CALIFORNIA'S MOST COMMON CANCERS: NAPA COUNTY, 2004-2008**

Males	County Rate	State Rate	Females	County Rate	State Rate
Prostate	167.9*	143.3	Breast	129.5	121.6
Lung & Bronchus	82.4*	62.0	Lung & Bronchus	59.1*	45.0
Colon & Rectum	59.7*	50.3	Colon & Rectum	43.3	38.1
Bladder	38.1	33.6	Uterus	25.5	22.1
Melanoma	31.2	26.2	Melanoma	23.8*	15.4
All sites	583.2*	494.5	All Sites	431.4*	387.4

\*County rate is significantly different from statewide rate (p<.05).  
Source: California Cancer Registry, County fact sheet.  
Rates are per 100,000 persons.

**FIGURE 4-78: NAPA COUNTY ESTIMATED NUMBER OF NEW CANCER CASES AND DEATHS, 2011 (MAJOR SITES)**

	Cases	Deaths
Breast	95	20
Prostate	160	15
Lung & Bronchus	105	70
Colon & Rectum	75	25
Bladder	35	10
All sites	780	270

Source: California Cancer Registry, County fact sheet. Excludes non-melanoma skin cancers and carcinoma *in situ*, except bladder. These projections are offered as a rough guide and should not be regarded as definitive.

women who smoke cigarettes compared with never smokers.<sup>128</sup> Tobacco use also

<sup>128</sup> Centers for Disease Control and Prevention (CDC), [http://www.cdc.gov/tobacco/basic\\_information/health\\_effects/cancer/](http://www.cdc.gov/tobacco/basic_information/health_effects/cancer/)

increases the risk of esophageal, pancreatic, bladder, cervical, and kidney cancers, as well as cancers of the oral cavity. The Behavioral Risk Factor section of this report provides data on tobacco use in the County and shows that some demographic groups have higher rates of tobacco use than others. Studies have also increasingly tied the use of alcohol to an increased

risk for several different cancers, including liver, breast, colon and throat cancers.<sup>129</sup> The high prevalence of binge drinking is a particular health concern; nearly 40% of Napa County residents reported binge drinking in the past year on the California Health Interview Survey (see Behavioral Risk Factor section).<sup>130</sup> In contrast, the high incidence of prostate cancer in men is at least partially the result of the high screening rates for prostate cancer in Napa County. Many prostate cancers

<sup>129</sup> Centers for Disease Control and Prevention (CDC), <http://www.cdc.gov/cancer/dccp/prevention/other.htm>

<sup>130</sup> California Health Interview Survey, 2009

identified through routine screening will not require any treatment.<sup>131</sup>

According to the CDC, an estimated one quarter to one third of common cancers in the U.S. are caused by the joint effects of excess weight and lack of physical activity. Nearly one third of adults in Napa County are obese (see discussion earlier in this chapter on overweight and obesity) and more than half of Napa County residents get little or no physical activity (see Behavioral Risk Factor section).

## 9. CAUSES OF DEATH

When a death occurs in California, state law requires that a death certificate be filed within eight days and before a decedent is buried or cremated. The death certificate is a legal document that serves as a permanent record of the death of an individual. This section summarizes information obtained from death certificates for all Napa County residents who died from 2005 through 2008.<sup>132</sup>

<sup>131</sup> Screening for prostate cancer, U.S. Preventive Services Task Force, <http://www.uspreventiveservicestaskforce.org/prostatecancerscreening/prostatecancerfact.pdf>

<sup>132</sup> 2008 was the most recently available death data at the time the analysis was conducted.

**FIGURE 4-79: RANKABLE CAUSES OF DEATH IN NAPA COUNTY (2005-2008) AND IN THE UNITED STATES (2007)**

Napa County				United States			
Rank	Cause of Death	No. of Deaths	Age-Adjusted Rate	Rank	Cause of Death	No. of Deaths	Age-Adjusted Rate
1	Malignant neoplasms (cancer)	1,149	177	1	Diseases of the heart	616,067	190.9
2	Diseases of the heart	1,099	154.8	2	Malignant neoplasms (cancer)	562,875	178.4
3	Cerebrovascular disease (stroke)	336	46.9	3	Cerebrovascular disease (stroke)	135,952	42.2
4	Chronic lower respiratory diseases	283	41.5	4	Chronic lower respiratory diseases	127,924	40.8
5	Alzheimer's Disease	277	36.1	5	Accidents (unintentional injuries)	123,706	40.0
6	Accidents (unintentional injuries)	170	29.1	6	Alzheimer's Disease	74,632	22.7
7	Influenza and pneumonia	160	21.6	7	Diabetes mellitus	71,382	22.5
8	Diabetes mellitus	125	18.9	8	Influenza and pneumonia	52,717	16.2
9	Parkinson's Disease	75	10.5	9	Nephritis, nephritic syndrome, nephrosis*	46,448	14.5
10	Chronic liver disease and cirrhosis	67	10.9	10	Septicemia	34,828	11.0
		Total	3,741			Total	1,846,531

Source: Napa County Mortality Report, 2005-2008  
 Rates are per 100,000 population  
 \*diseases of the kidneys

Although most residents of Napa County will live long lives, some will die before age 75. Years of Potential Life Lost (YPLL) is a measurement of the number of years of potential life lost before the standard life expectancy, defined as age 75 for the purpose of this calculation. It is used to reflect the impact of premature mortality (death) on a population. The years of life lost for each individual are added together and a rate is calculated so that

comparisons can be made across groups (by gender, race/ethnicity, etc.).

Many premature causes of death are linked to health behaviors (e.g., diet and exercise), substance use/abuse, and injuries and, therefore, may be considered preventable.

### Rankable Causes of Death

Rankable causes of death are established by the National Center for Health Statistics

(NCHS), which offers a standardized method of comparing cause of death data. Rankable categories are often broad; for example, in a rankable cause of death table all types of cancer are grouped into one category. Similarly, the “diseases of the heart” category includes both common causes of heart disease death, such as ischemic heart disease, and less common causes such as endocarditis. They are included in this report to allow comparison between the leading causes of death in Napa County and the leading causes of death throughout the United States.

A total of 4,725 Napa County residents died from 2005 to 2008. **Cancer** was the leading cause of death for all people one year of age and older in Napa County, with an age-adjusted rate of 177 deaths per 100,000 persons. **Diseases of the heart (e.g., heart disease) and cerebrovascular disease (stroke)** were the second and third leading causes of death, respectively, in Napa County (Figure 4-79, left side). These three causes account for more than half of all deaths in the County. Rankings one and two are reversed for the national data – where heart disease is currently the leading cause of death nationally, followed

by cancer.<sup>133</sup> **Alzheimer's disease** is the fifth leading cause of death in Napa County and the sixth leading cause nationally. **Parkinson's disease** ranks ninth in Napa County, but is not in the top ten causes of death nationwide. Napa County's population is proportionately older than the populations of many other counties,<sup>134</sup> which may at least partially explain some of the differences in rank since both Alzheimer's and Parkinson's diseases tend to occur late in life.<sup>135, 136</sup>

### Leading Causes of Death and Premature Death

Figure 4-80 shows leading causes of death after separating out specific causes from within rankable categories presented in Figure 4-79 (e.g., cancer is no longer one comprehensive category, instead it is separated out by type of cancer). This helps us to understand more about the specific causes of death and premature death in

<sup>133</sup> Xu JQ, Kochanek KD, Murphy SL, Tejada-Vera B. Deaths: Final data for 2007. National vital statistics reports; vol 58 no 19. Hyattsville, MD: National Center for Health Statistics. 2010.

<sup>134</sup> Napa County Community Health Needs Assessment. (2010).

<sup>135</sup> Alzheimer's Association. (2010). 2010 Alzheimer's disease facts and figures. *Alzheimer's & Dementia*, 6(2), doi: 10.1016/j.jalz.2010.01.009

<sup>136</sup> Rajput, A.H., & Birdi, S. (1997). Epidemiology of Parkinson's disease. *Parkinsons & Related Disorders*, 3(4)

**FIGURE 4-80: TEN LEADING CAUSES OF DEATH AND PREMATURE DEATH, NAPA COUNTY, 2005-2008**

Rank	Cause of Death	No. of Deaths	Age-Adjusted Death Rate	Rank	Cause of Death	No. of Deaths	YPLL-75	Age-Adjusted YPLL-75
1	Coronary Heart Disease	729	103.1	1	Coronary Heart Disease	180	2085.0	365.2
2	Stroke	336	46.9	2	Motor Vehicle Accidents	53	1962.0	412.4
3	Lung Cancer	298	46.6	3	Suicide	54	1807.0	382.0
4	Alzheimer's Disease	277	36.1	4	Lung Cancer	135	1339.0	230.5
5	COPD**	241	35.3	5	Drug Overdose	29	774.0	154.9
6	Influenza/Pneumonia	160	21.6	6	Alcoholic Liver Disease	41	741.0	137.3
7	Diabetes	125	18.9	7	Stroke	58	716.0	135.7
8	Organic Dementia	117	15.5	8	Diabetes	50	666.0	118.1
9	Congestive Heart Failure	92	12.4	9	Female Breast Cancer +	38	555.0	179.4
10	Female Breast Cancer +	79	21.5	10	COPD**	61	503.0	80.7
		Total	2,454			Total	699	11,148

Source: Napa County Mortality Report, 2005-2008; rates are per 100,000 population  
 Key: \*\* Chronic Obstructive Pulmonary Disease  
 + only female population for rate.

Napa County. Premature causes of death in Napa County are now ranked on the right side of the table. Of the 4,725 deaths, 1,531 occurred in persons aged one to 74 years, a total of 24,828 years of potential life lost. Premature death can have enormous financial as well as emotional consequences because the years lost represent time that a person would have contributed as a productive member of society. The younger someone is at time of death, the more years of productive life are lost.

### CAUSES OF DEATH IN ALL AGE GROUPS VS. PREMATURE CAUSES OF DEATH

In this more detailed analysis a new picture emerges, one in which **coronary heart disease** now becomes the leading cause of death for all age groups one year of age and older (left side of Figure 4-80). It is also the leading cause of premature death (right side of Figure 4-80). Overall, there were 729 deaths from coronary heart disease, an age-adjusted death rate of 103 deaths per 100,000 persons. At the same time 180 of the coronary heart disease deaths occurred prematurely in people under age 75, an

FIGURE 4-81: TEN LEADING CAUSES OF PREMATURE DEATH FOR MALES AND FEMALES 1-74 YRS, NAPA COUNTY, 2005-2008

Premature Death: Ages 1-74 yrs - MALES					Premature Death: Ages 1-74 yrs - FEMALES				
Rank	Cause of Death	No. of Deaths	YPLL-75	Age-adjusted YPLL-75	Rank	Cause of Death	No. of Deaths	YPLL-75	Age-Adjusted YPLL-75
1	Coronary Heart Disease	133	1676	599.9	1	Motor Vehicle Accidents*	17	684	*
2	Suicide	44	1540	635.1	2	Lung Cancer	60	567	190.8
3	Motor Vehicle Accidents	36	1278	521.1	3	Female Breast Cancer	38	555	179.4
4	Lung Cancer	75	772	271.3	4	Coronary Heart Disease	47	409	136.1
5	Alcoholic Liver Disease	29	526	157.1	5	Drug Overdose*	12	349	*
6	Drug Overdose*	17	425	*	6	Stroke	26	313	120.8
7	Diabetes	29	417	151.2	7	Suicide*	10	267	*
8	Cardiomyopathy*†	19	417	*	8	Diabetes	21	249	84.9
9	Homicide*	9	415	*	9	Myeloid Leukemia*	9	248	*
10	Stroke	32	403	151.1	10	Colon Cancer*	19	237	*
Total		423	7,869		Total		259	3,878	

Source: Napa County Mortality Report, 2005-2008; Rates are per 100,000 population.  
 Key: \* small numbers  
 † cardiomyopathy refers to diseases of the heart muscle (the myocardium)

age-adjusted premature death rate of 365 years per 100,000 persons. Coronary heart disease includes ischemic and hypertensive heart disease, both of which have modifiable risk factors including tobacco use, overweight/obesity, high cholesterol, high blood pressure, lack of physical activity and diabetes.<sup>137</sup>

<sup>137</sup> American Heart Association. (2010). Risk factors and coronary heart disease. Retrieved on 8/2/10 from [http://www.heart.org/HEARTORG/Conditions/More/MyHeartandStroke-News/Coronary-Artery-Disease---Coronary-Heart-Disease\\_UCM\\_436416\\_Article.jsp](http://www.heart.org/HEARTORG/Conditions/More/MyHeartandStroke-News/Coronary-Artery-Disease---Coronary-Heart-Disease_UCM_436416_Article.jsp).

There were a total of 298 deaths from **lung cancer** over the four-year time period, an age-adjusted rate of 47 deaths per 100,000.<sup>138</sup> Napa County's lung cancer death rate is below the national rate of 53 per 100,000, but higher than the California rate of 38 deaths per 100,000.<sup>139</sup> Lung

<sup>138</sup> Altekruse S.F., Kosary C.L., Krapcho M., Neyman N., Aminou R., Waldron W., Edwards B.K. (eds). SEER Cancer Statistics Review, 1975-2007, National Cancer Institute. Bethesda, MD, [http://seer.cancer.gov/csr/1975\\_2007/](http://seer.cancer.gov/csr/1975_2007/), based on November 2009 SEER data submission, posted to the SEER web site, 2010.  
<sup>139</sup> California Department of Public Health. (2010). 2010 County Health Status Profiles. <http://www.cdph.ca.gov/programs/ohir/Pages/CHSP.aspx>

cancer was ranked fourth as a cause of premature death, contributing 1,339 years of potential life lost or 231 years per 100,000 persons.

When accidents were broken out by specific cause, **motor vehicle accidents** became the second leading cause and **drug overdose** the fifth leading cause of premature death. There were 53 motor vehicle accident related deaths accounting for a total of 1,962 years of potential lost life and an age adjusted rate of 412 years per 100,000 persons. Motor vehicle accidents had fewer deaths than most other premature causes of death, but rank second as a cause of premature death because more young people die in motor vehicle accidents.

**CAUSES OF PREMATURE DEATH BY GENDER**

There were 928 premature deaths in males and 603 premature deaths in females between ages one and 74 from 2005 to 2008. Males had 16,006 years of potential life lost and females had 8,822 years.

For males, **coronary heart disease** remained the leading cause of premature death with 133 deaths and 1,676 YPLL. **Motor vehicle accidents** were a leading

cause of premature death for both males and females. In this analysis, motor vehicle accidents were the number one cause of premature death for females, but this ranking should be considered unstable because the total number of deaths was fewer than 20. In terms of the total numbers of deaths, **lung cancer, breast cancer** and **coronary heart disease** were the most frequent causes of premature death in females, accounting for approximately one quarter of the deaths. Half of the top 10 leading causes of premature death for females have small numbers and their rankings are considered unstable. This is partly because females have longer life spans than males (and therefore fewer premature deaths) and because there was a greater range of causes of premature death in females compared to males.

In this gender specific analysis, **suicide** moved up to the second rank and **motor vehicle accidents** moved down to third rank for premature death in males. From 2005-2008, there were a total of 64 suicide deaths in Napa County. As shown in Figure 4-81, 44 of these were in males under age 75 and 10 were in females under age 75. **Alcoholic liver disease** was the fifth leading

cause of premature death in males with 29 deaths and 526 years of lost life. During the same time this did not rank in the top 10 causes of premature death for females.

Overall, the leading causes of premature death in both genders illustrate the role that substance use/abuse often plays in early death. For example, smoking cigarettes is known to cause lung cancer and is also a risk factor for coronary heart disease and stroke.<sup>140, 141, 142, 143</sup> Overconsumption of alcohol causes alcoholic liver disease (the sixth cause of premature death) and can also contribute to motor vehicle accidents, accidental drug overdose and breast cancer.

<sup>140</sup> American Heart Association. (2010). Risk factors and coronary heart disease. Retrieved on 8/2/10 from <http://www.americanheart.org/presenter.jhtml?identifier=4726>.

<sup>141</sup> National Stroke Association. (2010). Stroke 101. Retrieved on 8/2/10 from [http://www.stroke.org/site/DocServer/STROKE\\_101\\_Fact\\_Sheet.pdf?docID=4541](http://www.stroke.org/site/DocServer/STROKE_101_Fact_Sheet.pdf?docID=4541)

<sup>142</sup> Mannino, D.M, & Buist, A.S. (2007). Global burden of COPD; risk factors, prevalence and future trends. *The Lancet*, 370(9589), doi: 10.1016/S0140-6736(07)61380-4

<sup>143</sup> Ruano-Ravina, A., Figueiras, A., & Barros-Dios, J.M. (2003). Lung cancer and related risk factors: an update of the literature. *Public Health*, 117(3), doi: 10.1016/S0033-3506(02)00023-9



# conclusion

The development of this Community Health Assessment (CHA) has provided an opportunity for Napa County community members to come together to redefine health. This new vision of a healthy Napa County is based on the understanding that health and health outcomes are the result of many complex and overlapping factors. The cross-sector approach used for the CHA was instrumental in achieving an in-depth review of qualitative and quantitative primary and secondary data to create a comprehensive understanding of health and the conditions that affect health outcomes in Napa County.

This report reflects the hard work of a broad range of community partners, including representatives from local hospitals, local government, nonprofits, community leaders and community members. Participants have contributed their time collecting data, engaging in community meetings, discussing findings, and reviewing chapter drafts. From the beginning of this process,

participants called for extensive and diverse community participation from across Napa County. Live Healthy Napa County (LHNC) has been very successful in engaging a diverse range of community members in this process, and continued efforts will be made to keep participants engaged in the next step—the development of the Community Health Improvement Plan.

This Community Health Assessment presents an in-depth and systematic analysis of the health status of Napa County. It is important to recognize that this report is not all encompassing, but instead serves as an important first step in taking an overarching look at health within Napa County. The development of the Community Health Improvement Plan (CHIP), the next step in the Live Healthy Napa County planning process, will result in a long-term plan to improve community health. The aim of the Community Health Improvement Plan will be to develop common priorities that

inform and mobilize coordinated action throughout the County. The first step in the CHIP process will be to use the CHA to identify critical health issues across Napa County. Then community stakeholders will develop goals and strategies to address those issues, as well as disparities that affect health among specific populations.

## 1. SUMMARY OF ASSESSMENT FINDINGS

This Community Health Assessment includes three assessments: Chapter 2, the Community Themes, Strengths, and Forces of Change Assessment; Chapter 3, the Local Public Health System Assessment; and Chapter 4, the Community Health Status Assessment. The full findings are presented in the main body of the report, while this section presents highlighted findings from each of the chapters.

### Chapter Contents:

1. Summary of Assessment Findings....103
2. Conclusion.....110

## Chapter 2: Community Themes, Strengths, and Forces of Change

The CHA process revealed several important themes, strengths, and forces of change that local residents, businesses, and neighborhood groups in Napa County identified as important to the health of their neighborhoods and communities. They include the assets, strengths, and challenges listed in the charts below.

### ASSETS AND STRENGTHS OF NAPA COUNTY

- Low crime rates and safe neighborhoods in many County communities
- A clean environment
- Good schools in many areas of the County
- A strong economy with local jobs available in many areas of the County
- Strong community involvement
- Many existing partnerships between nonprofits and local government

### CHALLENGES FACING NAPA COUNTY

- Drug and alcohol abuse
- Lack of affordable housing and rising cost of living
- Income inequality
- Limited access to services outside of the City of Napa
- Insufficient public transportation system to connect people to services, as well as unsafe roads and sidewalks
- Limited mental health services because of cost, location, or other barriers

### WHAT TRENDS WILL AFFECT COMMUNITY HEALTH IN NAPA COUNTY?

In addition to current assets, strengths, and challenges, Napa County community members anticipate and recognize trends that will impact overall community health. The trends identified are:

- Aging population
- Shrinking HMO provider network
- Growing Latino population with many low-income households

- Decrease in state and federal funding for local schools, social services, and other community programs
- Increase in chronic conditions such as obesity and diabetes, especially among young people
- Increased focus on preventative care rather than medical treatment

### WHAT ARE THE BARRIERS TO HEALTH CARE ACCESS?

Lack of access to health care is a key issue among residents; the barriers in accessing health care services are summarized below:

- Cost of care
- Lack of insurance
- Lack of doctors accepting insurance, particularly for Kaiser Permanente patients, who are limited to Kaiser's health care campuses
- Lack of available specialists
- Immigration status and language

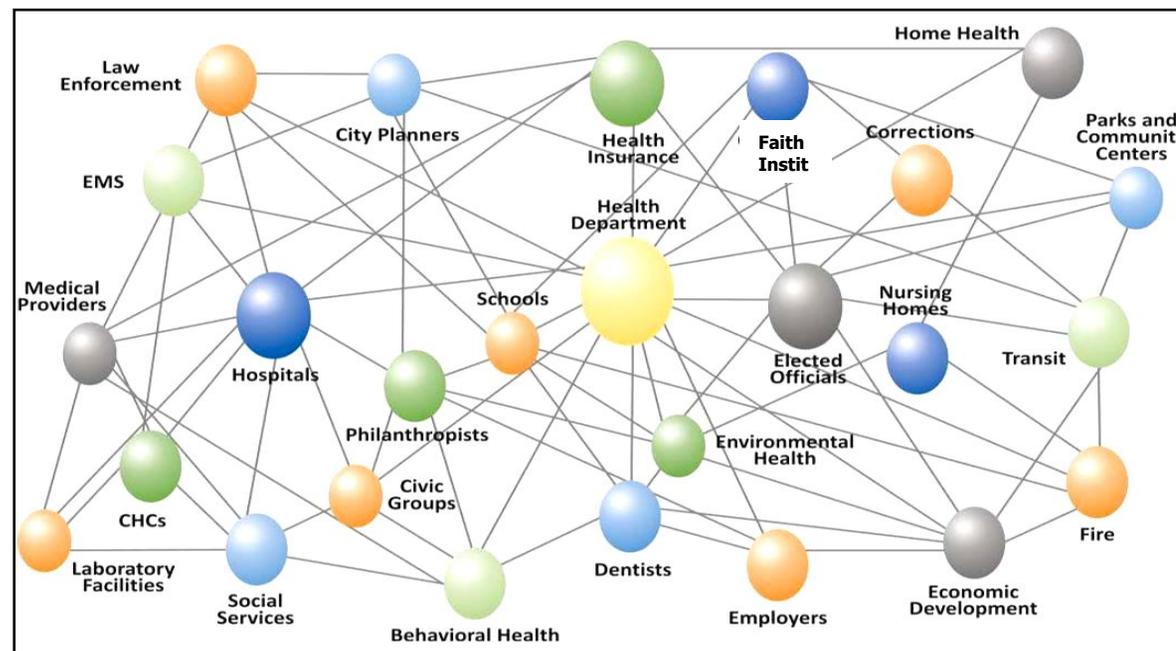
### WHAT ARE THE NEEDED IMPROVEMENTS IN NAPA COUNTY THAT WILL IMPACT COMMUNITY HEALTH?

Community members were also asked about overall improvements that are

needed in Napa County to improve community health. Their suggestions are presented below:

- Affordable housing and related services
- A drug, violence, and gang free environment
- Better access to health care for residents, including mental health services, emergency medical care, and late-night clinics
- More employment opportunities
- Strong schools and educational opportunities for children, youth, and families in all areas of the County
- Improved transportation options, including better roads and sidewalks and transit lines that connect families to hospitals and pharmacies
- Improved access to fresh, healthy foods, especially in schools
- Expanded opportunities for community dialogues and engagement
- Multilingual resources and services
- Funding

FIGURE 5-1: LOCAL PUBLIC HEALTH SYSTEM



### Chapter 3: Local Public Health System Assessment

The Local Public Health System Assessment (LPHSA) examined the capacity and capability of the network of organizations (Figure 1) that contribute to the health and wellbeing of the community. The LPHSA takes a systematic look at the broad set of services provided within the system. The system includes agencies, organizations, individuals and businesses that must work together on social, economic, environmental and individual factors to create conditions for

improved health and wellbeing in a community. The illustration above shows the variety of entities that contribute to the local public health system and the interconnectedness of each to the others' work. Key findings from the assessment are summarized below.

### ESSENTIAL PUBLIC HEALTH SERVICES RANKINGS

The Local Public Health System assessment provided an opportunity to examine

### 10 ESSENTIAL PUBLIC HEALTH SERVICES

1. **Monitor** health status to identify community health problems.
2. **Diagnose** and investigate health problems and health hazards in the community.
3. **Inform, educate, and empower** people about health issues.
4. **Mobilize** community partnerships to identify and solve health problems.
5. **Develop policies and plans** that support individual and community health efforts.
6. **Enforce** laws and regulations that protect health and ensure safety.
7. **Link** people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. **Assure** a competent public health and personal healthcare workforce.
9. **Evaluate** effectiveness, accessibility, and quality of personal and population-based health services.
10. **Research** for new insights and innovative solutions to health problems.

which Essential Public Health Services (EPHS) are currently strong in Napa County, and which could be strengthened. It also examined aspects of the public health system where Napa County faces challenges and could improve. The table on the next page presents the three EPHS ranked highest and lowest in the assessment process. Assessment participants were a cross section of representatives from the local public health system including law enforcement, fire and ambulance services, health care providers, education, community-based organizations, and faith based institutions as well as community members.

### OVERALL STRENGTHS AND CHALLENGES

In addition to documenting rankings for the each of the 10 Essential Public Health Services, the CHA was able to document overall strengths and challenges related to delivery of these services. They include the following, as shown in the table on the next page.

---

**NAPA COUNTY PUBLIC HEALTH ESSENTIAL SERVICES RANKINGS**


---

**HIGHEST RANKED ESSENTIAL SERVICES**

1. Diagnose and investigate health problems and health hazards.
2. Enforce laws and regulations that protect health and ensure safety.
3. Develop policies and plans that support individual and community health efforts.

**LOWEST RANKED ESSENTIAL SERVICES**

1. Research for new insights and innovative solutions to health problems.
2. Assure a competent public and personal health care workforce.
3. Mobilize community partnerships to identify and solve health problems.

---

**NAPA COUNTY PUBLIC HEALTH ESSENTIAL SERVICES**


---

**OVERALL STRENGTHS**

- Developing partnerships and collaborations across diverse stakeholders (e.g., nonprofits and County government, among health care providers, among nonprofits)
- Collaborating on activities related to Live Healthy Napa County

**OVERALL CHALLENGES**

- System-wide sharing of resources (e.g., to monitor health status, diagnose and investigate health hazards, develop partnerships)
- Coordinating data systems
- Developing partnerships with community members, within certain geographical regions of the County, and between business community and nonprofits
- Developing a proactive approach to address needs and issues
- Assessing overarching County needs and issues (i.e., systems approach)
- Disseminating data in accessible formats
- Budget cuts and limited resources
- Lack of coordination and communication between services/organizations

## Chapter 4: Community Health Status Assessment

Understanding the health status of Napa County residents is essential to understanding community health. The Community Health Status Assessment examined more than 120 indicators across eight broad-based categories related to health and wellbeing; below is a summary of key findings from the assessment.

### CHSA HIGHLIGHTS: STRENGTHS

- The percent of children living below the federal poverty level in Napa County (12%) is substantially below the statewide average of 19.1% (2006-2010 data).
- Although the Napa County unemployment rate rose in recent years, it has leveled off and remains lower than the unemployment rate in California overall (9.5% vs. 12.3% in 2011).
- The violent crime rate declined in Napa County between 2006 and 2010 and is lower than the violent crime rates for both the Bay Area region and California.
- Napa County had a mean number of 0.21 days of unhealthy ozone exposure between 2007 and 2009 compared to an average of 11.8 days statewide.
- Napa County has more grocery stores (27.8/100,000) and fewer fast food restaurants (54.9/100,000) per capita than either California or the U.S.
- Pesticide use declined 34% between 1999 and 2009 and the use of highly toxic pesticides such as methyl bromide has been largely phased out.
- 96.8% of new mothers in Napa County initiate breastfeeding in the hospital.
- Napa County meets or exceeds the Healthy People 2020 objectives for low birth weight babies, percent of preterm births, births to teen mothers, infant and child mortality, and the percent of women who are late to prenatal care.
- In Napa County, 93.6% of kindergarteners have all required immunizations.
- The majority (84.8%) of Napa County residents self-rate their health as being good to excellent.
- Although they continue to be leading causes of death, Napa County has met the Healthy People 2020 objectives for reducing heart disease (97.4 deaths per 100,000) and lung cancer death (41.1 deaths per 100,000) rates.

### CHSA HIGHLIGHTS: CHALLENGES

- About 15% of residents in Napa County self-rate their health as fair or poor; Latino and low-income residents report fair or poor health at higher than average rates.
- Only about half of Napa County adults and children eat five or more serving of fruits and vegetables daily. Additionally, 41.5% of children between the ages of 2 and 11 years drink one or more sugar sweetened beverages every day.
- In Napa County, 40% of fifth, seventh, and ninth grade students and 60% of adults are overweight or obese.
- Slightly more than half (57.5%) of all Napa County adults reported engaging in little or no physical activity each week.
- Within Napa County, 15.8% of residents (21,587 people) have no health insurance; 49.3% of unemployed and 32.9% of foreign born individuals were uninsured in 2011.
- In 2007, less than half of seniors (39.8%) reported having dental insurance.
- The rate of non-fatal Emergency Department (ED) visits for fall related injuries among seniors (5,557/100,000 in 2011) has increased in Napa County since 2009 and remains higher than the statewide rate.
- Among Napa County high school youth, one quarter (25%) of ninth grade students and one-third (34%) of eleventh grade students reported using alcohol within the past 30 days; furthermore, 21% of ninth graders and 25% of eleventh graders reported driving after drinking or being in a car with a friend who had been drinking.
- Between 2008 and 2010, there were 47 suicides in Napa County; this is higher than both the statewide rate and the Healthy People 2020 objective.
- A third (33%) of 11th grade students in Napa County reported feeling sad or hopeless for two weeks or more in the last year.
- The age-adjusted cancer incidence rates (newly diagnosed cancer cases) are significantly higher for both men and women in Napa County than for the State of California overall.
- The top three leading causes of death among all Napa County residents over one year of age are: coronary heart disease, stroke, and lung cancer, all of which have modifiable risk factors.
- The top three causes of premature death among all Napa County residents ages 1-74 are: coronary heart disease, motor vehicle accidents, and suicide.

## 2. CONCLUSION

Participants in the development of this comprehensive Community Health Assessment have consistently emphasized the importance of ensuring that Napa County residents have access to a broad range of services and activities that, together, create a healthy, thriving community and healthy community members. Examples include having access to affordable health-related services, education, healthy foods, transportation, active lifestyle options (e.g., sidewalks and safe parks), employment and housing opportunities, and access to mental health services. Participants described their vision of a healthy Napa County as: *a place where the physical and mental health of the community matters, and where community members have opportunities to feel engaged in meaningful ways throughout the course of their lives.*

Recognizing the hard work needed to achieve this vision, participants identified strengths and resources within and across Napa County that can be supported and/or enhanced. Participants also emphasized the need to develop a proactive,

preventive approach to address the leading health issues and health disparities identified across the County. Time and time again, participants underlined the importance of addressing disparities throughout Napa County, including disparities related to health status, accessing and navigating health services, the educational system, socioeconomic status, and access to promising job opportunities. A consistent theme—one that was prioritized in meetings and discussions, as well as seen in the data presented throughout this report—is that Latino community members are marginalized in a number of ways, and that disparities related to Latino community members in Napa County need to be addressed.

As described earlier, the next stage in the LHNC process is the development of the Community Health Improvement Plan. To assist in that effort, this final section presents a summary of crosscutting themes. They have been organized into four categories: **strengths** (data that illustrate positive health attributes across Napa County), **challenges** (data that illustrate health issues across the County),

**disparities** (data that reveal health challenges within a subpopulation in Napa County), and **steps forward** (important considerations and potential actions for the CHIP process).

### CROSSCUTTING THEMES: STRENGTHS ACROSS NAPA COUNTY

- Overall, community members rate themselves as having good to excellent health.
- Napa County has many clean, safe neighborhoods with access to recreation areas.
- Use of agricultural pesticides in Napa County has steadily declined over the past decade and levels of environmental ozone and fine particulate matter are generally low.
- Community members generally feel that Napa County has a good school system and a strong economy with local jobs.
- Overall Napa County has very high routine disease screening and immunization rates.
- The teen birth rate in Napa County has been steadily declining and remains lower than the California teen birth rate.
- Napa County meets or exceeds many of the national standards for maternal and child health.
- Rates of reportable sexually transmitted infections, including HIV, in Napa County are significantly below statewide rates.
- The Local Public Health System is able to enforce laws and regulations that protect health and ensure safety.
- The Local Public Health System has the capability and expertise to effectively diagnose and investigate health problems and health hazards.
- There are strong partnerships and collaborations across diverse stakeholders.
- There is strong community involvement in Napa County.

#### CROSCUTTING THEMES: CHALLENGES ACROSS NAPA COUNTY

- Napa County's Local Public Health System (LPHS) (Figure 5-1 on page 109) has challenges coordinating data systems, communicating between services and organizations, and system-wide sharing of resources.
- Napa County's LPHS has challenges developing partnerships, including with community members, in certain geographic regions of the County, and between the business community and nonprofits.
- Only about half of Napa County adults and children eat the recommended servings of fruits and vegetables daily.
- Slightly more than half of all Napa County adults reported engaging in little or no physical activity each week.
- Overweight and obesity rates are a concern among all age groups, but it is particularly concerning that nearly 40% of fifth, seventh and ninth graders in Napa County are now overweight or obese.
- Too many Napa County residents lack health and dental insurance, with marginalized populations particularly affected.
- Drug and alcohol abuse is a serious concern; over one third of Napa County adults have reported binge drinking within the past year and one quarter of ninth grade students report alcohol use in the past month.
- Many individuals and families are living in poverty in Napa County; over one quarter of all residents and one third of families with children under 18 live below 200% of the federal poverty level.
- Mental health is an important concern among Napa County residents; the suicide death rate in Napa County is above the Healthy People 2020 national objective and nearly one in five 9th and 11th graders have indicated that they've seriously considered attempting suicide within the past 12 months.
- The top three causes of death among **all** Napa County residents over one year of age are: coronary heart disease, stroke, and lung cancer, which all have modifiable risk factors.
- The top three causes of **premature death** among all Napa County residents ages 1-74 are: coronary heart disease, motor vehicle accidents, and suicide.

### CROSCUTTING THEMES: SIGNIFICANT HEALTH DISPARITIES IN NAPA COUNTY

- While the overall health status rating is very good in Napa County, Latino residents in the County reported fair or poor health at nearly three times the frequency of non-Latino white residents.
- Despite the fact that the County's overall rates of Sexually Transmitted Infections (STI) are lower than state levels, Latino and African American residents are more likely than non-Latino white residents be diagnosed with Chlamydia.
- A higher percentage of Latino residents, people with lower educational attainment (high school or less), and female headed households are living in poverty compared to other groups in the County.
- The City of Calistoga and the City of Napa each had census tracts with high concentrations of families living below 200% of the Federal Poverty Level (FPL).
- Hispanic/Latino residents and those who identify with "two or more races" had higher rates of unemployment compared to the overall County unemployment rate of 7.4%.
- Latinos, socioeconomically disadvantaged students, and English Language Learners are overrepresented among high school dropouts in Napa County.
- The percentage of third grade English Language Learner students reading at or above grade level (15%) is four-fold lower than the percentage of all other students (61%) reading at or above grade level.
- Napa County adults with an income below 200% of the federal poverty level (FPL) were nearly two times as likely to be obese as adults with higher incomes (above 399% FPL).
- Adults with less than a high school education were three times as likely to be obese as those with a college degree.
- Within Napa County, 18.3% of low-income preschoolers are obese.
- Eleventh grade minority students in Napa County reported harassment for bias-motivated reasons more frequently than their non-Latino white counterparts.

#### CROSSCUTTING THEMES: A PATH FORWARD IN NAPA COUNTY

Based on the quantitative and qualitative data gathered, as well as insights from three Steering Committee meetings held during the development of the CHA, Napa County has the opportunity to take several important steps to (a) set the stage for a successful Community Health Improvement Plan, and (b) strengthen the overall health and wellbeing of all County residents for the long term. These steps may include the following:

- Develop approaches to **coordinate data systems and communication** between services and organizations.
- Develop approaches to engage in a **system-wide sharing of resources**.
- Increase **collaborative efforts and partnerships** in order to meet the complex needs of Napa County residents.
- Develop **proactive community engagement and prevention** strategies.
- Develop **approaches to address disparities** identified throughout this assessment.
- Address health issues related to **overweight and obesity**.
- Address excessive **use of alcohol and drugs** among all ages.
- Address **mental health issues**.
- Increase **access to fresh, healthy foods**, especially in schools.
- Address the **sources of the leading causes of death** and premature death.

Live  
Healthy  
Napa  
County



Vive  
Saludable  
Condado  
de Napa

## appendices

PREPARED BY



Moore Iacofano Goltzman, Inc.

*in collaboration with*



Harder+Company

*and*

Live Healthy Napa County



ST. HELENA HOSPITAL

NAPA VALLEY

—Adventist Health



A Tradition of Stewardship  
A Commitment to Service

St. Joseph Health   
Queen of the Valley

  
NAPA VALLEY COALITION OF NONPROFIT AGENCIES

 KAISER PERMANENTE®



## table of contents

---

<b>APPENDIX A: LHNC COMMUNITY HEALTH SURVEY</b>	<b>1</b>
<hr/>	
<b>APPENDIX B: COMMUNITY HEALTH STATUS ASSESSMENT DATA BOOK</b>	
Socioeconomics	9
Quality of Life	10
Social and Mental Health	12
Maternal, Child and Adolescent Health	13
Healthcare and Preventative Services	15
Behavioral Risk Factors	16
Illness and Injury	17
Causes of Death	19
<hr/>	
<b>APPENDIX C: KEY INFORMANT LIST</b>	
Public Health Experts	21
Community Leaders	21
Individuals from Health Care Organizations	22
Representatives of Broad Interests of the Community	22
Contracted Third Party to Conduct Interviews	22
<hr/>	
<b>APPENDIX D: REPORTS TO BE REVIEWED IN THE CHIP PROCESS</b>	<b>23</b>



## Live Healthy Napa County Community Health Survey

---

---

Please take a minute to complete the survey below. **The purpose of this survey is to get your opinions about community health issues and concerns in Napa County.** Live Healthy Napa County (LHNC) will use the results of this survey and other information to identify the most important problems that can be addressed through community action.

**Your opinion is important!** If you have already completed a survey, please don't fill out another one. Thank you and if you have any questions, please contact us (*see contact information on back*).

1. Where do you live? Please check **one** from the following list:

- |  |                                       |
|--|---------------------------------------|
| <input type="checkbox"/> American Canyon | <input type="checkbox"/> Oakville     |
| <input type="checkbox"/> Angwin          | <input type="checkbox"/> Rutherford   |
| <input type="checkbox"/> Calistoga       | <input type="checkbox"/> St. Helena   |
| <input type="checkbox"/> City of Napa    | <input type="checkbox"/> Yountville   |
| <input type="checkbox"/> Deer Park       | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Lake Berryessa  |                                       |

2. Where do you work? Please check **one** from the following list:

- |  |  |
|--|--|
| <input type="checkbox"/> American Canyon | <input type="checkbox"/> St. Helena                  |
| <input type="checkbox"/> Angwin          | <input type="checkbox"/> Yountville                  |
| <input type="checkbox"/> Calistoga       | <input type="checkbox"/> Work at home                |
| <input type="checkbox"/> City of Napa    | <input type="checkbox"/> Not working                 |
| <input type="checkbox"/> Deer Park       | <input type="checkbox"/> Work outside of Napa County |
| <input type="checkbox"/> Lake Berryessa  | <input type="checkbox"/> Unincorporated Napa County  |
| <input type="checkbox"/> Oakville        | <input type="checkbox"/> Other: _____                |
| <input type="checkbox"/> Rutherford      |  |

***For the following questions, please circle the number to the left of your answer.***

3. In the list below, what do you think are the **three** most important factors that make this county a good place to live?

Circle only 3 numbers of the 15 below:

- |                                |                                     |
|--------------------------------|-------------------------------------|
| 1 Community involvement        | 9 Good jobs and healthy economy     |
| 2 Low crime/safe neighborhoods | 10 Strong family life               |
| 3 Good schools                 | 11 Healthy behaviors and lifestyles |
| 4 Access to health care        | 12 Low death and disease rates      |
| 5 Parks and recreation         | 13 Religious or spiritual values    |
| 6 Clean environment            | 14 Arts and cultural events         |
| 7 Affordable housing           | 15 Other: _____                     |
| 8 Acceptance of diversity      |                                     |

4. In the list below, what do you think are the **three** most important health issues in Napa County? (The most important health issues are those problems that you feel have the greatest impact on overall community health in Napa County.)

Circle only 3 numbers of the 21 below:

- |  |   |
|--|---|
| 1 Motor vehicle crashes                            | 12 Homelessness   |
| 2 Violence (e.g., gangs, firearm-related injuries) | 13 Tobacco use  |
| 3 Mental health issues                             | 14 Alcohol and drug abuse   |
| 4 Sexually transmitted diseases (e.g., HIV, HPV)   | 15 Lack of access to health care                                  |
| 5 Teenage pregnancy                                | 16 Chronic diseases (e.g., cancer, diabetes, high blood pressure) |
| 6 Domestic violence                                | 17 Aging problems (e.g., arthritis, hearing/vision loss, etc.)    |
| 7 Child abuse / Child neglect                      | 18 Agricultural pesticides  |
| 8 Hunger   | 19 Air quality  |
| 9 Healthy food access/ Poor diet                   | 20 Water quality/ Water conservation                              |
| 10 Inactivity/ Lack of exercise                    | 21 Other: _____   |
| 11 Unsafe roads/ Sidewalk conditions               |   |

5. I think Napa County is a \_\_\_\_\_ community to live in.

Circle one to fill in the blank.

- 1 Very Unhealthy    2 Unhealthy    3 Healthy    4 Very Healthy    5 Don't Know

6. I think Napa County is a \_\_\_\_\_ place to grow up or raise children.

Circle one to fill in the blank.

- 1 Very Unsafe    2 Unsafe    3 Safe    4 Very Safe    5 Don't Know

7. Where do you go most often to access health care services for yourself and your family?

Circle one number that best applies:

- 1 Napa County hospitals
- 2 Napa County clinics/ health centers
- 3 Napa County emergency rooms
- 4 Community-based organizations
- 5 Schools/Universities
- 6 Mobile health vans
- 7 Alcohol or drug dependency programs
- 8 Napa County Health and Human Services Agency
- 9 Other: \_\_\_\_\_

8. If you needed health care services in the past year, were you able to get these services in Napa County?

Circle one number that best applies:

- 1 Yes
- 2 No
- 3 I was able to get some services in Napa County, but not all the services that I needed.
- 4 I did not need any health care services.

If no, please explain why you were not able to get health care services in Napa County.

\_\_\_\_\_

9. If you got health care services outside of your home city, circle one number that best matches why:

- 1 My doctor of choice is in another city.
- 2 No providers for services I need.
- 3 My insurance only covers doctors in another area.
- 4 No appropriate doctors accept Medicare or Medi-Cal.
- 5 Other: \_\_\_\_\_

10. Within the past year, what types of mental health services did you or anyone in your family use?

Circle all numbers that apply:

- 1 None
- 2 Crisis Care
- 3 Hospitalization
- 4 Counseling/Therapy
- 5 Residential Treatment
- 6 Needed services, but did not use because:  
\_\_\_\_\_

11. How do you pay for your health care?

Circle all numbers that apply:

- |  |                           |
|--|---------------------------|
| 1 No insurance (pay cash)                                      | 6 Healthy Families        |
| 2 Health Insurance (e.g., private insurance, Blue Shield, HMO) | 7 Veterans Administration |
| 3 Medi-Cal   | 8 Indian Health Service   |
| 4 Medicare   | 9 Other: _____            |
| 5 Medicare Supplemental Insurance                              |                           |

12. Within the past year, what types of social service benefits did you or anyone in your family receive?

Circle all numbers that apply:

- |                              |                          |
|------------------------------|--------------------------|
| 1 None                       | 8 Subsidized child care  |
| 2 Food stamps (SNAP)         | 9 Child welfare services |
| 3 Healthy Families insurance | 10 Unemployment services |
| 4 TANF (Cash Aid)            | 11 Legal Aid             |
| 5 Housing assistance         | 12 Social Security       |
| 6 Medi-Cal/Medicare          | 13 Other: _____          |
| 7 Respite care               |                          |

13. If you received benefits, were you able to get them in Napa County?

- Yes       No

If no, please describe/explain.

\_\_\_\_\_

14. Are you currently employed? (Circle one.)

- 1 Not employed    2 Self-employed    3 Employed part-time    4 Employed full-time

15. If not working, what is the main reason you are not working? (Circle one.)

- |                             |                         |
|-----------------------------|-------------------------|
| 1 Medically ill or disabled | 4 Taking care of family |
| 2 Cannot find work          | 5 Need training         |
| 3 Retired                   | 6 Other: _____          |

16. Do you think there are enough jobs in Napa County?  
For adults?  Yes  No                      For youth?  Yes  No

17. How much stress do you feel at your job on a regular basis? (Circle one.)

1 None	4 Too much stress
2 Some stress	5 Not working
3 A lot of stress	

18. Are you satisfied with your housing situation?  Yes  No  
If no, why not? Circle all numbers that apply:

- |  |                              |
|--|------------------------------|
| 1 Too small  | 4 Too run down               |
| 2 Too many people living in the same home (i.e., over-crowded) | 5 Too expensive              |
| 3 Problems with other people                                   | 6 Too far from town/services |
|  | 7 Other: _____               |

19. In Napa County, the places where I go for recreation most often are:  
Circle only three numbers from the list below:

- |                              |                                    |
|------------------------------|------------------------------------|
| 1 Parks                      | 9 Dance halls                      |
| 2 Movie theaters             | 10 Centers for yoga, tai-chi, etc. |
| 3 Live theater/performances  | 11 Church                          |
| 4 Social club/service club   | 12 Senior center                   |
| 5 Rivers/lakes/beaches/woods | 13 Library                         |
| 6 Sports fields              | 14 Neighborhood (walking/biking)   |
| 7 Swimming pools             | 15 Restaurants                     |
| 8 Health/fitness clubs       | 16 Other: _____                    |

20. Recreation activities that I would use if they were available in Napa County are:  
\_\_\_\_\_

21. Approximately how many hours per month do you participate in community activities such as volunteering in schools, hospitals, voluntary organizations and churches?

Circle one.

- 1 None
- 2 1 to 5 hours
- 3 6 to 10 hours
- 4 Over 10 hours

I would spend more time participating in community activities if:

---

**Please answer the following questions about yourself so we can see how different types of people feel about these local health issues. (This section is optional.)**

22. Zip code where you live: \_ \_ \_ \_ \_

23. Your Gender:  Male  Female

24. Your age:

Circle one.

- 1 Under 18 years
- 2 18 to 25 years
- 3 26 to 39 years
- 4 40 to 54 years
- 5 55 to 64 years
- 6 65 to 80 years
- 7 Over 80 years

25. Ethnic group(s) you most identify with:

Circle all that apply.

- 1 African American/Black
- 2 Asian/Pacific Islander
- 3 Hispanic/Latino
- 4 Native American
- 5 White/Caucasian
- 6 Other: \_\_\_\_\_

26. Your highest educational level:

Circle one.

- 1 Less than High School graduate
- 2 High School Diploma
- 3 GED
- 4 Some college
- 5 College degree
- 6 Graduate or professional degree or higher
- 7 Other: \_\_\_\_\_

27. Annual Household Income:

Circle one.

- 1 Less than \$20,000
- 2 \$20,000 to \$34,999
- 3 \$35,000 to \$49,999
- 4 \$50,000 to \$64,999
- 5 \$65,000 to \$79,999
- 6 \$80,000 to \$100,000
- 7 Over \$100,000

Number of people in your household\*: \_\_\_\_\_

*\*Household means the number of family and non-family members living in the same house together.*

28. Where did you get this survey?

Circle one.

1 Church

2 Community Meeting/ Event

3 Grocery Store/ Shopping Mall

4 Post Office

5 Electronic mail

6 Other: \_\_\_\_\_

***Thank you very much for your response!***

Please return completed surveys to the address below by November 30, 2012. You can also scan and fax or email the completed surveys. If you would like more information about this project, please contact us at the number below.

Mail to: MIG, Attn: Jamillah Jordan  
800 Hearst Avenue  
Berkeley, CA 94710

Phone: 510-845-7549  
Fax: 510-845-8750  
Email: jamillahj@migcom.com



## Appendix B: Community Health Status Assessment Data Book

Socioeconomics	Napa County	CA	US	HP2020	Napa County and HP 2020	Sources	Comments
Percent of people living below 100% of Federal Poverty Level	10.0% (2006-2010)	13.7% (2006-2010)	13.8% (2006-2010)	NA	NA	ACS	
Percent of children under age 18 living below 100% of Federal Poverty Level	12.0% (2006-2010)	19.1% (2006-2010)	19.2% (2006-2010)	NA	NA	ACS	
Percent of people living below 200% of Federal Poverty Level	26.4% (2006-2010)	32.8% (2006-2010)	32.0% (2006-2010)	NA	NA	ACS	
Unemployment Rate (percent of civilian labor force currently unemployed)	9.5% (2011)	12.3% (2011)	9.1% (2011)	NA	NA	ACS	
Median household income	\$67,389 (2006-2010)	\$60,883 (2006-2010)	\$50,502 (2011)	NA	NA	ACS	
Living Wage - Annual income required to support household with two adults*	\$34,287 (2012)	\$34,790 (2012)	NA	NA	NA	MIT	*Data for Napa County not regionally adjusted. Calculated at <a href="http://livingwage.mit.edu">http://livingwage.mit.edu</a>
Living wage - Annual income required to support one adult and one child*	\$47,875 (2012)	\$47,212 (2012)	NA	NA	NA	MIT	*Data for Napa County not regionally adjusted. Calculated at <a href="http://livingwage.mit.edu">http://livingwage.mit.edu</a>
Gini coefficient of income inequality	48.1 (2011)	48.1 (2011)	47.5 (2011)	NA	NA	ACS	Values range from 0-100, with larger values indicate more income inequality
Proportion of renters spending 30% or more of household income on rent	62.5% (2011)	57.7% (2011)	53.4% (2011)	NA	NA	ACS	
Percent enrolled in Supplemental Nutrition Assistance Program(SNAP)	3.4% (2009)	8.4% (2009)	12.6% (2009)	NA	NA	Census (SAIPE)	
Percentage of households reporting food insecurity	52.2% (2009)	40.4% (2009)	34.8%** (2009)	NA	NA	CHIS/ BRFS	**This is based on families at 185% FPL, whereas estimates in CA are for families at <200%FPL
Percent of the population that speak English less than "very well"	19.3% (2011)	19.4% (2011)	8.7% (2011)	NA	NA	ACS	
Percent of children eligible for free or reduce price school lunch	41.8% (2009-2010)	55.6% (2009-2010)	47.0% (2009-2010)	NA	NA	US Dept of Ed	
Percent of adults age 25+ without high school diploma	17.8% (2006-2010)	19.3% (2006-2010)	15.0% (2006-2010)	NA	NA	ACS	

## Appendix B: Community Health Status Assessment Data Book

Socioeconomics	Napa County	CA	US	HP2020	Napa County and HP 2020	Sources	Comments
Percent of students reported as "drop outs" from high school	13.3% (2010-2011)	14.4% (2010-2011)	7.4%** (2010)	NA	NA	CDE/US Dept of Ed	**Caution: US drop out rate calculated differently than California dropout rates.
Percent of students meeting UC or CSU course requirements	33.8% (2010-2011)	36.9% (2010-2011)	NA	NA	NA	CDE	
Quality of Life							
Voter turnout rate as a percent of eligible voters	51.5% (2010)	43.7% (2010)	41.7% (2010)	NA	NA	SOS	
Proportion of renter occupied households living in overcrowded environments (>1.5 persons/room)	4.4% (2006-2010)	5.1% (2006-2010)	1.9% (2006-2010)	NA	NA	ACS	
Percent of fourth grade children reading at proficient or advanced level	62% (2012)	67.0% (2012)	71.4% (2011)	>=36.3	Met	CDE/US Dept of Ed	
Percent of students grades 2 and above proficient in English Language Arts (ELA) and Math on the STAR test	59.5% ELA 54.2% Math (2012)	58.1% ELA 59.5% Math (2012)	NA	NA	NA	CDE	
Percent of English language learners (K-12) who met California English Language Development Test (CELDT) criteria for proficiency	39.0% (2011-2012)	42.0% (2011-2012)	NA	NA	NA	CDE	
Percent of English language learners (grade 10) who passed the California High School Exit Exam in English Language Arts (ELA) and Math	30% ELA 42% Math (2012)	44% ELA 56% Math (2012)	NA	NA	NA	CDE	
Percentage of 11th grade students reporting current gang involvement	7% (2011-2012)	8% (2009-2011)	NA	NA	NA	CHKS	
Number of domestic violence calls for assistance and rate per 1,000 population	400 calls 2.9/1,000 (2010)	166,351 calls 4.3/1,000 (2010)	NA	NA	NA	CA DOJ	

## Appendix B: Community Health Status Assessment Data Book

Quality of Life	Napa County	CA	US	HP2020	Napa County and HP 2020	Sources	Comments
Rate of arrests for alcohol related offenses among persons age 10 to 69 years	1,494/100,000 (2008)	1,203/100,000 (2008)	NA	NA	NA	CA ADP	
Violent crime rate	2.9/1,000 (2010)	4.4/1,000 (2010)	4.0/1,000 (2010)	NA	NA	FBI Uniform Crime Reports	Violent crime includes murder and non-negligent manslaughter, forcible rape, robbery, aggravated assault
Fast Food Restaurants per 100,000 population	54.9/100,000 (2009)	69.4/100,000 (2009)	68.4/100,000 (2009)	NA	NA	USDA	
Grocery Stores per 100,000 population	27.8/100,000 (2009)	22.2/100,000 (2009)	21.8/100,000 (2009)	NA	NA	USDA	
WIC Authorized Grocery Stores per 100,000 population	17.4/100,000 (2012)	15.8/100,000 (2012)	15.6/100,000 (2012)	NA	NA	USDA	
Percent of population that is low-income and lives > 1 mile from supermarket/large grocery store	5.2% (2006)	14.6% (2006)	23.6% (2006)	NA	NA	USDA	Values for CA and US are mean values for all counties listed in USDA data spreadsheet for Food Environment Atlas
Liquor Stores per 100,000 population (see comment)	34.4/100,000 (2010)	10.6/100,000 (2010)	9.7/100,000 (2010)	NA	NA	Census	Includes wine retail businesses.
Recreation and Fitness Facilities per 100,000 population	13.2/100,000 (2009)	8.7/100,000 (2010)	10.0/100,000 (2010)	NA	NA	Census	
Percent of population living within 1/2 mile of a park	57.6% (2010)	58.6% (2010)	NA	NA	NA	Census, ESRI	
Percentage of days exceeding emissions standards (particulate matter 2.5 level)	6.2% (2008)	4.2% (2008)	1.2% (2008)	NA	NA	CDC NEPHTN	
Pounds of pesticides applied and rank among California counties	1,326,805 24 of 58 (2010)	173,213,823 (2010)	5,085 million (2007)	NA	NA	CDPR	

## Appendix B: Community Health Status Assessment Data Book

Social and Mental Health	Napa County	CA	US	HP2020	Napa County and HP 2020	Sources	Comments
Adults with adequate social or emotional support	76.9% (2006-2010)	75.0% (2006-2010)	80.3% (2006-2010)	NA	NA	BRFSS	
Average number of mentally unhealthy days reported in last 30 days (age adjusted)	4.1 (2004-2010)	3.6 (2004-2010)	NA	2.3**	Not met	BRFSS	**Not a Healthy People 2020 indicator, but National Benchmark used by County Health Rankings 2012.
Percent of people who report being linguistically isolated	8.3% (2007-2009)	10.2% (2009-2011)	4.6% (2010)	NA	NA	ACS	
Percent of adults with a physical, mental or emotional disability	24.8% (2009)	27.4% (2009)	NA	NA	NA	CHIS	BRFSS data not comparable
Percent of adults age 65+ with a physical, mental or emotional disability	46.3% (2009)	52.2% (2009)	NA	NA	NA	CHIS	BRFSS data not comparable
Reports to Adult Protective Services (APS) regarding elder abuse (count and rate per 1,000 age 65+)*	260 12.6/1,000 (2011-2012)	17,421 9.4/1,000 (2011-2012)	NA	NA	NA	Napa County/ CDSS	Care should be used in drawing conclusions from comparison with statewide data. Data is not collected uniformly from all APS agencies.
Substantiated allegations of child maltreatment per 1,000 children ages 0-17	4.2/1,000 (2011)	9.6/1,000 (2011)	9.2/1,000 (2010)	<=8.5	Met	CDSS-UCB	<a href="http://cssr.berkeley.edu/ucb_childwelfare/RefRates.aspx">http://cssr.berkeley.edu/ucb_childwelfare/RefRates.aspx</a>
Non-fatal emergency department visits for self-inflicted injuries among youth age 5-19	95.2/100,000 (2009-2011)	103.3/100,000 (2009-2011)	103.7/100,000 (2009-2011)	NA	NA	OSHPD/ CDC WISQARS	Treated and released or transferred
Percent of 11th grade students who felt sad or hopeless almost everyday for 2 weeks or more so that they stopped doing some usual activities	33% (2011-2012)	32% (2011-2012)	28.8% (2011)	NA	NA	CHKS/ YRBSS	
Percent of 11th grade students who report they've been victims of cyber bullying in the past 12 months	27.0% (2011-2012)	21.0% (2009-2011)	16.0% (2011)	NA	NA	CHKS/ YRBSS	

## Appendix B: Community Health Status Assessment Data Book

Social and Mental Health	Napa County	CA	US	HP2020	Napa County and HP 2020	Sources	Comments
Percent of 11th grade students reporting harassment on school property related to their sexual orientation	8.0% (2011-2012)	8.0% (2009-2011)	NA	NA	NA	CDE	
Percent of 11th grade students reporting harassment or bullying on school property within the past 12 months for any reason	27% (2011-2012)	28% (2011-2012)	17.1% (2011)	NA	NA	CHKS/ YRBSS	YRBSS uses term "bullying" as opposed to harassment in their survey question
Percent of adults who needed help for emotional/mental health problems or use of alcohol/drug	15.6% (2007/2009)	15.4% (2007/2009)	NA	NA	NA	CHIS	
Among adults who indicated they needed help, percent who saw any healthcare provider for emotional-mental and/or alcohol-drug issues in past year	68.6% (2007/2009)	56.3% (2007/2009)	NA	NA	NA	CHIS	
<b>Maternal, Child and Adolescent Health</b>							
Percent of mothers initiating breastfeeding in the hospital	96.8% (2011)	91.7% (2011)	76.9% (2009)	>=81.9%	Met	CDPH/ NVSS	
Percent of WIC mothers exclusively breastfeeding at 6 months	28.7% (2011)	21.7% (2009)	16.3% (2009)	>=25.5%	Met	Napa WIC/CDC	
Percent of newborns with low birth weight	5.1% (2011)	6.8% (2010)	8.2% (2010)	<=7.8%	Met	Napa/ CDPH IPODR/ NVSS	
Percent of newborns with very low birth rates	0.6% (2011)	1.1% (2010)	1.5% (2010)	<=1.4%	Met	Napa/ CDPH/ NVSS	
Percent of women late to prenatal care (past first trimester)	15.8% (2010)	16.5% (2010)	29.2% (2007)	<=22.1%	Met	CDPH IPODR/ NVSS	

## Appendix B: Community Health Status Assessment Data Book

Maternal, Child and Adolescent Health	Napa County	CA	US	HP2020	Napa County and HP 2020	Sources	Comments
Percent of women with no prenatal care or prenatal care not starting until 3rd trimester	2.4% (2011)	3.2% (2008)	4.5% (2010)	NA	NA	Napa/ CDPH/ NVSS	
Percent of pre-term births (< 37 weeks gestation)	8.3% (2011)	10.0% (2010)	12.0% (2010)	<=11.4%	Met	Napa/ CDPH IPODR/ NVSS	
Births to teens age 15-17 years	10.6/1,000 (2010)	15.2/1,000 (2010)	17.3/1,000 (2010)	<=36.2	Met	CDPH/CDC	
Proportion of births by C-section to low risk women giving birth for the first time	24.0 % (2010)	26.1% (2010)	26.5% (2007)	<=23.9%	Not met	CDPH IPODR/ NVSS	
Percentage of mothers obese at the beginning of pregnancy	22.4% (2011)	20.0% (2010)	22.6% (2009)	NA	NA	Napa/ MIHA/ CDC PRAMS	
Percentage of mothers reporting postpartum depression	14.6%* (2011/2012)	13.4% (2010)	14.5% (2004-2008)	NA	NA	QV Outreach data/ MIHA/CDC PRAMS	*May not be representative sample of all women in Napa County
Infant deaths per 1,000 live births (within 1 year)	5.6/1,000* (2007-2009)	5.3/1,000 (2006-2008)	6.7/1,000 (2006)	<=6.0	Met	CDPH/NVSS	*Statistically unstable
Child mortality, 1-4 years	25.2/100,000* (2010)	19.8/100,000 (2010)	28.6/100,000 (2007)	<=25.7	Met	CDPH/NVSS	*Statistically unstable, based on 2 deaths
Child mortality, 5-14 years	14.9/100,000*(2 010)	10.1/100,000 (2010)	13.9/100,000 (2009)	NA	NA	CDPH/CDC	*Statistically unstable, based on 3 deaths

## Appendix B: Community Health Status Assessment Data Book

Healthcare and Preventative Services	Napa County	CA	US	HP2020	Napa County and HP 2020	Sources	Comments
Percent of population without health insurance	15.8% (2011)	18.1% (2011)	15.1% (2011)	0.0%	Not met	ACS	
Percent of adults with usual source of primary care	87.8% (2009)	83.5% (2009)	80.0% (2008)	>=83.9%	Met	CHIS/BRFSS	
Primary care physicians per 100,000 population	129.5/100,000 (2009)	118.1/100,000 (2009)	118.2/100,000 (2009)	NA	NA	HRSA ARF	
Percent of adults unable to obtain or had difficulty obtaining medical care	12.6% (2007/2009)	12.9% (2007/2009)	10.0% (2007)	9.0%	Not met	CHIS/NHIS	
Preventable hospitalization rate among Medicare enrollees	48/1,000 (2009)	52/1,000 (2009)	NA	49**	Met	BRFSS	**Not a Healthy People 2020 indicator, but National Benchmark used by County Health Rankings 2012.
Percent of kindergarteners with all required immunizations	93.6% (2010)	90.7% (2010)	95.2% (2010)	NA	NA	CDPH	
Percent of adults age 50+ who have ever had a sigmoidoscopy/colonoscopy	69.4% (2007/2009)	65.5% (2007/2009)	52.1% (2008)	>=70.5%	Not met	CHIS/NHIS	
Percent of women age 21-65 years with Pap test in past 3 years	92.5%* (2005/2007)	88.3% (2005/2007)	84.4% (2008)	>=93.0%	Not met	CHIS/NHIS	*Statistically unstable
Percent of women age 55+ with mammogram in past 2 years	82.4% (2007/2009)	82.4% (2007/2009)	73.7% (2008)	>=81.1%	Met	CHIS/NHIS	
Percent of adults with no dental visit in past year	12.4% (2006-2010)	30.5% (2006-2010)	29.3% (2006-2010)	NA	NA	BRFSS	
Percent of adults with dental insurance in past year	56.3% (2007)	66.3% (2007)	NA	NA	NA	CHIS	
Percent of adults age 65+ with dental insurance in past year	39.8% (2007)	49.4% (2007)	NA	NA	NA	CHIS	
Percent of children and teens who could not afford needed dental care	4.1%* (2007)	6.0% (2007)	7.0% (2010)	NA	NA	CHIS/NHIS	*Statistically unstable
Median length of stay (in days) for hospice patients	22 (2011)	NA	21 (2010)	NA	NA	NVH/NHPCO	
Percent of deaths among Medicare patients that occur in hospice	61% (2010)	57% (2010)	64% (2010)	NA	NA	Hospice Market Atlas	

## Appendix B: Community Health Status Assessment Data Book

Behavioral Risk Factors	Napa County	CA	US	HP2020	Napa County and HP 2020	Sources	Comments
Adults Consuming 5+ Servings of Fruits/Vegetables per Day	51.8% (2005)	48.7% (2005)	28.0% (2003-2009)	NA	NA	CHIS/BRFSS	
Children Consuming 5+ Servings of Fruits/Vegetables per Day	55% (2007/2009)	48.3% (2007/2009)	NA	NA	NA	CHIS	
Percent of children age 2-11 drinking one or more sugar sweetened beverages per day	41.5% (2005)	41.0% (2005)	NA	NA	NA	CHIS	
Percent of adults participating in moderate or vigorous physical activity	42.5% (2007)	36.3% (2007)	43.5% (2008)	>=47.9%	Not met	CHIS	
Percent of 5th, 7th and 9th graders who are physically fit.**	65.5% (2011-2012)	62.8% (2011-2012)	NA	NA	NA	CDE	**In the healthy fitness zone for aerobic capacity.
Percent of children under 18 consuming fast food at least once in past week	59.2% (2007/2009)	71.9% (2007/2009)	NA	NA	NA	CHIS	
Percent of 11th grade students who report eating breakfast on day of survey.	59% (2011-2012)	59% (2009-2011)	NA	NA	NA	CHKS	
Percent of adults binge drinking at least once in month prior.	19.4% (2005)	17.6% (2005)	27.0% (2008)	<=24.3%	Met	CHIS/NSDUH	
Percent of 11th grade students binge drinking at least once in month prior	21.0% (2011-2012)	22.0% (2009-2011)	25.2% (2011)	NA	NA	CHKS/YRBSS	
Percent of 11th grade students reporting driving after drinking (respondent or by friend)	26.0% (2011-2012)	26.0% (2009-2012)	23.8% (2011)	<=25.5%	Not met	CHKS/YRBSS	
Percent of adults currently using tobacco	13.8% (2007/2009)	14% (2007/2009)	18.2% (2004-2010)	<=12%	Not met	CHIS/BRFSS	
Percent of 11th grade students using cigarettes any time within last 30 days	11.0% (2011-2012)	15.0% (2009-2011)	19.3% (2011)	<=21%	Met	CHKS/YRBSS	
Percent of 11th grade students reporting marijuana use within the last 30 days	24% (2011-2012)	21% (2009-2011)	25.5% (2011)	NA	NA	CHKS/YRBSS	

## Appendix B: Community Health Status Assessment Data Book

Behavioral Risk Factors	Napa County	CA	US	HP2020	Napa County and HP 2020	Sources	Comments
Percent of 11th grade students who report they've been "high" from using drugs	44% (2009-2011)	36% (2009-2011)	NA	NA	NA	CHKS	
<b>Illness and Injury</b>							
Percent of adults who reported being in poor or fair health	15.2% (2009)	18.8% (2009)	12.0% (2010)	NA	NA	CHIS/NHIS	
Percent of adults (20+ years) who are overweight (BMI >25 and < 30)	31.9% (2007/2009)	34.6% (2007/2009)	36.4% (2006-2010)	NA	NA	CHIS/BRFSS	
Percent of adults (20+ years) who are obese (BMI > 30)	28.9% (2007/2009)	23.2% (2007/2009)	27.4% (2009)	<=30.6%	Met	CHIS/BRFSS	
Percent of 5th, 7th and 9th graders who are overweight or obese (85% and above)	42.0% (2011-2012)	44.1% (2011-2012)	NA	NA	NA	CDE	
Percent of low income (<200% FPL) preschool children (age 2-4) who are obese	18.3% (2009-2011)	15.8% (2008-2010)	14.6% (2008)	<=9.6**	Not met	USDA	**Among all children age 2-5
Percent of low income children (age 1-5) in WIC who are anemic	10.8% (2011-2012)	6.7% (2011-2012)	NA	NA	NA	WIC	
Percent of adults ever diagnosed with asthma	17.5% (2007/2009)	13.0% (2007/2009)	13.2% (2006-2010)	NA	NA	CHIS/BRFSS	
Percent of children ever diagnosed with asthma	17.5% (2007/2009)	14.8% (2007/2009)	14.0% (2010)	NA	NA	CHIS	
Percent of adults who have diabetes (20+ years of age)	8.4% (2009)	8.9% (2009)	8.8% (2009)	NA	NA	CHIS/ CDC NDSS	
Percent of adults who have coronary heart disease (20+ years of age)	8.1% (2009)	6.2% (2009)	6.0%* (2010)	NA	NA	CHIS/ NHANES	*estimate is age-adjusted

## Appendix B: Community Health Status Assessment Data Book

Illness and Injury	Napa County	CA	US	HP2020	Napa County and HP 2020	Sources	Comments
Percent of adults who have ever been diagnosed with high blood pressure	28.1% (2007/2009)	26.2% (2007/2009)	29.9% (2005-2008)	<=26.9%	Not met	CHIS/NHANES	
Breast cancer age adjusted incidence	124.3/100,000 (2005-2009)	123.2/100,000 (2005-2009)	121.9/100,000 (2005-2009)	NA	NA	NCI	
Cervical cancer age adjusted incidence	6.1/100,000 (2005-2009)	8.3/100,000 (2005-2009)	8.0/100,000 (2005-2009)	<=7.1	Met	NCI	
Colorectal cancer age adjusted incidence	42.3/100,000 (2005-2009)	38.1/100,000 (2005-2009)	40.2/100,000 (2005-2009)	<=38.6	Not Met	NCI	
Lung cancer age adjusted incidence	58.4/100,000 (2005-2009)	45.2/100,000 (2005-2009)	55.7/100,000 (2005-2009)	NA	NA	NCI	
Prostate cancer age adjusted incidence	171.7/100,000 (2005-2009)	143.0/100,000 (2005-2009)	154.1/100,000 (2005-2009)	NA	NA	NCI	
Chlamydia Incidence	230.2/100,000 (2011)	438.0/100,000 (2011)	426.0/100,000 (2010)	NA	NA	CDPH/CDC	
HIV Incidence (newly <i>diagnosed</i> cases)	7.2/100,000 (2011)	13.9/100,000 (2009)	14.4/100,000 (2007)	<=13	Met	Napa PH/CDPH/ CDC	
Tuberculosis incidence	4.1/100,000 (2011)	5.8/100,000 (2011)	3.6/100,000 (2009)	NA	NA	CDPH	
Non-fatal emergency department visits for fall related injuries among adults 65 to 106 years	5,557/100,000 (2011)	4,018/100,000 (2011)	5,235/100,000 (2007)	<=4,712	Not met	CDPH EpiCenter/ CDC NCHS	
Non-fatal emergency department visits for motor vehicle crash injuries (occupants)	520/100,000 (2011)	461/100,000 (2011)	828/100,000 (2010)	NA	NA	CDPH EpiCenter/ CDC WISQARS	

## Appendix B: Community Health Status Assessment Data Book

Causes of Death	Napa County	CA	US	HP2020	Napa County and HP 2020	Sources	Comments
Age adjusted death rate, all causes	662.4/100,000 (2008-2010)	632.7/100,000 (2008-2010)	753.1/100,000 (2007-2009)	NA	NA	CDPH	
All cancers age adjusted mortality rate	175.8/100,000 (2008-2010)	151.7/100,000 (2008-2010)	178.4/100,000 (2007)	<=160.6	Not met	CDPH/NVSS	
Alzheimer's disease age adjusted mortality rate	30.5/100,000 (2008-2010)	28.2/100,000 (2008-2010)	25.7/100,000 (2009)	NA	NA	CDPH	
Breast cancer age adjusted mortality rate	19.1/100,000 (2008-2010)	20.7/100,000 (2008-2010)	22.9/100,000 (2007)	<=20.6	Met	CDPH/NVSS	*Statistically unstable. New data from state shows Napa as having census tracts with invasive breast cancer rates that were statistically significantly higher than the state rate in 2001.
Colorectal cancer age adjusted mortality rate	17.5/100,000 (2008-2010)	14.1/100,000 (2008-2010)	17.0/100,000 (2007)	<=14.5	Not met	CDPH/NVSS	
Diabetes age adjusted mortality rate	18.7/100,000 (2008-2010)	19.5/100,000 (2008-2010)	see comment	NA	NA	CDPH	National data for diabetes mortality is not comparable to CA rates because the national diabetes death rate is based on both underlying and contributing causes.
Heart disease age adjusted mortality rate	97.4/100,000 (2008-2010)	121.6/100,000 (2008-2010)	126.0/100,000 (2007)	<=100.8	Met	CDPH/NVSS	
Homicide death rate	0.7/100,000* (2008-2010)	5.3/100,000 (2008-2010)	6.1/100,000 (2007)	<= 5.5	Met	CDPH/NVSS	*Statistically unstable
Lung cancer age adjusted mortality rate	41.1/100,000 (2008-2010)	36.1/100,000 (2008-2010)	53.0/100,000 (2009)	<=45.5	Met	CDPH/SEER	
Motor vehicle crash death rate	9.2/100,000* (2008-2010)	7.9/100,000 (2008-2010)	13.8/100,000 (2007)	<=12.4	Met	CDPH/NVSS	*Statistically unstable

## Appendix B: Community Health Status Assessment Data Book

Causes of Death	Napa County	CA	US	HP2020	Napa County and HP 2020	Sources	Comments
Pedestrian motor vehicle death rate	0.90/100,000 (2007-2010)	1.6/100,000 (2010)	1.4/100,000 (2008)	<=1.3	Met	CDPH/NVSS	
Prostate cancer age adjusted mortality rate	24.2/100,000* (2008-2010)	21.2/100,000 (2008-2010)	23.5/100,000 (2007)	<=21.2	Not met	CDPH/NVSS	*Statistically unstable
Stroke age adjusted mortality rate	37.2/100,000 (2008-2010)	37.4/100,000 (2008-2010)	42.2/100,000 (2007)	<=33.8	Not met	CDPH/NVSS	
Suicide death rate	11.5/100,000 (2008-2010)	9.7/100,000 (2008-2010)	11.3/100,000 (2011)	<=10.2	Not met	CDPH/NVSS	
Years of Potential Life Lost Before Age 75, All Causes	5,365 yrs/ 100,000 (2006-2008)	5,641 yrs/ 100,000 (2007)	6,474/100,000 (2010)	NA	NA	CDPH/CDC	

## Appendix C. Key Informant List

All key informant interviews were conducted during November and December 2012. These interviews were used to inform Assessment #1: Community Themes, Strengths, and Forces of Change.

Public Health Experts			
Name	Title	Affiliation or Organization	Special Knowledge or Expertise
Dr. Karen Smith, MD, MPH	Public Health Officer/ Deputy Director	Napa County Public Health	Over 20 years' experience in local public health; knowledge of: public health practice; community health assessment; health equity and health disparities; public health law and advocacy.
Randolph F. Snowden, JD	Director Napa County Health and Human Services Agency	Napa County Health and Human Services Agency	Director, Napa County Health and Human Service Agency, 2005-present Member, Board of Directors, Partnership Health Plan of California (PHC), 2005-present Program Director, The Wolfe Center adolescent substance abuse program, Napa, California 2003-2004 Behavioral Healthcare Manager, Napa County Health and Human Services Agency, 1999-2003 Director, Alcohol and Drug Policy Institute, 2001-2003 Administrator, Thunder Road adolescent substance abuse program, Oakland, California 1987-1996 Partner, Coombs & Dunlap, Napa, California 1978-1990 BA and BS, University of California, Davis 1971 JD, University of California, Davis 1974

Community Leaders			
Name	Title	Affiliation or Organization	Nature of Leadership Role
José Hurtado	Vice President	NVUSD Board of Education	Vice President NVUSD Board of Education and leader in the Latino Community
Esmeralda Mondragon	Superintendent	Calistoga School District	Superintendent of the Calistoga School District

<b>Individuals from Health Care Organizations</b>		
<b>Name</b>	<b>Title</b>	<b>Affiliation or Organization</b>
Tanir Ami	CEO	Community Health Clinic Olé, Local Federally Qualified Health Center (FQHC) <a href="http://www.clinicole.org/">http://www.clinicole.org/</a>
Dr. James Cotter, MD	Chief Physician	Kaiser Permanente, Napa Medical Offices <a href="http://mydoctor.kaiserpermanente.org/ncal/provider/jimcotter">http://mydoctor.kaiserpermanente.org/ncal/provider/jimcotter</a>
Walt Mickens	Trustee, President and CEO	St. Joseph Health, Queen of the Valley Medical Center <a href="http://www.thequeen.org/">http://www.thequeen.org/</a>

<b>Representatives of Broad Interests of the Community</b>		
<b>Name</b>	<b>Title</b>	<b>Affiliation or Organization</b>
Joelle Gallagher	Executive Director	COPE Family Resource Center
Sara Cakebread	Executive Director	St Helena Family Resource Center
Victoria Li	Executive Director	Calistoga Family Resource Center
Sally Sheehan Brown	Executive Director	First 5
Leslie Medine	Executive Director	On the Move
Sherry Tennyson	Executive Director	American Canyon Family Resource Center
Kathleen Dreessen	Executive Director	Napa Valley Community Housing and Chair of the Coalition's Housing Committee

<b>Contracted Third Party to Conduct Interviews</b>		
<b>Name</b>	<b>Title</b>	<b>Affiliation or Organization</b>
Kym Dorman and Mariana Saenz	Consultant	Harder + Company Community Research

## Appendix D. Reports to be Reviewed in the CHIP Process

- Agricultural Worker Health Study (2003)
- Area Agency on Aging: Four-Year Area Plan on Aging (2012-2016)
- Assessment of the Demand for Farm Worker Housing in Napa County (2007)
- Closing the Achievement Gap in Napa County (2012)
- Comprehensive Services for Older Adults (CSOA) Strategic Plan (2012)
- County-wide Nutrition Action Plan (CNAP): Napa County Strategic Plan (2012)
- Homelessness Planning Council- 10 Year Plan to End Homelessness (2006)
- McPherson Community Garden - Spring 2010 Survey Results
- MHPA Workforce Needs Assessment (2009)
- Napa County Community Foundation - Profile of Immigrants in Napa County (2012)
- Napa County Community Health Needs Assessment (2010)
- Napa County Community Services and Supports Plan – Identified Community Issues, Prevalence, and Penetration Data
- Napa County Farmworker Housing Needs Assessment (2012)
- Napa County Health and Human Services - Mental Health Services Act (MHSA) Annual Plan Update - FY 2012-2013
- Napa County Health and Human Services Agency Alcohol and Drug Services Division -Strategic Plan for Substance Abuse Prevention (2012 – 2015)
- Napa County Health and Human Services- Mental Health Division - Goals: 2012-2013
- Napa County Maternal, Child and Adolescent Health Needs Assessment (2010-2014)
- Napa County Nutrition Education Survey 2012
- Napa County Transportation and Planning Agency - Short Range Transit Plan (2012-2017)