



# 2016 Community Health Needs Assessment

**Kaiser Permanente – Kern County**

Approved by KFH Board of Directors

September 21, 2016

To provide feedback about this Community Health Needs Assessment, email [CHNA-communications@kp.org](mailto:CHNA-communications@kp.org)

**Kaiser Permanente Southern California Region  
Community Benefit  
CHNA Report for Kaiser Permanente – Kern**

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## **I. EXECUTIVE SUMMARY**

Kaiser Permanente Kern County (Kaiser Permanente – Kern) has undertaken a Community Health Needs Assessment (CHNA). The Community Health Needs Assessment is the primary tool used by Kaiser Permanente – Kern to determine its community benefit plan, which outlines how it will improve the health of the community by providing quality health care and investment in community services that address unmet community health needs. This assessment incorporates components of primary data collection and secondary data analysis that focus on the health and social needs of the service area.

Kaiser Permanente – Kern has medical facilities in Bakersfield and Tehachapi. The service area includes the following communities in Kern County: Arvin, Bakersfield, Bodfish, Buttonwillow, Caliente, Delano, Fellows, Glennville, Keene, Kernville, Lake Isabella, Lamont, Lebec, Lost Hills, Maricopa, McFarland, McKittrick, Shafter, Taft, Tehachapi, Wasco, Wofford Heights, and Woody.

### **A. Community Health Needs Assessment Background**

The Patient Protection and Affordable Care Act (ACA), enacted on March 23, 2010, included new requirements for nonprofit hospitals in order to maintain their tax exempt status. The provision was the subject of final regulations providing guidance on the requirements of section 501(r) of the Internal Revenue Code. Included in the new regulations is a requirement that all nonprofit hospitals must conduct a community health needs assessment (CHNA) and develop an Implementation Strategy (IS) every three years (<http://www.gpo.gov/fdsys/pkg/FR-2014-12-31/pdf/2014-30525.pdf>).

While Kaiser Permanente has conducted CHNAs for many years to identify needs and resources in our communities and to guide our Community Benefit plans, these new requirements have provided an opportunity to revisit our needs assessment and strategic planning processes with an eye toward enhancing compliance and transparency and leveraging emerging technologies. The CHNA process undertaken in 2016 and described in this report was conducted in compliance with current federal requirements.

### **B. Summary of Prioritized Needs**

Kaiser Permanente – Kern hosted a community forum on January 19, 2016 in Bakersfield, California to prioritize the significant health needs. The forum engaged 38 community leaders who have current data or other information relevant to the health needs of the community served by the hospital facility. A review of the Community Health Needs Assessment process and the identified significant health needs were presented at the community forum. The forum attendees engaged in a process to prioritize the health needs using the Relative Worth method. The Relative Worth method is a ranking strategy where each participant received a fixed number of points. The points were assigned to health needs based on the size of the problem (relative portion of population afflicted by the problem); or seriousness of the problem (impact at



individual, family, and community levels). In the tabulation, items were ranked in priority order according to the total points the group assigned. As a result of the process, the significant health needs were ranked in the following priority order:

1. Overweight and obesity
2. Mental health
3. Access to health care
4. Diabetes
5. Cardiovascular disease
6. Substance abuse
7. Asthma
8. Maternal and infant health
9. Cancer
10. STD/HIV/AIDS
11. Oral health
12. Environmental health

### **C. Summary of Needs Assessment Methodology and Process**

The Community Health Needs Assessment incorporates primary and secondary data that focus on the health and social needs of the hospital service area. Kaiser Permanente – Kern used the Kaiser Permanente CHNA Data Platform ([www.chna.org/kp](http://www.chna.org/kp)) to review over 150 indicators from publically available data sources. Additional data were collected to supplement the CHNA Data Platform. The secondary data were obtained from September – October 2015. When applicable, the data sets are presented in the context of county data and state data, framing the scope of an issue as it relates to the broader community.

Community input was obtained through a community survey and interviews with key community stakeholders, public health, and service providers, members of medically underserved, low-income, and minority populations in the community, and individuals or organizations serving or representing the interests of such populations. The survey and interviews took place September – November, 2015. Kaiser Permanente – Kern worked collaboratively with San Joaquin Community Hospital, Mercy and Memorial Hospitals, and Delano Regional Medical Center on secondary and primary data collection. These hospitals share a large part of their service areas and collaboration eliminated redundancy in collecting data. Thirty-three (33) phone interviews were conducted among community stakeholders and 935 surveys were obtained from community residents.

The primary data collection process was designed to validate secondary data findings, identify additional community issues, solicit information on disparities among subpopulations, and ascertain community assets to address needs.

The following Community Health Needs Assessment provides a detailed demographic profile of the community service area, a description of the identified community health

needs, stakeholder input on the health needs, community assets and resources available to respond to the identified health needs, and an evaluation of the impact that Kaiser Permanente – Kern has had on community needs. The CHNA process informs our community investments and helps us develop strategies aimed at making long-term, sustainable change, and it allows us to deepen the relationships we have with other organizations that are working to improve community health.

#### **D. Implementation Strategy Evaluation of Impact**

In the 2013 Implementation Strategy (IS) process, all KFH planned for and drew on a broad array of resources and strategies to improve the health of communities and vulnerable populations, such as grant making, in-kind resources, collaborations and partnerships, as well as several internal KFH programs including, charitable health coverage programs, future health professional training programs, and research. Kaiser Permanente – Kern is monitoring and evaluating progress to date on their 2013 Implementation Strategies for the purpose of tracking the implementation of those strategies as well as to document the impact of those strategies in addressing selected CHNA health needs. Tracking metrics for each prioritized health need include the number of grants made, the number of dollars spent, the number of people reached/served, collaborations and partnerships, and KFH in-kind resources. In addition, Kaiser Permanente – Kern tracks outcomes, including behavior and health outcomes, as appropriate and where available. As of the documentation of this CHNA Report in March 2016, Kaiser Permanente – Kern had evaluation of impact information on activities from 2014 and 2015. While not reflected in this report, Kaiser Permanente – Kern will continue to monitor impact for strategies implemented in 2016.



## **II. INTRODUCTION/BACKGROUND**

### **A. About Kaiser Permanente (KP)**

Founded in 1942 to serve employees of Kaiser Industries and opened to the public in 1945, Kaiser Permanente is recognized as one of America's leading health care providers and nonprofit health plans. We were created to meet the challenge of providing American workers with medical care during the Great Depression and World War II, when most people could not afford to go to a doctor. Since our beginnings, we have been committed to helping shape the future of health care. Among the innovations Kaiser Permanente has brought to U.S. health care are:

- Prepaid health plans, which spread the cost to make it more affordable
- A focus on preventing illness and disease as much as on caring for the sick
- An organized coordinated system that puts as many services as possible under one roof—all connected by an electronic medical record

Kaiser Permanente is an integrated health care delivery system comprised of Kaiser Foundation Hospitals (KFH), Kaiser Foundation Health Plan (KFHP), and physicians in the Permanente Medical Groups. Today we serve more than 10 million members in nine states and the District of Columbia. Our mission is to provide high-quality, affordable health care services and to improve the health of our members and the communities we serve.

Care for members and patients is focused on their Total Health and guided by their personal physicians, specialists, and team of caregivers. Our expert and caring medical teams are empowered and supported by industry-leading technology advances and tools for health promotion, disease prevention, state-of-the-art care delivery, and world-class chronic disease management. Kaiser Permanente is dedicated to care innovations, clinical research, health education, and the support of community health.

### **B. About Kaiser Permanente Community Benefit**

For more than 70 years, Kaiser Permanente has been dedicated to providing high-quality, affordable health care services and to improving the health of our members and the communities we serve. We believe good health is a fundamental right shared by all and we recognize that good health extends beyond the doctor's office and the hospital. It begins with healthy environments: fresh fruits and vegetables in neighborhood stores, successful schools, clean air, accessible parks, and safe playgrounds. These are the vital signs of healthy communities. Good health for the entire community, which we call Total Community Health, requires equity and social and economic well-being.

Like our approach to medicine, our work in the community takes a prevention-focused, evidence-based approach. We go beyond traditional corporate philanthropy or grant making to pair financial resources with medical research, physician expertise, and clinical practices. Historically, we've focused our investments in three areas—Health Access, Healthy Communities, and Health Knowledge—to address critical health issues in our communities.

For many years, we've worked side-by-side with other organizations to address serious public health issues such as obesity, access to care, and violence. And we've conducted Community Health Needs Assessments to better understand each community's unique needs and resources. The CHNA process informs our community investments and helps us develop strategies aimed at making long-term, sustainable change—and it allows us to deepen the strong relationships we have with other organizations that are working to improve community health.

### **C. Purpose of the CHNA Report**

#### **i. To advance community health**

Community Health Needs Assessments (CHNA) have been integral to learning about the health of the communities Kaiser Permanente serves. We are committed to building on the CHNA and relationships in the community to deepen our knowledge of the community specific needs and the resources and leaders in the community. This deeper knowledge will enable us to develop a new approach by engaging differently and activating in a way that addresses specific community needs and in collective action with the community. This new approach will leverage our existing and new community partnerships and harness the power of all Kaiser Permanente asset – economic, relationships, and expertise – to positively impact community health.

#### **ii. To implement ACA regulations**

The Patient Protection and Affordable Care Act (ACA), enacted on March 23, 2010, included new requirements for nonprofit hospitals in order to maintain their tax exempt status. The provision was the subject of final regulations providing guidance on the requirements of section 501(r) of the Internal Revenue Code. Included in the new regulations is a requirement that all nonprofit hospitals must conduct a community health needs assessment (CHNA) and develop an implementation strategy (IS) every three years (<http://www.gpo.gov/fdsys/pkg/FR-2014-12-31/pdf/2014-30525.pdf>). The required written IS plan is set forth in a separate written document.

### **D. Kaiser Permanente Approach to CHNA**

Kaiser Permanente has conducted CHNAs for many years as part of long standing community collaboratives. The new federal CHNA requirements have provided an opportunity to revisit our needs assessment and strategic planning processes with an eye toward enhanced compliance and transparency and leveraging emerging technologies. Our intention is to develop and implement a transparent, rigorous, and whenever possible, collaborative approach to understanding the needs and assets in our communities. From data collection and analysis to the identification of prioritized needs and the development of an implementation strategy, the intent was to develop a rigorous process that would yield meaningful results.

Kaiser Permanente's innovative approach to CHNAs includes the development of a free,

web-based CHNA data platform that is available to the public. The data platform provides access to a core set of approximately 150 publicly available indicators to understand health through a framework that includes social and economic factors; health behaviors; physical environment; clinical care; and health outcomes.

In addition to reviewing the secondary data available through the CHNA data platform, and in some cases other local sources, each Kaiser Permanente facility, individually or with a collaborative, collected primary data through key informant interviews, focus groups, and surveys. Primary data collection consisted of reaching out to local public health experts, community leaders, and residents to identify issues that most impacted the health of the community. The CHNA process also included an identification of existing community assets and resources to address the health needs.

Each hospital/collaborative developed a set of criteria to determine what constituted a health need in their community. Once all of the community health needs were identified, they were all prioritized, based on identified criteria. This process resulted in a complete list of prioritized community health needs. The process and the outcome of the CHNA are described in this report.

In conjunction with this report, Kaiser Permanente – Kern will develop an Implementation Strategy for the priority health needs the hospital will address. These strategies will build on Kaiser Permanente's assets and resources, as well as evidence-based strategies, wherever possible.

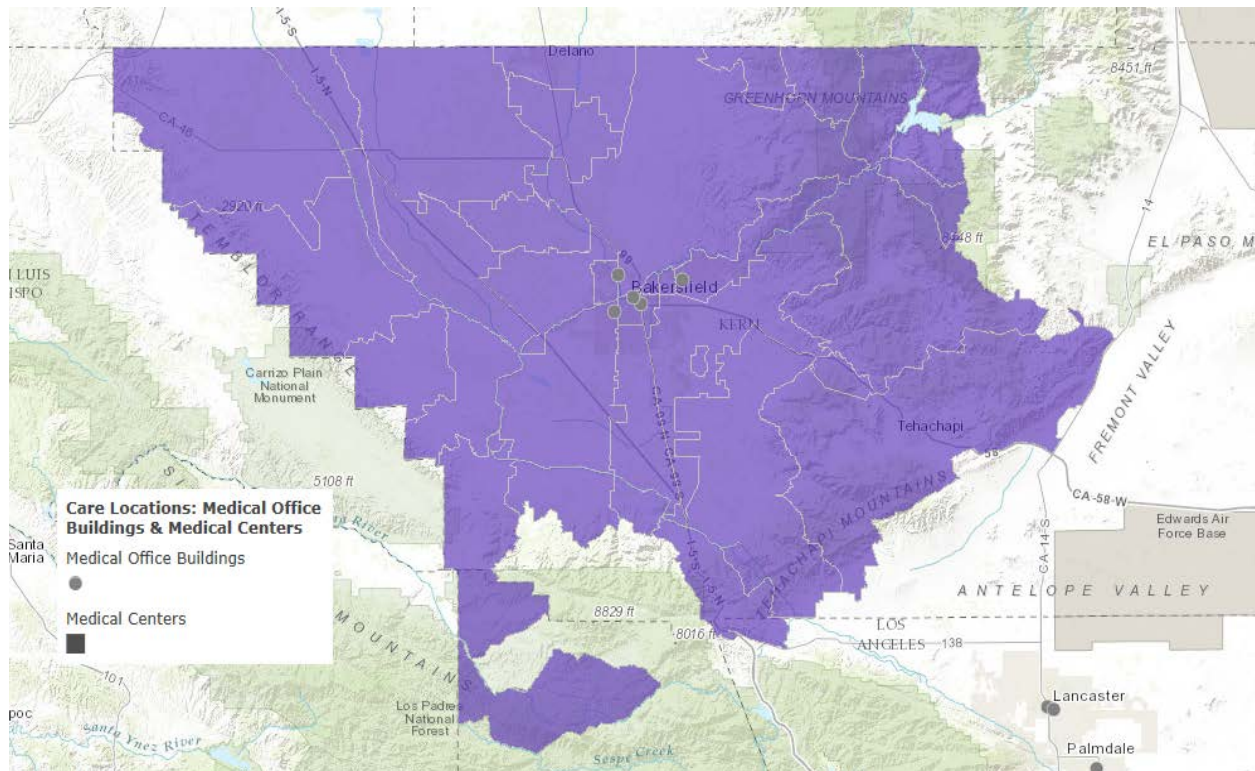
### III. COMMUNITY SERVED

#### A. Kaiser Permanente's Definition of Community Served

Kaiser Permanente defines the community served as those individuals residing within its service area. A service area includes all residents in a defined geographic area surrounding its medical facilities and does not exclude low-income or underserved populations.

#### B. Map and Description of Community Served

##### i. Map



**ii. Geographic description of community served**

Kaiser Permanente – Kern has locations in Bakersfield and Tehachapi. The service area is presented below by community and Zip code.

**Kaiser Permanente – Kern Medical Service Area**

City	Zip Code
Arvin	93203
Bakersfield	93301, 93304, 93305, 93306, 93307, 93308, 93309, 93311, 93312, 93313, 93314
Bodfish	93205
Buttonwillow	93206
Caliente	93518
Delano	93215
Fellows	93224
Glennville	93226
Keene	93531
Kernville	93238
Lake Isabella	93240
Lamont	93241
Lebec	93243
Lost Hills	93249
Maricopa	93252
McFarland	93250
McKittrick	93251
Shafter	93263
Taft	93268
Tehachapi	93561
Wasco	93280
Wofford Heights	93285
Woody	93287

**iii. Demographic profile of community served**

The Kaiser Permanente – Kern service area has a relatively high number of children, youth, and young adults (41.8%). A majority of residents in Kern are Latino (52.9%) and 40.3% of the population is Spanish speaking. While unemployment has decreased in the past three years, 23.4% of residents in the service area are living in poverty. 29.1% of residents do not have a high school diploma, which may contribute to the high rate of poverty.

**Population**

The population of the Kaiser Permanente – Kern service area is 761,489. The service area is 6,133 square miles and has a population density of 124.2 persons per square mile.

### Total Population

	Service Area	Kern County	California
Total population	761,489	848,204	37,659,180
Total land area (square miles)	6,133	8,130	155,738
Population density (per square mile)	124.2	104.3	241.8

Source: U.S. Census Bureau, American Community Survey, 2009-2013.

<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

From 2000 to 2010, the population in the service area increased by 28.7%. During this same period the state experienced a 10% increase in population growth.

### Change in Total Population 2000-2010

	Service Area	Kern County	California
Total population 2000	584,282	661,649	33,871,648
Total population 2010	751,855	839,631	37,253,956
Change in population 2000-2010	28.7%	26.9%	10.0%

Source: U.S. Census Bureau, 2000 + 2010 Population and Housing.

<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

Of the area population, 51.6% are male and 48.4% are female.

### Population by Gender

	Service Area	Kern County	California
Male	51.6%	51.5%	49.2%
Female	48.4%	48.5%	50.8%

Source: U.S. Census Bureau, American Community Survey, 2009-2013.

<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

Children, ages 0-17, make up 30.5% of the population; 60.7% are adults, ages 18-64; and 8.8% of the population are seniors, ages 65 and over. The service area and county have a higher percentage of children, youth and young adults, and a lower percentage of seniors than the state.

### Population by Age

	Service Area	Kern County	California
0-4	8.8%	8.6%	6.7%
5-17	21.7%	21.4%	17.9%
18-24	11.3%	11.2%	10.5%
25-34	14.9%	14.7%	14.4%
35-44	12.9%	12.8%	13.7%
45-54	12.4%	12.7%	13.9%
55-64	9.3%	9.5%	11.1%
65 and older	8.8%	9.2%	11.8%

Source: U.S. Census Bureau, American Community Survey, 2009-2013.

<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

When the service area is examined by community, Lost Hills has the largest percentage of youth, ages 0-17, (40.7%), and Kernville has the largest percentage of seniors



(37.8%). Woody has the smallest percentage of youth (3.6%) and Lost Hills has the smallest percentage of seniors (2.4%).

#### Population by Youth, Ages 0-17, and Seniors, Ages 65+

	Youth (Ages 0-17)	Seniors (Ages 65+)
Arvin	38.4%	4.0%
Bakersfield	30.1%	8.8%
Bodfish	15.9%	23.4%
Buttonwillow	33.9%	8.1%
Caliente	16.3%	32.4%
Delano	29.8%	6.4%
Fellows	24.2%	13.9%
Glennville	22.0%	17.5%
Keene	13.9%	29.6%
Kernville	16.1%	37.8%
Lake Isabella	13.6%	31.0%
Lamont	36.1%	5.1%
Lebec	30.4%	4.1%
Lost Hills	40.7%	2.4%
Maricopa	11.8%	6.2%
McFarland	34.0%	3.9%
McKittrick	21.9%	9.9%
Shafter	34.9%	7.5%
Taft	29.3%	10.0%
Tehachapi	22.5%	13.5%
Wasco	28.9%	5.2%
Wofford Heights	17.0%	31.6%
Woody	3.6%	37.5%
<b>Service Area</b>	<b>30.5%</b>	<b>8.8%</b>
<b>Kern County</b>	<b>30.0%</b>	<b>9.2%</b>
<b>California</b>	<b>24.6%</b>	<b>11.8%</b>

Source: U.S. Census Bureau, American Community Survey, 2009-2013, DP05.  
<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

#### Race/Ethnicity

In the service area, 52.9% of the population is Hispanic/Latino; 35.1% of the residents are White; 5.1% are African American; 4.3% are Asian; and 2.6% of the population is multiple races, Native Hawaiian/Pacific Islander, Native American/ Alaska Native and other races. The area has a higher percentage of Hispanic/Latino and Native Americans/Alaska Natives than the state.

#### Race/Ethnicity

	Service Area		Kern County	California
	Number	Percent	Percent	Percent
Hispanic/Latino	402,541	52.9%	49.8%	37.9%
White	267,232	35.1%	37.9%	39.7%
Black/African American	38,988	5.1%	5.3%	5.7%
Asian	32,394	4.3%	4.1%	13.1%
Multiple Races	13,676	1.8%	2.0%	2.6%
Native American/Alaska Native	4,861	0.6%	0.7%	0.4%

	Service Area		Kern County	California
	Number	Percent	Percent	Percent
Some other Race	994	0.1%	0.1%	0.2%
Native Hawaiian/Pacific Islander	802	0.1%	0.1%	0.4%

Source: U.S. Census Bureau, American Community Survey, 2009-2013.

<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

## Language

Over 40% of the population speaks Spanish in the home in the Kern service area (40.3%). This is higher than the county or state. 54.9% of the population speaks English only.

### Language Spoken at Home for the Population 5 Years and Over

	Service Area	Kern County	California
English only	54.9%	57.9%	56.3%
Spanish	40.3%	37.4%	28.8%
Asian	2.5%	2.5%	9.6%
Indo-European	1.7%	1.7%	4.5%

Source: U.S. Census Bureau, American Community Survey, 2009-2013, DP02.

<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

English proficiency reports the percentage of the population ages 5 and older who speak a language other than English at home and speak English less than "very well." In the Kaiser Permanente – Kern service area, 19.4% of the population has limited English proficiency. This rate is higher than the county (18.1%) and equal to the state rate.

### Limited English Proficiency, Population 5 Years and Older

	Service Area	Kern County	California
Limited English proficient	19.4%	18.1%	19.4%

Source: U.S. Census Bureau, American Community Survey, 2009-2013.

<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

## Sexual Orientation

Self-reported sexual orientation indicates a higher percentage of gay, lesbian or homosexual residents in Kern County (5.5%) than found in the state (2.3%). In Kern County, 1.4% of the population identified as bisexual.

### Sexual Orientation

	Kern County	California
Straight or heterosexual	93.0%	94.9%
Gay, lesbian or homosexual	5.5%	2.3%
Bisexual	1.4%	2.2%
Not sexual, celibate, none, other	None	0.7%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

## Unemployment

The unemployment rate in Kern County shows a decrease from 14.9% in 2011 to 10.4% in 2014.

## Poverty

Poverty thresholds are used for calculating all official poverty population statistics. They are updated each year by the Census Bureau. For 2013, the federal poverty level for one person was \$11,490 and for a family of four \$23,550.

Among the residents in the Kaiser Permanente – Kern service area, 21.1% are at or below 100% of the federal poverty level (FPL) and 45.4% are at 200% or below FPL. These rates of poverty are higher than found in the county and the state.

### Poverty Levels, All Residents

	Service Area		Kern County	California
	Number	Percent		
<100% FPL	171,081	23.4%	22.9%	15.9%
<200% FPL	355,282	48.7%	47.6%	35.9%

Source: U.S. Census Bureau, American Community Survey , 2009-2013.

<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

The percentage of children, ages 0-17, living in households with income below the Federal Poverty Level (FPL) is 32.7%, which is higher than the state rate of 22.2%. When examined by race/ethnicity, 47.8% of Black/African American children are living in poverty, 40.9% of Native Hawaiian/Pacific Islander children are in poverty, and 39% of Hispanic/Latino children are living in poverty. White (18.6%) and Asian (19.3%) children are among the populations with the lowest levels of poverty in the service area. A higher percentage of all races/ethnicities of children live in poverty in the service than compared to the state.

### Children in Poverty, Ages 0-17, by Race/Ethnicity

	Service Area	Kern County	California
Children living below the Federal Poverty Level	32.7%	32.3%	22.2%
Black or African American	47.8%	50.9%	33.2%
Native Hawaiian/Pacific Islander	40.9%	36.6%	20.8%
Hispanic or Latino	39.0%	38.1%	30.1%
Some other Race	35.5%	35.8%	33.4%
Native American/Alaska Native	35.2%	36.0%	32.1%
Multiple Race	21.7%	20.9%	15.6%
Asian	19.3%	18.9%	12.5%
White	18.6%	18.4%	10.3%

Source: U.S. Census Bureau, American Community Survey , 2009-2013.

<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

## Educational Attainment

Among adults, ages 25 and older, in the Kaiser Permanente – Kern service area, over one-fourth of the population (29.1%) have no high school diploma.

## Educational Attainment

	Service Area	Kern County	California
Population age 25 and over	442,990	498,699	24,455,010
Less than 9th grade	15.7%	14.5%	10.2%
9 <sup>th</sup> to 12 <sup>th</sup> grade, no diploma	13.4%	13.0%	8.5%
High school graduate	26.5%	26.5%	20.7%
Some college, no degree	23.4%	23.9%	22.1%
Associate degree	6.7%	7.0%	7.8%
Bachelor's degree	9.5%	9.9%	19.4%
Graduate or professional degree	4.8%	5.1%	11.2%

Source: U.S. Bureau of the Census, American Community Survey, 2009-2013, DP02. <http://factfinder.census.gov>

## Uninsured Rates

In the Kaiser Permanente – Kern service area, over one-fifth of the population (20.8%) is uninsured, which translates to 79.2% who have health insurance. This is less than the Healthy People 2020 objective of 100% health insurance coverage.

## Uninsured

	Service Area	Kern County	California
Uninsured	20.8%	20.2%	17.8%

Source: U.S. Census Bureau, American Community Survey, 2009-2013. <http://factfinder.census.gov>

Note: the health insurance coverage landscape may have changed since the passage of the Affordable Care Act.

#### **IV. WHO WAS INVOLVED IN THE ASSESSMENT**

##### **A. Identity of Hospitals that Collaborated on the Assessment**

Kaiser Permanente – Kern worked collaboratively with the hospitals in the Kern County Community Benefit Collaborative: San Joaquin Community Hospital, Mercy and Memorial Hospitals, and Delano Regional Medical Center.

##### **B. Other Partner Organizations that Collaborated on the Assessment**

The Kern County Department of Public Health participated in the identification of community health needs for this assessment.

##### **C. Identity and Qualification of Consultants Used to Conduct the Assessment**

Biel Consulting, Inc. conducted the Community Health Needs Assessment. Biel Consulting, Inc. is an independent consulting firm that works with hospitals, clinics and community-based nonprofit organizations. Dr. Melissa Biel conducted the Kaiser Permanente – Kern Community Health Needs Assessment. She was joined by Sevanne Sarkis, JD, MHA, MEd, and Irene Graff, MA. Biel Consulting, Inc. has extensive experience conducting hospital Community Health Needs Assessments and working with hospitals on developing, implementing, and evaluating community benefit programs. [www.bielconsulting.com](http://www.bielconsulting.com)

## **V. PROCESS AND METHODS USED TO CONDUCT THE CHNA**

### **A. Secondary Data**

#### **i. Sources and dates of secondary data used in the assessment**

Kaiser Permanente – Kern used the Kaiser Permanente CHNA Data Platform ([www.chna.org/kp](http://www.chna.org/kp)) to review over 150 indicators from publically available data sources. Previous CHNAs were also consulted. Data on gender and race/ethnicity breakdowns were analyzed when available. The secondary data were obtained from September – October 2015. Additional data were collected to supplement the CHNA Data Platform. These data were selected from recent data or local sources that were not offered on the CHNA Data Platform. Data available by zip code were aggregated to represent the Kaiser Permanente – Kern service area. The additional data sets were accessed electronically. When applicable, the data sets are presented in the context of county data and state data, framing the scope of an issue as it relates to the broader community. For details on specific sources and dates of data used, please see Appendix A.

#### **ii. Methodology for collection, interpretation and analysis of secondary data**

Indicators from the CHNA Data Platform that presented data available at the service area level were utilized. The Data Platform was utilized to obtain benchmark and comparison data. The Kaiser Permanente common indicators data on the CHNA Data Platform were calculated to obtain unique service area rates. In most cases, the service area values represent the aggregate of all data for geographies (zip codes, counties, tracts, etc.), which fall within the service area boundary. When one or more geographic boundaries were not entirely encompassed by a service area, the measure was aggregated proportionally. The options for weighting “small area estimations” were based upon total area, total population, and demographic-group population. The specific methodology for how service area rates were calculated for each indicator can be found on the [CHNA.org/kp](http://CHNA.org/kp) website.

The secondary data for the Kaiser Permanente – Kern service area were collected and documented in data tables with narrative explanation. The tables present the data indicator, the geographic area represented, the data measurement (e.g. rate, number, percent), county and state comparisons (when available), the data source, data year and an electronic link to the data source. Analysis of secondary data included an examination and reporting of health disparities for some health indicators. The secondary data were organized into categories using the MATCH (Mobilizing Action Toward Community Health) Framework. The MATCH Framework offers a consistent method to examine health needs by categorizing data by health outcomes and drivers for analysis. Data presented in MATCH categories offers a consistent method to examine and understand health outcomes and the “drivers” or determinants of health.



## **B. Community Input**

### **i. Description of the community input process**

Community input was provided by a broad range of community members through a community survey and key informant interviews. Individuals with the knowledge, information, and expertise relevant to the health needs of the community were consulted. These individuals included representatives from state, local, tribal, or other regional governmental public health departments (or equivalent department or agency) as well as leaders, representatives, or members of medically underserved, low-income, and minority populations. Additionally, where applicable, individuals with expertise of local health needs were consulted.

The survey and interviews took place September – November, 2015. Kaiser Permanente – Kern participated as a member of the Kern County Community Benefit Collaborative to conduct the survey and interviews. Thirty-three (33) phone interviews were conducted among community stakeholders, and 935 surveys were obtained from community residents. For a complete list of individuals who provided input, see Appendix B.

### **Interviews**

Kaiser Permanente – Kern, in partnership with Kern County Community Benefit Collaborative hospitals, developed a list of key influencers in the community who have knowledge of the identified preliminary health needs. They were selected to cover a wide range of communities within Kern County, represent different age groups, and racial/ethnic populations. In addition, non-traditional partners were identified. Kaiser Permanente intentionally included non-traditional stakeholders in this CHNA to give voice to a wide range of community members who represent a variety of sectors. For the purpose of this CHNA, non-traditional stakeholders were community members who represented organizations or groups beyond the required CHNA stakeholder groups. They could include representatives of anchor institutions, significant employers, other business stakeholders, financial institutions, banks, faith-based organizations, grocers and food producers, real estate developers, technology innovators, Chamber of Commerce leaders, urban planners, economic development experts, workforce development, uniformed public servants, sustainability leaders, and local civic leaders or their staff. The identified stakeholders were invited by email to participate in a one hour phone interview. Appointments for the interviews were made on dates and times convenient to the stakeholders. At the beginning of each interview, the purpose of the interview in the context of the assessment was explained, the stakeholders were assured their responses would remain confidential, and consent to proceed was given.

Interview participants were asked to share their perspectives on a number of topics related to the identified preliminary health needs in the Kaiser Permanente – Kern service area. Questions focused on the following topics:

- Major health issues facing the community.

- Socioeconomic, behavioral, environmental or clinical factors that contribute to poor health in a community (MATCH Health Factors).
- Issues, challenges, barriers faced by community members as they relate to the identified health needs (preliminary list from secondary data analysis).
- Services, programs, community efforts, resources available to address the health needs.
- Special populations or groups that are affected by a health need.
- Health and social services missing or difficult to access in the community.
- Other comments or concerns.

## **Community Survey**

The Kern County collaborative hospitals developed a plan for distribution of a survey to engage community residents. The survey was available in an electronic format through a Survey Monkey link, and in a paper copy format in English and Spanish. The hospitals distributed the surveys to their clients, in hospital waiting rooms and service sites, and through social media, including posting the survey link on hospital Facebook pages. The survey was also distributed to community partners who made them available to their clients. A written introduction to the survey questions explained the purpose of the survey and assured participants the survey was voluntary, and that they would remain anonymous. For community members who were illiterate, an agency staff member read the survey introduction and questions to the client in his/her preferred language and marked his/her responses on the survey.

The survey asked for the respondents' zip code, age, insurance status, and perceived health status. Survey questions focused on the following topics:

- Biggest health issues in the community.
- Where residents and their families receive routine health care services.
- Problems faced accessing health care, mental health care, dental care or supportive services.
- What would make it easier to obtain care?
- Types of support or services needed in the community.
- Healthy changes adopted in the past year to improve health.

The summary survey report can be found in Appendix C.

### **ii. Methodology for interpretation and analysis of primary data**

The primary data collection process was designed to validate secondary data findings, identify additional community issues, solicit information on disparities among subpopulations, and ascertain community assets to address needs. Analysis of the primary data occurred through a process that compared and combined responses to identify themes. Identification of additional health needs, beyond the preliminary list of health needs, was determined by documenting if a need was discussed by stakeholders. When possible, the primary data responses were also organized into the MATCH

Framework categories for ease in data analysis and comparison with secondary data. All responses to each question were examined together and concepts and themes were summarized to reflect the respondents' experiences and opinions.

### **C. Data Limitations and Information Gaps**

The Kaiser Permanente CHNA data platform includes approximately 150 secondary indicators that provide timely, comprehensive data to identify the broad health needs faced by a community. However, there are some limitations with regard to these data, as is true with any secondary data. Some data were only available at a county level, making an assessment of health needs at a neighborhood level challenging.

Furthermore, disaggregated data around age, ethnicity, race, and gender were not available for all data indicators, which limited the ability to examine disparities of health within the community. Lastly, data are not always collected on a yearly basis, meaning that some data are several years old. To address these limitations, data were augmented with additional data reports.

## **VI. IDENTIFICATION AND PRIORITIZATION OF COMMUNITY HEALTH NEEDS: PROCESS AND KEY FINDINGS**

### **A. Identifying Community Health Needs**

#### **i. Definition of health need**

For the purposes of the CHNA, Kaiser Permanente defines a “health need” as a health outcome and/or the related conditions that contribute to a defined health need. Health needs are identified by the comprehensive identification, interpretation, and analysis of a robust set of primary and secondary data.

#### **ii. Criteria and analytical methods used to identify community health needs**

Data analysis was an iterative process that commenced with secondary data collection and analysis to identify a preliminary list of health needs. Health needs were identified from secondary data using the size of the problem (relative portion of population afflicted by the problem) and the seriousness of the problem (impact at individual, family, and community levels). To determine size or seriousness of the problem, the health needs identified in the secondary data were measured against benchmark data, specifically county rates, state rates and/or Healthy People 2020 objectives. Indicators related to the health needs that performed poorly against one or more benchmarks met this criterion to be considered a health need. The analysis of secondary data yielded a preliminary list of significant health needs, which then informed primary data collection.

Health needs were identified based on the following criteria:

- Met the Kaiser Permanente definition of a health need.
- Confirmed by more than one indicator or data source.
- Indicator(s) performed poorly against one or more benchmarks. (Benchmarks were used to determine the size of the problem (relative portion of population afflicted by the problem) and the seriousness of the problem (impact at individual, family, and community levels)).

Primary data collection followed to validate and identify significant health needs. The secondary data collection and preliminary analysis were completed prior to primary data collection in order to assess the needs of the community served and identify health needs. The primary data collection then focused on the significant health needs identified through secondary data analysis. Primary data collection corroborated and augmented the significant health needs identified through secondary data collection.

The significant health needs identified in the Kaiser Permanente – Kern service area included:

Access to Health Care  
Asthma  
Cancer

Cardiovascular Disease  
Diabetes  
Environmental Health (Air Quality and Water Safety)  
Lung Disease  
Maternal and Infant Health  
Mental Health Care  
Oral Health  
Overweight and Obesity  
Sexually Transmitted Diseases (STD/HIV/AIDS)  
Substance Abuse (Alcohol/Drugs/Tobacco)

## **B. Process and Criteria Used for Prioritization of the Health Needs**

The Kern County Community Benefit Collaborative hosted a community forum on January 19, 2016 in Bakersfield, California to prioritize the identified health needs. The forum engaged 38 community leaders in public health, government agencies, schools, and nonprofit organizations that serve the medically underserved, low-income, and minority populations in the community. These individuals have current data or other information relevant to the health needs of the community served by the facility. A review of the Community Health Needs Assessment process and the identified significant health needs were presented at the community forum.

### **Priority Setting Process**

The forum attendees engaged in a process to prioritize the health needs using the Relative Worth method. The Relative Worth method is a ranking strategy where each participant received a fixed number of points; in this case 100 points (5 dots equaled 100 points, where each dot was worth 20 points). Instructions were given, and the criteria for assigning points were explained. The points were assigned to health needs based on the size of the problem (relative portion of population afflicted by the problem); or seriousness of the problem (impact at individual, family, and community levels). The points could be distributed among the health needs to be prioritized in a number of ways:

- Give all points to a single, very important item
- Distribute points evenly among all items (if none is larger or more serious than another)
- Distribute some points to some items, no points to other items

In the tabulation, items were ranked in priority order according to the total points the group assigned.

Participants engaged in a group discussion about the priority areas. Participants were asked to discuss the following questions for the high priority areas:

1. For priority issues, what is going well? What works in the community to address this issue? What groups/organizations are already focused on this issue?
2. What/who is missing? Where are the gaps? What are the barriers?
3. Identify collaborative opportunities to address the issues.

The participants were also asked to explain their thinking behind the lower rankings for some of the health needs. They indicated that many of the health needs were interrelated and impacted on each other. So by addressing a particular health need, for example mental health, this would also serve to influence substance abuse, homelessness and community safety. Therefore, more points were given to mental health as a health need because of the impact this need had on a number of other health needs. The information gathered from the community forum will be used for decision making in creation of the Implementation Strategy.

### **C. Prioritized Description of all the Community Health Needs Identified through the CHNA**

#### **i. Community health landscape and trends**

This section describes the health outcomes and important determinants (drivers) of health in the community. The list of significant health outcomes and drivers listed in this section is determined by the secondary and primary data collection and analysis (as described in Section V). This section includes data for: asthma, cancer, heart disease, blood pressure, stroke, diabetes, and STD/HIV/AIDS.

##### **a. Significant morbidity and mortality (health outcomes)**

A health outcome is a snapshot of a disease in a community that can be described in terms of both morbidity (incidence) and mortality (deaths). In Kern County, 9.4% of the population has been diagnosed with asthma. Residents in the county suffer from high rates of lung and cervical cancer. Heart disease is the leading cause of death in the service area. 40.3% of adults have high blood pressure and 9.4% have been diagnosed with heart disease. While rates of death as a result of stroke (41.5 per 100,000 persons) are lower than county and state rates, but exceed the Healthy People 2020 objective (34.8 per 100,000 persons). Diabetes is a growing concern in the community; 10.3% of adults in Kern County have been diagnosed with diabetes, which is higher than the state rate (8.9%).

#### **Asthma**

The population diagnosed with asthma in Kern County is 9.4%. 44% of county asthmatics take medication to control their symptoms. Among county children and youth, 8.9% have been diagnosed with asthma and 13.6% take medication to control their symptoms.



## Asthma

	Kern County	California
Diagnosed with asthma, total population	9.4%	14.0%
Diagnosed with asthma, 0-17 years old	8.9%	14.5%
ER visit in past year due to asthma, total population	8.3%	9.6%
ER visit in past year due to asthma, 0-17 years old	13.6%	13.9%
Takes daily medication to control asthma, total population	44.0%	44.2%
Takes daily medication to control asthma, 0-17 years old	13.6%	39.0%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Asthma is a condition that when managed can prevent hospitalizations. The overall hospitalization discharge rate for asthma in the Kaiser Permanente – Kern service area is 10.6 per 10,000 persons. This is lower than the county (10.8) but higher than the state rate (8.9 per 10,000 persons).

### Asthma, Age-Adjusted Hospital Discharge Rate, per 10,000 Population

	Service Area	Kern County	California
Asthma hospital discharge rate	10.6	10.8	8.9

Source: California Office of Statewide Health Planning and Development, 2011. [OSHDP Patient Discharge Data](#).  
Additional data analysis by [CARES](#).

## Community Input – Asthma

Stakeholder interviews and community surveys identified the following issues, challenges and barriers related to asthma:

- Arvin has some of the worst air quality in the country, not just the state. With asthma we are at the mercy of geography. Poor air quality gets trapped. We are also a major highway corridor.
- If you suffer from asthma then you may not go outside and be active and then you are gaining weight and you're not eating healthy food.
- A huge environmental challenge is that we can't get rid of our air so asthma, allergies and sinusitis are very prevalent.
- Smoking rates are down but we still have higher rates than the state average.
- We live in an arid climate with lots of dust and particulate matters. We are in a bowl so inversion takes place that traps air.
- The Air Pollution Control District monitors organizations from an emissions standpoint. Our air has improved dramatically over the last 20 years.
- In the county we received an F grade for ozone levels from the American Lung Association.
- Geography and industry (oil and agriculture) contribute to asthma and breathing problems.

## Cancer

In Kern County, lung cancer (58.0 per 100,000 persons) and cervical cancer (9.6) exceed state rates. Other types of cancer occur at rates less than the state rates.

### Age-Adjusted Cancer Incidence, per 100,000 Persons, 2008-2012

	Kern County	California
Prostate Cancer	116.6	126.9
Breast Cancer (Female)	111.8	122.1
Lung and Bronchus Cancer	58.0	48.0
Colon and Rectum Cancer	38.5	40.0
Melanoma (Skin)	16.3	20.9
Cervix	9.6	7.7

Source: Age-Adjusted Invasive Cancer Incidence Rates by County in California, 2008 - 2012. Based on November 2014 Extract (Released November 21, 2014). California Cancer Registry. Cancer-Rates.info. <http://cancer-rates.info/ca/>

Cancer is the second highest cause of death after heart disease in the service area. The rate of age-adjusted death due to malignant neoplasm (cancer) is 159.5 per 100,000 persons in the service area. This is lower than the county rate, and the Healthy People 2020 objective of cancer death of 160.6 per 100,000 persons.

### Cancer Mortality Rate, Age-Adjusted, Rate per 100,000 Persons

	Service Area		Kern County	California
	Number	Rate	Rate	Rate
Cancer death rate	8,064	159.5	163.6	157.1

Source: University of Missouri, 2010-2012. [Center for Applied Research and Environmental Systems](#). California Department of Public Health, [CDPH - Death Public Use Data](#) by zip code.

## Colorectal Cancer Screening

The Healthy People 2020 objective rate for colorectal screening is 70.5% of adults 50 years and older. In Kern County, the rate of compliance for colorectal cancer screening averaged from 2006-2012 was 54.6%, which does not meet the Healthy People 2020 objective for colorectal cancer screening.

### Colorectal Cancer Screening, Adults 50+, 2006 - 2012

	Kern County	California
Screening Sigmoidoscopy or colonoscopy	54.6%	57.9%

Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](#), 2006-2012. [Health Indicators Warehouse](#)

## Mammograms and Pap Smears

The Healthy People 2020 objective for mammograms is 81% of women 50 to 74 years have a mammogram within the past two years. In Kern County, women have exceeded this objective with 87.5% obtaining mammograms.

## Women Mammograms

	Kern County	California
Women ages 50 to 74 who reported having a mammogram in the past 2 years	87.5%	85.9%

Source: California Health Interview Survey, 2012. <http://ask.chis.ucla.edu/AskCHIS/>

77% of county women aged 18 and older reported having had a pap smear.

## Women Pap Smears, 2006-2012

	Kern County	California
Women 18+ who reported having a pap smear within the past 3 years	77.0%	78.3%

Source: Centers for Disease Control and Prevention, *Behavioral Risk Factor Surveillance System*, 2006-2012. [Health Indicators Warehouse](#)

## Community Input – Cancer

Stakeholder interviews and community surveys identified the following issues, challenges and barriers related to cancer:

- Our agricultural industry adds a lot of pesticides and herbicides to our environment, which can especially impact the health of kids. Building Healthy Communities is working on increasing the distance of active spraying that can be done within a school radius to 1 mile while school is in session.
- We have higher than average rates of breast cancer. There are theories that it's related to the hormones and chemicals in our livestock. The body retains these chemicals.
- In the McFarland cancer cluster, young children were diagnosed with very rare, strange types of cancer. It's believed there was a well contaminated by pesticides and it got concentrated. By the time the well was tested, it has reduced but the damage was done.
- Health screening is a challenge. We work with the American Cancer Society and the American Lung Association to increase awareness but it's still hard to get people in.
- We have great facilities for early diagnosis. It's about continued education as to how you educate the community about accessing care.

## Heart Disease

Heart disease is the leading cause of death in the service area. The rate of death, age-adjusted for coronary heart disease is 217.2 per 100,000 persons. This exceeds the county rate (214.3), and the Healthy People 2020 objective, which is a mortality rate due to heart disease of 100.8 per 100,000 persons.

## Coronary Heart Disease Mortality, Age-Adjusted, Rate per 100,000 Persons

	Service Area		Kern County	California
	Number	Rate	Rate	Rate
Heart disease death rate	9,966	217.2	214.3	163.2

Source: University of Missouri, 2010-2012. [Center for Applied Research and Environmental Systems](#). California Department of Public Health, [CDPH - Death Public Use Data](#)

For adults in Kern County, 9.4% have been diagnosed with heart disease. Among these adults, 67.9% are very confident they can manage their condition. Less than half (46.4%) have a management care plan developed by a health care professional.

### Adult Heart Disease

	Kern County	California
Diagnosed with heart disease	9.4%	6.1%
Very confident to control condition	67.9%	53.6%
Somewhat confident to control condition	28.7%	34.9%
Not confident to control condition	3.5%	11.5%
Has a management care plan	46.4%	67.1%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

### High Blood Pressure

A co-morbidity factor for diabetes and heart disease is hypertension (high blood pressure). In Kern County, 40.3% of adults have been diagnosed with high blood pressure, and of those, 64.3% take medication to control their hypertension. The rate of reported diagnosis is higher than the state rate.

### High Blood Pressure

	Kern County	California
Diagnosed with high blood pressure	40.3%	28.5%
Takes medication for high blood pressure	64.3%	68.5%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

### Stroke

The rate of death, age-adjusted for cerebrovascular disease (stroke) is 41.5 per 100,000 persons. This is lower than the county rate (42.3) and higher than the state rate (37.4). But exceeds the Healthy People 2020 objective, which is a mortality rate due to stroke of 34.8 per 100,000 persons.

### Stroke Heart Disease Mortality Rate, Age-Adjusted, Rate per 100,000 Persons

	Service Area		Kern County	California
	Number	Rate	Rate	Rate
Stroke disease death rate	1,940	41.5	42.3	37.4

Source: University of Missouri, 2010-2012. [Center for Applied Research and Environmental Systems](http://centerforappliedresearchandenvironmentalsystems.org). California Department of Public Health, CDPH - Death Public Use Data.

### Diabetes

Diabetes is a growing concern in the community; 10.3% of adults in Kern County have been diagnosed with diabetes, which is higher than the state rate (8.9%). For adults with diabetes, only 29.4% are very confident they can control their diabetes.

## Adult Diabetes

	Kern County	California
Diagnosed pre/borderline diabetic	13.5%	10.5%
Diagnosed with diabetes	10.3%	8.9%
Very confident to control diabetes	29.4%	56.5%
Somewhat confident	67.7%	34.7%
Not confident	2.9%	8.8%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Diabetes is a condition that when managed can prevent hospitalizations. The diabetes hospitalization rate in the service area is 14.1 per 10,000 population. This rate is lower than the county (16.1) but higher than the state (10.4) rate of hospitalizations for diabetes.

## Diabetes, Hospital Discharge Rate, per 10,000 Population, Adults

	Service Area	Kern County	California
Patient discharge rate for diabetes	14.1	16.1	10.4

Source: California Office of Statewide Health Planning and Development, 2011-2013. [www.thinkhealthla.org](http://www.thinkhealthla.org)

## Community Input – Cardiovascular Disease and Diabetes

Stakeholder interviews and community surveys identified the following issues, challenges and barriers related to cardiovascular disease and diabetes:

- For healthy food access, we are one of the top counties in the nation that is food insecure. We are 9<sup>th</sup> highest in the US for food hardship. Taken together with the environment it's all interrelated.
- Heart disease we are 4<sup>th</sup> highest rate of 58 California counties. With diabetes we are 2<sup>nd</sup> highest in the state. This is an improvement from where we were; we used be #1 with both. So we're seeing some improvements with both areas.
- Contributing to diabetes is the weather in this area. It's a barrier to making lifestyle choices.
- There are social aspects to our convenience culture and the types of food that are available. We also have a lot of genetic modifications to most of our fruits and veggies and we're eating highly processed foods.
- Smoking rates are down but we still have higher rates than the state average.
- Chronic disease goes back to education. Diabetes can be largely controlled by diet and changing lifestyles.
- Because we have such high rates of cardiac issues, we could collaborate better and use more social media to remind people to walk, eat well, support one another with community challenges, go to parks and use facilities that are available.
- We should give incentive dollars to promote change.
- The challenge with diabetes is the understanding that what you eat and your physical activity and medications impact this disease. Many people have co-morbidities and they may focus more efforts on the other diseases than diabetes.

- People with serious and persistent mental illness die on average 15 years earlier than other populations. Most of those deaths are related to preventative chronic diseases that could have been maintained. So our effort is to make sure they get their medical care.
- We are the worst county in CA for heart disease. This goes back to diet and exercise and ethnicity. A lot of diets and traditional meals are high fat and heavy foods.

## STD/HIV/AIDS

In 2013 there were a total of 1,208 living cases of HIV/AIDS in Kern County.

### HIV/AIDS, 2013

	Total Cases	Living Cases	Percent Deceased
Kern County	2,049	1,208	41%
California	169,734	73,291	57%

Source: California Department of Public Health, HIV AIDS Surveillance in California, 2013.  
<http://www.cdph.ca.gov/data/statistics/Pages/OAHIVAIDSStatistics.aspx>

## Sexually Transmitted Diseases

Rates of Chlamydia in Kern County are 719.5 per 100,000 persons, higher than the state rate (453.4). The rate of Gonorrhea is 176.8 per 100,000 persons, which is higher than the state rate of 116.8. Primary and Secondary Syphilis (16.2) is slightly higher than the state average while Early Latent Syphilis is slightly lower, at 4.6 per 100,000 persons.

### STD Cases, Rate per 100,000 Persons, 2014

	Kern County		California
	Cases	Rate	Rate
Chlamydia	6,276	719.5	453.4
Gonorrhea	1,542	176.8	116.8
Primary & Secondary Syphilis	141	16.2	9.9
Early Latent Syphilis	59	4.6	6.8

Source: California Department of Public Health, 2014. <http://www.cdph.ca.gov/data/statistics/Pages/STDDataTables.aspx>

## Community Input – STD/HIV/AIDS

Stakeholder interviews and community surveys identified the following issues, challenges and barriers related to STD/HIV/AIDS:

- HIV rates are increasing for African American women.
- If you want birth control, you have to go to the Department of Public Health or a nonprofit and not a lot of kids are doing that.
- This County is in the middle of a syphilis outbreak. Young mothers have no prenatal care and come to the ED to deliver babies with congenital syphilis. Treatment takes over 3 weeks and it's very hard to keep track of them after they leave.
- This is really a migrant population issue. And it's about cultural background differences.
- Incidence is directly proportional to society. We are pretty tolerant of almost everything.



- Up until recently, comprehensive age appropriate sex education wasn't mandatory in public schools, so they'd take the path of least resistance. We do a comprehensive program in a few schools but we need to hit all schools all the time. I fully believe when young people are given accurate information in a supportive environment they can make better choices.
- With an economic crisis, prevention programs are always the first to go and it comes back with explosive rates of STDs. We are seeing a hint now and we are starting to see HIV infections in adolescents. We had 7 of them last year, the highest number ever.
- There is a belief that if we give information on contraception then we are giving permission to have sex. Families need to express their values and expectations and always tell young people that the only 100% way to not get pregnant or get an STI is to be abstinent until one is ready to be in long-term relationship. You can always give that message, but people make their own choices and should have the tools that will be with them for the rest of their lives.

## **b. Significant health drivers**

Health drivers are behavioral, environmental, social, economic and clinical care factors that positively or negatively impact health.

### **i. Access to care**

#### **Health Insurance Coverage**

In the Kaiser Permanente – Kern service area, the 2009-2013 American Community Survey indicates that 35.9% of the population has Medi-Cal coverage. Over one-fifth of the population (20.8%), based on this data source, is uninsured, which translates to 79.2% who have health insurance. This is less than the Healthy People 2020 objective of 100% health insurance coverage.

#### **Medi-Cal and Uninsured**

	<b>Service Area</b>	<b>Kern County</b>	<b>California</b>
Medi-Cal coverage	35.9%	34.8%	23.4%
Uninsured	20.8%	20.2%	17.8%

Source: U.S. Census Bureau, American Community Survey, 2009-2013. <http://factfinder.census.gov>

According to the 2014 California Health Interview Survey, 90.9% of Kern County residents are insured. 37.1% of the population has employment-based insurance. Rates of Medi-Cal coverage (31.8%) and private purchase (12.5%) are higher in the county than found in the state.

#### **Insurance Coverage**

	<b>Kern County</b>	<b>California</b>
Employment Based	37.1%	44.8%
Medi-Cal	31.8%	22.5%
Private Purchase	12.5%	6.4%
Medicare only	9.1%	13.4%
No Insurance	9.1%	11.9%
Other Public	0.3%	1.0%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

#### **Sources of Care**

Residents who have a medical home and access to a primary care provider improve continuity of care and decrease unnecessary ER visits. A usual source of care is a place to go when a person is sick or needs health advice. In Kern County, 85.4% of residents have a usual source of care.

#### **Usual Source of Care**

	<b>Kern County</b>	<b>California</b>
Usual source of care	85.4%	85.8%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

The source of care for 54.1% of Kern County residents is a doctor's office, HMO, or Kaiser. Clinics and community hospitals are the source of care for 25.8% of residents. 14.6% of residents have no source of care.

#### Sources of Care

	Kern County	California
Dr. Office/HMO/Kaiser	54.1%	60.7%
Community or government clinic/ community hospital	25.8%	23.0%
ER/Urgent Care	2.6%	1.4%
Other	3.0%	0.7%
No source of care	14.6%	14.2%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

15.8% of residents in Kern County visited an ER over the period of a year. This is a lower ER rate than found in the state (17.4%). Seniors visit the ER at the highest rates (28%).

#### Use of Emergency Room

	Kern County	California
Visited ER in last 12 months	15.8%	17.4%
0-17 years old	6.1%	19.3%
18-64 years old	18.9%	16.5%
65 and older	28.0%	18.3%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

A "Health Professional Shortage Area" (HPSA) is defined as a geographic area designated as having a shortage of primary medical care, dental or mental health professionals. 31.8% of the population in the Kaiser Permanente – Kern service area is living in a HPSA for primary care. These rates are lower than the county but higher than the state.

#### Health Professional Shortage Areas

	Service Area	Kern County	California
Percentage of population living in a primary care HPSA	31.8%	39.0%	25.2%

Source: U.S. Department of Health & Human Services, Health Resources and Services Administration, March 2015. <http://datawarehouse.hrsa.gov/tools/analyzers/hpsafind.aspx>

#### Delayed Care

Among residents of Kern County, 7.9% delayed or did not get medical care and 8.4% delayed or did not obtain prescription medications when needed. 62.2% of Kern County adults delayed care due to the cost of care or lack of insurance.

## Delayed Care

	Kern County	California
Delayed or didn't get medical care in past 12 months	7.9%	11.3%
Delayed care due to cost or lack of insurance	62.2%	51.3%
Delayed or didn't get prescription medicine in past 12 months	8.4%	8.7%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

## Community Input – Access to Care

Stakeholder interviews and community surveys identified the following issues, challenges and barriers related to access to care:

- At-risk children and families don't necessarily seek care on a regular basis. They are in survivor mode and struggle with basic needs; so long term health isn't an investment they make. It's always crisis mode.
- If people need to access care after regular office hours, it can be hard to maneuver urgent care vs. ED treatment.
- There is only one option for our health care: long lines, take the day off of work, and not get paid. And still, you may not have a remedy to the illness.
- We need specialty care, especially pediatrics. You need to go out of County for care. This is a hard reality for families, lost work time, etc.
- After hours care there is a big gap in services. Many partners are looking at how they can increase access on weekends or after 5 pm. Residents visit the ED because they don't have timely access to a primary care provider. We have urgent care systems, but they are also limited hours.
- Bakersfield has a new urgent care. There is one in Taft and an after-hours clinic in Delano. For our insured, we try to promote access to an advice line 24 hours a day.
- Medications can be expensive on a limited income and become prohibitive. There are programs out there but people are not always aware. You can almost always get medications in some way that is economical for things like blood pressure, etc.
- In Kern County, there is a huge shortage of ophthalmology. You have to wait 3-6 months for Medi-Cal or you have to travel 150 miles outside of Kern to get care.
- The amount of providers in our area doesn't match the population so it's difficult for everyone to be served. Also, if health literacy were higher, we'd probably have higher access.
- It is very problematic for residents to access care even within the city limits of Bakersfield. Depending on where you live and your transport options, if your spouse is at work and your family only has one car, your transportation options are limited. If you don't have a car, you take public transportation and it takes all day to travel. It can be extremely difficult to get to those resources.
- Finding culturally linguistic competent medical staff can be difficult. We have a Mexican indigenous population that doesn't speak Spanish, Filipinos, and a growing Sheikh population.
- Establishment of a medical home is the biggest issue. When the undocumented and migrant workers get sick they are using the ED for their health care. This is the most expensive and least efficient way to get your health care.

- Even for people who have insurance, we have a lack of primary care providers in our community and more and more providers are retiring and choosing other ways to practice their craft. So access is always a problem and it's an even bigger problem if you don't have an established relationship with a medical home.
- People get a list of doctors from the ACA but the doctors really aren't accepting that insurance or the time to get an appointment is so far out in the future that people only get all worked up about getting to a doctor when they aren't feeling well. But when you're sick, they don't see you that quickly anyways without a prior relationship.
- We have extreme shortages of specialists, particularly urologists, ENT, neurologists, and endocrinologists.
- We have a shortage of primary care providers. This impacts communities of color. Same day appointments or well visits and immunizations are difficult to get. We don't have enough access for the demand.
- Attracting new people to Kern is difficult with the air quality and long hot summers. People would rather live somewhere else.
- There is a surplus of primary care doctors in L.A. and the Bay area. They are paid less than they are here but the fact is, they'd rather live by the beach and have better air quality. We need to work on how we repackage and sell ourselves as a community.
- We really need to expand linkages to medical schools in the state. We have some, but we could use more to have a real robust pipeline to physicians in our community.
- A number of our residents' legal status may be in question so they don't qualify for Covered CA. They may access a natural healer and the ED so they aren't doing any preventive care.
- We need to work with small businesses to understand what their options are for providing care. How can we do a better job of providing coverage for our employees and explore anything that can be done on a community basis to defray costs to small businesses.
- Often small businesses can't offer the best coverage and that becomes a retention issue and access and quality of care as well. We need to look at localized health plans with a large local pool of applicants to reduce cost and increase coverage.

## Oral Health

Lack of access to dental health care can contribute to poor health status. In Kern County, 77% of children, 89.8% of teens, and 79.1% of adults had been to the dentist in the past two years. In the county, 23% of children had never been to a dentist.

## Time Since Last Dental Visit, Children, Teens and Adults

	Kern County	California
Children who have been to dentist less than 6 months to 2 years	77.0%	83.8%
Children who have been to dentist more than 2 years to more than 5 years	None	0.9%
Children who have never been to dentist	23.0%	15.3%
Teens who have been to dentist less than 6 months to 2 years	89.8%	94.7%

	Kern County	California
Teens who have been to dentist more than 2 years to more than 5 years	10.2%	3.5%
Teens who have never been to the dentist	None	1.8%
Adults who have been to dentist less than 6 months to 2 years	79.1%	79.7%
Adults who have been to dentist more than 2 years to more than 5 years	20.4%	18.1%
Adults who have never been to the dentist	0.5%	2.2%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

A "Health Professional Shortage Area" (HPSA) is defined as a geographic area designated as having a shortage of primary medical care, dental or mental health professionals. In Kern County 11% of the population is living in a designated HPSA for dental care.

#### Health Professional Shortage Area

	Kern County	California
Percentage of population living in a dental care HPSA	11.0%	4.9%

Source: U.S. Department of Health & Human Services, Health Resources and Services Administration, March 2015. <http://datawarehouse.hrsa.gov/tools/analyzers/hpsafind.aspx>

#### Community Input – Oral Health

Stakeholder interviews and community surveys identified the following issues, challenges and barriers related to oral health care:

- Not all employers offer dental and vision with medical insurance. So families opt out, trying to prioritize their money.
- Our water isn't fluoridated.
- Over the last decade Denti-Cal has been cut repeatedly. Dental is viewed as almost cosmetic when that is not the case. If you aren't insured what do you do? Take time off work? Can you afford to do that?
- For our mentally ill and substance abusers, they have horrific dental hygiene. Meth abusers lose their teeth too.
- At one point we had Mercy Clinic in Taft reaching underserved populations for dental needs. But it became a significant transportation issue. They were taking vans of people to dental services but between the transportation costs and the canceled appointments, they stopped.
- We identified a need for more dental care in our community. Young children in particular and for toddlers, shortages of early screenings and treatment.
- There used to be a lot of campaigns about baby bottle tooth decay but maybe it fell off the radar. We see kids who are very overweight and with very poor oral hygiene.
- Private insurance may not have dental coverage. And if they do, they have high deductibles.
- We should take dental care into the schools like food programs. If we are serious about prevention, then it isn't just migrant or poor people we should reach out to, it is for everyone.

## Mental Health

In Kern County, 17.1% of adults experienced serious psychological distress in the past year. 21.4% of adults needed help for emotional, mental health, alcohol or drug issues, and 85.5% of those who sought or needed help did not receive treatment. The Healthy People 2020 objective is for 64.6% of adults with a mental disorder to receive treatment (35.4% who do not receive treatment).

### Mental Health, Adults

	Kern County	California
Adults who has likely had serious psychological distress during past year	17.1%	7.7%
Adults who needed help for emotional-mental and/or alcohol-drug issues in past year	21.4%	15.9%
Adults who saw a healthcare provider for emotional/mental health and/or alcohol-drug issues in past year	3.8%	12.0%
Adults who felt they might need to see a professional for problems with emotions or drugs/alcohol who sought/needed help but did not receive treatment	85.5%	43.4%
Adults who took prescription medicine for emotional/mental health issue in past year	8.0%	10.1%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

In Kern County, 9.5% of teens needed help for an emotional or mental health problem and of those 13% received counseling.

### Mental Health, Teens

	Kern County	California
Teens who needed help for emotional / mental health problems in past year	9.5%	23.2%
Teens who received psychological/ emotional counseling in past year	13.0%	11.6%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Among adults in Kern County, 26.8% reported they received insufficient social and emotional support all or most of the time.

### Lack of Social or Emotional Support

	Kern County	California
Adults who received insufficient social and emotional support	26.8%	24.6%

Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2012. [Health Indicators Warehouse](#).



In Kern County, 3.4% of adults had seriously considered suicide.

### Thought about Committing Suicide

	Kern County	California
Adults who ever seriously thought about committing suicide	3.4%	7.8%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

In the service area, the age-adjusted rate of suicide is 9.8 per 100,000 persons. This is less than the Healthy People 2020 objective of 10.2 per 100,000 persons.

### Suicide Mortality Rate, Age-Adjusted, Rate per 100,000 Persons

	Service Area		California
	Number	Rate	Rate
Suicide death rate	646	9.8	9.8

Source: University of Missouri, 2010-2012. [Center for Applied Research and Environmental Systems](#). California Department of Public Health, [CDPH - Death Public Use Data](#) by zip code.

### Substance Abuse/Tobacco

#### Alcohol and Drug Use

There are 36 beer, wine, and liquor stores in the Kaiser Permanente – Kern service area, which equates to 4.8 liquor stores per 100,000 persons. This is lower than the state rate (10.0).

#### Liquor Store Access, per 100,000 Persons

	Service Area		Kern County	California
	Number	Rate		
Alcohol retail licenses	36	4.8	5.4	10.0

Source: US Census Bureau, [County Business Patterns](#), 2012. Additional data analysis by [CARES](#).

Binge drinking is defined as consuming a certain amount of alcohol in a set period of time. For males, it is five or more drinks per occasion. For females, it is four or more drinks per occasion. In Kern County, 40.9% of adults engaged in binge drinking; 31.3% of teens indicated they had tried an alcoholic drink. 11.9% of teens have reported binge drinking in the past month. Alcohol use is higher in Kern County than the state.

### Alcohol Consumption and Binge Drinking

	Kern County	California
Adults who have participated in binge drinking past year	40.9%	32.6%
Teen who have ever had an alcoholic drink	31.3%	22.5%
Teens who report binge drinking in the past month	11.9%	3.6%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

In Kern County, 10.7% of teens have tried drugs and 9.7% have used marijuana in the past year. Teen marijuana use is higher than among teens in the state.

## Teen Illegal Drug Use

	Kern County	California
Ever tried marijuana, cocaine, sniffing glue, other drugs	10.7%	12.4%
Marijuana use in past year	9.7%	8.6%

Source: California Health Interview Survey, 2012. <http://ask.chis.ucla.edu>

## Cigarette Smoking

Smoking is a contributing cause to disease and death. It increases the risk of developing heart disease, stroke and cancer. In Kern County, 10.1% of adults are smokers; these smoking rates are lower than the Healthy People 2020 objective of 12%.

## Cigarette Smoking, Adults

	Kern County	California
Current smoker	10.1%	11.6%
Former smoker	23.0%	22.4%
Never smoked	67.0%	66.0%

Source: California Health Interview Survey, 2012. <http://ask.chis.ucla.edu>

12.5% of teens are current cigarette smokers, which is greater than the state rate of 3.5% teen smokers. 21.6% of teens in Kern County have smoked an e-cigarette; this is higher than the state rate (10.3%).

## Cigarette Smoking, Teens Ages 13-19

	Kern County	California
Current cigarette smoker	12.5%	3.5%
Ever smoked an e-cigarette	21.6%	10.3%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

## Community Input – Mental Health Care and Substance Abuse

Stakeholder interviews and community surveys identified the following issues, challenges and barriers related to mental health care and substance abuse:

- I believe about 70-80% of homelessness is related to mental health issues. We have a few facilities that offer immediate or around-the-clock mental health, hope, and beds. Their beds are consistently full, so there is a lot more need than services currently available.
- Culturally some groups view mental health as a weakness and don't talk about it. Also, immigrant populations experience stress from navigating a new life and being undocumented, concerned about deportation, or being taken advantage of at work.
- We are the 3rd largest county by geography and 11<sup>th</sup> for the largest population. The largest role is played by County. They try to partner with everyone but they're underfunded. We had bond funding (2006-2010) that aimed at increasing services and reach, but overall mental health funding has dwindled.

- A big piece of what goes on is a lot of people that are chronically homeless are not interested in going to our programs that are meant to get them re-housed, working, etc. Homeless funding is coming from HUD, but it really needs to come from a federal level for mental health. It's a unique population.
- Our mental health plan is for the serious and persistent, and not for people with insurance or people who could otherwise be treated by their PCP.
- Too often the disenfranchised experience access issues and they use the ED for routine needs.
- Lots of kids try to get a job at a fast food joint or mall and they aren't getting them so they stick to what they know: smoking pot and hanging with friends.
- We are too 'siloed.' We take money and build programs. We'd serve the community better by connecting people to existing services.
- Our mental health plan treats the entire County. We are trying to reinvent our connections with hospitals, schools, and the police in smaller rural communities like Lake Isabella. I'm trying to work with hospitals, all ED and psych beds, but it's like herding cats; social service organizations come to the table but not ED doctors. We used to go to hospitals twice a year with key staff but cohesiveness with hospitals is always difficult.
- People who are on Medi-Cal get comprehensive mental health because of case management and wraparound services.
- Our mental health agency has a new administration and we see an increased desire to collaborate with other agencies. Access for our clients has greatly increased. We have clinicians in several of our offices now. They have contracts with providers and our provider network has increased in the last year.
- When we look at demographics by zip code and ask do we have easy access to mental health facilities in those communities where schools are? My answer is no. We need something on school campuses.
- Our Hispanic culture says your behavior is serious but it's interpreted as you aren't behaving well, not that it is something in our brain.
- County mental health folks are so understaffed and resourced and there are endless clients who need help. It is difficult for them to serve their clients, especially with any degree of success and longevity.
- Often people who need services have transportation challenges and family issues so there are a huge number of people without access to counseling and medications.
- Delano has 2 or 3 prisons in the area. When the prisoners came in, their families followed. And then they get out and stay in the neighborhood. Issues come about.
- Some people think counseling is waste of time, talking to a stranger won't help. They don't trust therapists and prescriptions, they don't think treatment drugs are good for their body, and they don't want to get addicted.
- Drugs are readily available. Kids watch parents and they aren't setting a good example. Kids think this is part of life.
- We have a lot of functional addicts and lots of issues of denial so they don't seek treatment, even the ones who can afford it.

- Drugs are a big deal here for teens in the Arvin area. Kids are taking cocktails of prescription medication mixes.
- We hire between 15- 30 people a year and 30% of people who we extend offers to fail their drug screen. Abuse is very prevalent here and it's hard to get a job.
- Very high rates of substance abuse - meth to spice and bath salts with our youth. We also have issues around pain medication addiction and abuse. You don't hear much about it, but #1 is still alcohol. We have more than our fair share of car accidents with deaths due to drinking.
- The County is working very hard to create a more robust mental health and substance abuse treatment.
- This is almost epidemic along with family violence. You see a lot of families with domestic violence, mental health and substance abuse.
- Kern County used to be a big area to grow or manufacture drugs. It's reduced, but we are still a hub of transport.
- Real issues with meth, heroin, alcohol and pot. There are high relapse rates.
- We get 2-3 kids a day who we have to call the paramedics for or they need detox.
- Kern County is a pipeline for drugs. DEA had a spice bust here. We're a transportation zone – we're between North and South CA and the Mexican mafia.
- Pot use has increased. Meth use is not that high with teens but it is high with adults. A lot of people in fields like transportation and agriculture are addicted and there has also been a big comeback of heroin.
- We lack an in-house treatment facility for teens for substance abuse. This is a gap. There is always a waiting list, even for adults trying to get in-house treatment.
- There are a number of programs now that the court refers to for decriminalization of some abuse and illegal activities that has allowed people get treatment vs. jail but there are capacity issues.
- It can be very expensive to access substance abuse counseling and treatment and even private insurance is not sufficient to fully pay for treatment.
- There is huge use of drugs and a shortage of affordable rehab centers. People go to LA or back to Mexico for treatment because it's so cost prohibitive here.
- Meth is everywhere and pot is so pervasive now because it's so easy to get and there is no longer a taboo since it's so widely available. With collectives everywhere, it's in the high schools. It's the gateway to other drugs.
- Our community based rehab organizations aren't providing holistic-based care so people are relapsing. The reality is we can put you in rehab, but you need the skills to avoid your old behaviors and triggers. When they go back to the same neighborhood and people, they relapse.

## ii. Health behaviors

Health behaviors are activities undertaken to promote or protect health. Health behaviors impact health status.

### Overweight and Obesity

In Kern County, 27.2% of the adult population reported being overweight while 15.6% of teens and 18.2% of children in the county are overweight.

#### Overweight

	Kern County	California
Adult (ages 18+)	27.2%	35.5%
Teen (ages 12-17)	15.6%	16.3%
Child (ages 2-11)	18.2%	13.6%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>. An adult is considered overweight if  $25.0 \leq \text{Body Mass Index (BMI)} \leq 30.0$ . Teen Overweight is defined as a BMI at or above the 85th percentile and lower than the 95th percentile for children of the same age and sex. Child overweight is defined as overweight for age, and does not factor in height (CDC.gov, 2013)

Youth overweight reports the percentage of children in grades 5, 7, and 9 ranking within the "Needs Improvement" category (Overweight) for body composition on the Fitnessgram physical fitness test. Body composition is determined by skinfold measurements or bioelectrical impedance analysis for the calculation of percent body fat and/or Body Mass Index (BMI) calculation. In the service area, 22.4% of 5<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> graders are considered overweight.

#### Youth Overweight

	Service Area	Kern County	California
Children in grades 5, 7, and 9 within the needs improvement* category for body composition	22.4%	22.2%	19.3%

Source: California Department of Education, 2013-2014, [FITNESSGRAM® Physical Fitness Testing](#). The CDC's [BMI-for-age growth charts](#) define an individual as overweight when his or her weight is between the "85th to less than the 95th percentile" \*The percent body fat "needs improvement" threshold is 18.9%-22.3% for boys and 20.9%-31.4% for girls, depending on age. The BMI "Health Risk" threshold is 16.8-25.2 for boys and girls, depending on age.

Hispanic or Latino youth (23.9%) and Black or African American youth (22.5%) have the highest rates of overweight among kids in the school districts served by Kaiser Permanente – Kern.

#### Youth Overweight by Race/Ethnicity

	Service Area	Kern County	California
Hispanic or Latino	23.9%	23.6%	21.6%
Black or African American	22.5%	22.2%	20.3%
Multiple Races	21.5%	19.1%	18.3%
White	19.5%	19.3%	15.9%
Asian	18.9%	19.6%	15.1%

Source: California Department of Education, 2013-2014, [FITNESSGRAM® Physical Fitness Testing](#). By School District

Obesity among adults is 50.4% in Kern County. This far exceeds the state rate of obesity of 27% and the Healthy People 2020 objective of 30.5% of adult obesity.

### Adult Obesity

	Kern County	California
Adults with BMI 30 or higher	50.4%	27.0%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu> An adult is considered obese if BMI  $\geq 30\text{kg/m}^2$ .

When adult overweight and obesity rates are examined by race and ethnicity, Latinos and Whites have higher rates.

### Adult Overweight and Obesity by Race/Ethnicity

	Kern County	California
Hispanic or Latino	86.5%	73.2%
White	77.3%	58.9%
Black or African American	35.3%	71.2%
Asian	3.1%	43.7%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu> An adult is considered obese if BMI  $\geq 30\text{kg/m}^2$ .

Youth obesity reports the percentage of children in grades 5, 7, and 9 who rank within the "High Risk" category (Obese) for body composition on the Fitnessgram physical fitness test. Body composition is determined by skinfold measurements or bioelectrical impedance analysis for the calculation of percent body fat and/or Body Mass Index (BMI). Youth obesity rates in the service area 22.4%, which is higher than the state rate.

### Youth Obesity

	Service Area	Kern County	California
Children in grades 5, 7, and 9 within the high risk* category for body composition	22.4%	22.1%	19.0%

Source: California Department of Education, 2013-2014, [FITNESSGRAM® Physical Fitness Testing](#).

The CDC's [BMI-for-age growth charts](#) define an individual as overweight when his or her weight is "greater than the 95th percentile" \* The percent body fat "high risk" threshold is 27.0%-35.1% for boys and 28.4%-38.6% for girls, depending on age. The BMI "high risk" threshold is 17.5-25.2 for boys and 17.3-27.2 for girls, depending on age.

### Healthy Eating

In the Kaiser Permanente – Kern area there are 177 grocery stores, for a rate of 23.7 stores per 100,000 persons. This is higher than county (23) and state rates (21.5).

### Grocery Store Access, per 100,000 Persons

	Service Area		Kern County	California
	Number	Rate		
Grocery store access	177	23.7	23.0	21.5

Source: US Census Bureau, [County Business Patterns](#), 2011. Additional data analysis by [CARES](#)

In Kern County, 59.7% of children and teens consume two or more servings of fruit in a day. This is lower than the state rate of fruit consumption (63.3%).

### Eat Two or More Servings of Fruit Daily, Children and Teens

	Kern County	California
Children and teens	59.7%	63.3%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

17.0% of children in Kern County consume at least two sodas or sweetened drinks a day, which is higher than the state rate of 14.2%.

### Soda or Other Sugary Drinks, Two or More Glasses, Consumed Yesterday

	Kern County	California
Teens and children	17.0%	14.2%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

22.2% of Kern County residents eat fast food three or more times a week. Youth and adults consume fast food at a higher rate than seniors.

### Fast Food Consumption, Three or More Times a Week

	Kern County	California
Total population	22.2%	20.6%
Ages 0-17	23.9%	14.6%
Ages 18-64	23.5%	24.9%
Ages 65+	6.8%	9.6%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

In the Kaiser Permanente – Kern area there are 505 fast food restaurants, for a rate of 67.3 fast food establishments per 100,000 persons. This is higher than county rates but lower than the state rate.

### Fast Food Restaurant Access, per 100,000 Persons

	Service Area		Kern County	California
	Number	Rate		
Fast food restaurant access	505	67.3	65.4	74.5

Source: US Census Bureau, [County Business Patterns](#), 2011. Additional data analysis by [CARES](#).

A food desert is defined as a low-income census tract where a substantial number or share of residents has low access to a supermarket or large grocery store. In the service area, 19.7% of the population in the service area lives in a designated food desert, which is higher than the state rate.

### Food Desert

	Service Area		Kern County	California
	Number	Percent		
Population with low food access	147,787	19.7%	22.6%	14.3%

Source: US Department of Agriculture, Economic Research Service, 2010. [USDA - Food Access Research Atlas](#).



### Active Living

In Kern County, 83.5% of children engaged in at least one hour of physical activity three or more days in the previous week. Teens engage in physical activity at lower rates. Only 55% of teens engaged in at least one hour of physical activity three or more days in 'a typical week'. Over three-quarters of youth (75.2%) in the service area visited a park, playground or open space in the last month.

### Physical Activity, Children and Teens

	Kern County	California
Engaged in at least one hour of physical activity 3-7 days of the previous week – child	83.5%	76.3%
Engaged in at least one hour of physical activity 3-7 days of a typical week - teen	55.0%	68.5%
No physical activity/week – child	5.4%	6.2%
No physical activity/week – teen	10.2%	8.6%
Youth visited park, playground or open space in the last month	75.2%	83.9%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

The California Department of Education's physical fitness test (PFT) measures the aerobic capacity of school children using run and walk tests. Children who meet established standards for aerobic capacity are categorized in the Healthy Fitness Zone. Youth physical inactivity is the percentage of children in grades 5, 7, and 9 ranking within the "High Risk" or "Needs Improvement" zones for aerobic capacity on the Fitnessgram physical fitness test. Among the school districts in the service area, 40.5% of 5<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> graders rank within the high risk or needs improvement zones for aerobic capacity; this is higher than the state rate of 35.9%.

### Youth Physical Inactivity

	Service Area	Kern County	California
Children in grades 5, 7, and 9 ranking within the "High Risk" or "Needs Improvement" zones for aerobic capacity	40.5%	40.6%	35.9%

Source: California Department of Education, 2013-2014, [FITNESSGRAM® Physical Fitness Testing](#).

In the Kaiser Permanente – Kern service area, 2.2% of adults commute to work by either walking or riding a bicycle. This is lower than the county (2.3%) and state (3.8%) rates.

### Commute to Work, Adults, Walking or Biking

	Service Area	Kern County	California
Adults who walk or bike to work	2.2%	2.3%	3.8%

Source: U.S. Census Bureau, American Community Survey, 2009-2013. <http://factfinder.census.gov>

40.1% of the population in the Kaiser Permanente – Kern service area lives within one-half mile of a park. This exceeds the county (37.8%) rate but is lower than the state (58.6%) rate.

## Park Access

	Service Area	Kern County	California
Population living within 1/2 mile of park	40.1%	37.8%	58.6%

Source: US Census Bureau, 2010. [Decennial Census](#). [ESRI Map Gallery](#)

In the Kaiser Permanente – Kern service area there are 4.4 recreation facilities per 100,000 persons. The rate of access to recreation facilities is less than the county rate of 4.8 and the state rate of 8.7 facilities per 100,000 persons.

## Recreation and Fitness Facility Access, per 100,000 Persons

	Service Area		Kern County	California
	Number	Rate		
Recreation and fitness facilities	32	4.4	4.8	8.7

Source: US Census Bureau, [County Business Patterns](#), 2012. Additional data analysis by [CARES](#).

## Community Input – Overweight and Obesity

Stakeholder interviews and community surveys identified the following issues, challenges and barriers related to overweight and obesity:

- We see fewer home cooked meals. Both parents are working and the kids are at home eating a lot of junk food and tending for themselves.
- Awareness doesn't cause a change in behavior. So policy change is a huge step in the right direction like schools not serving junk food and soda on campus.
- In East Bakersfield there is no walkability, no walkways or streetlights. Southeast is particularly bad with lots of empty lots and crime and everything is spread so far apart. In Northwest Bakersfield, they walk a lot. I think it also depends on culture.
- We've really tried to attack this issue locally. When you look at partnerships that have happened private/public they have been incredibly helpful. We have two charter schools that are funded by agriculture companies and put a big focus on healthy lunches, community gardens: Paramount and Grimmway Farms. They have reached out to the public schools around them to help support more school gardens.
- There is fast food on every corner in poor neighborhoods and it's not always healthier food choices. It's relatively cheap and it fills the stomach and tastes good. Our culture is focused on what's convenient, what's appealing to the eye and tastes good versus what our body needs to be healthy.
- The geography makes it imperative to have a vehicle here so there is not a lot of walking, and with environmental factors like air quality, climate and temperature it is not conducive for persons to be outdoors all of the time.
- Recently a Wal-Mart opened in East Bakersfield. It's nice to have a neighborhood store and groceries. There are lots of low-income apartments around nearby so now people within the area can access that resource.
- Often people don't have enough money to buy fresh food and produce so they are buying Ramen noodles or going to the food bank for canned foods with lots of sodium and empty calories.
- Community gardens work in areas where people care about their environment and are educated about them. Unless it's heavily supervised here, it isn't sustainable. Here, it needs to be protected and we need to have instructors.

- Cal Fresh program is hard to access so it's underutilized. In Southeast Bakersfield there are a lot of people who qualify and a lot of mom and pop shops that do EBT. Grocery stores accept it too. But there is not a lot of fresh food.

### iii. Physical environment

#### Air, Water and Climate

The Environmental Protection Agency provides information on toxic chemical releases. Disposal of the chemicals can occur in air, water, wells, and landfills. In 2014, Kern County disposed of more than 7 million pounds of hazardous air pollutants.

#### Release of Pollutants in Air and Water

	Kern County	California
Surface and underground water discharges (in pounds)	145	13,157
Total air emissions (in pounds)	48,806	3,652,346
Total on or off site disposal or other releases of OSHA carcinogens (in pounds)	2,705,498	6,219,650
Total on or off site disposal or other releases of hazardous air pollutants (in pounds)	7,152,472	14,609,357

Source: U.S. Environmental Protection Agency, Toxics Release Inventory Program, 2014.  
[http://iaspub.epa.gov/triexplorer/tri\\_release.geography](http://iaspub.epa.gov/triexplorer/tri_release.geography)

In Kern County, 13.5% of the population may be getting drinking water from public water systems with at least one health-based violation. This is higher than the population exposed to unsafe water in the state (2.7%).

#### Unsafe Drinking Water

	Kern County	California
Population exposed to unsafe drinking water	13.5%	2.7%

Source: University of Wisconsin Population Health Institute, County Health Rankings. 2012-2013. [County Health Rankings Safe Drinking Water Information System](#)

In Kern County, the percentage of weeks in drought from January 1, 2012 – December 31, 2014 was 98%, which is higher than found in California (92.8%).

#### Drought Severity

	Kern County	California
Percentage of weeks in drought	98.0%	92.8%

Source: U.S. Drought Monitor, 2012-2014. [US Drought Monitor](#)

### Coccidioidmycosis

Coccidioidmycosis or Valley Fever is an illness caused by a fungus found in the soil. The fungus can become airborne and be inhaled with dust particles. It affects the lungs and can produce flu-like symptoms and pneumonia. Kern County has very high rates of Valley Fever. Rates of Valley Fever in Kern County have been decreasing from a rate of 217.3 per 100,000 persons in 2012 to 102.0 in 2014.

#### Valley Fever, Cases and Rates, per 100,000 Persons, 2012 - 2014

	2012		2013		2014	
	Cases	Rates	Cases	Rates	Cases	Rates
Kern County	1,860	217.3	1,659	191.7	890	102.0
California	4,147	11.0	3,318	8.7	2,217	5.8

Source: California Department of Public Health, Center for Infectious Disease, Yearly Summaries of Selected General Communicable Diseases in California, 2011 – 2014.  
<http://www.cdph.ca.gov/data/statistics/Pages/YearlySummariesofSelectedGeneralCommunicableDiseasesinCalifornia2011-2014.aspx>

### Violence and Injury Prevention

Death rates as a result of violence and injury are higher in the service area than in the state. The homicide death rate is 8.8 per 100,000 persons, which exceeds the Healthy People 2020 objective of 5.5 deaths per 100,000 as a result of homicide. The death rate as a result of motor vehicle accidents in the service area is 9.0 per 100,000. This rate of death is less than the Healthy People 2020 objective of 12.4 deaths per 100,000 as a result of motor vehicle accidents. The rate of pedestrians being killed by motor vehicles is 3.9 per 100,000 persons. This rate of death is higher than the Healthy People 2020 objective of 1.2 pedestrian deaths per 100,000 persons.

#### Violence and Injury Mortality Rates, Age-Adjusted, Rate per 100,000 Persons

	Service Area		Kern County	California
	Number	Rate	Rate	Rate
Homicide death rate	578	8.8	8.4	5.2
Motor vehicle accident death rate	549	9.0	8.8	5.2
Pedestrian motor vehicle death rate	219	3.9	3.5	2.0

Source: University of Missouri, 2010-2012. Center for Applied Research and Environmental Systems. California Department of Public Health, CDPH - Death Public Use Data by zip code.

### Crime

Violent crimes include homicide, rape, robbery (of an individual or individuals, not a home or business) and aggravated assault. In Kern County the overall violent crime rate is 561.1 per 100,000 persons. This is higher than the state rate of 425.0. The county rate for assault (393.6) is also higher than the state rate (249.4). Rates for robbery and rape in the county are less than the state rates.

### Crime Rates per 100,000 Persons, 2010 - 2012

	Kern County	California
Violent crime rate	561.1	425.0
Robbery	139.0	149.5
Assault	393.6	249.4
Rape	20.5	21.0

Source: Federal Bureau of Investigation, *FBI Uniform Crime Reports*. Additional analysis by the *National Archive of Criminal Justice Data*. Accessed via the *Inter-university Consortium for Political and Social Research*. 2010-2012.

8.1% of teens in Kern County received threats of violence or physical harm from their peers in the past year. 7% of teens in the county feared being attacked at school in the past year.

### Teens Threat of Violence

	Kern County	California
Teens received threats of violence or physical harm by peers in past year	8.1%	16.2%
Teens feared being attacked at school in past year	7.0%	14.3%

Source: California Health Interview Survey, 2012. <http://ask.chis.ucla.edu>

### Child Neglect and Abuse

According to the Kern County Network for Children, child neglect is the failure to provide for a child's basic physical, emotional, medical or educational needs, which threatens the child's health or welfare. Physical abuse is injury to a child that is not an accident and sexual abuse is any situation where a child is used for sexual gratification.

In Kern County in 2014, the rate of child abuse was 14.2 per 1,000 children; this is higher than the state rate of 8.7 per 1,000 children. The referral rate to California Protective Services (CPS) was 74.1 per 1,000 children, which is higher than the state rate of 54.6 per 1,000 children. Among these children, African American children have higher rates of substantiated child abuse (38.7 per 1,000 children) and children under the age of 1 have the highest rates of abuse (46.1 per 1,000 children).

### Child Abuse and CPS Referral Rates, 2014

	Kern County	California
Substantiated child abuse rates per 1,000 children	14.2	8.7
CPS referral rates per 1,000 children	74.1	54.6

Source: Kern County Network for Children, 2015 Report Card.  
[http://kerncares.org/wp-content/uploads/sites/22/2015/06/2015ReportCard\\_interactive.pdf](http://kerncares.org/wp-content/uploads/sites/22/2015/06/2015ReportCard_interactive.pdf)  
[http://cssr.berkeley.edu/ucb\\_childwelfare/ReportDefault.aspx](http://cssr.berkeley.edu/ucb_childwelfare/ReportDefault.aspx)

In 2014, Kern County CPS responded to 863 allegations of suspected sexual abuse among children. 47 or 5% of these cases were substantiated by CPS and 18 of these children were placed in foster care. The number of substantiated sexual abuse cases among children has declined over the past five years.

### Cases of Substantiated Sexual Abuse among Children in Kern County, 2012-2014

	2010	2011	2012	2013	2014
Number of children with substantiated cases of sexual abuse	84	86	62	52	47

Source: Kern County Network for Children, 2015 Report Card.

[http://kerncares.org/wp-content/uploads/sites/22/2015/06/2015ReportCard\\_interactive.pdf](http://kerncares.org/wp-content/uploads/sites/22/2015/06/2015ReportCard_interactive.pdf)

[http://cssr.berkeley.edu/ucb\\_childwelfare/ReportDefault.aspx](http://cssr.berkeley.edu/ucb_childwelfare/ReportDefault.aspx)

### Community Input – Safety, Violence and Injury Prevention

Stakeholder interviews and community surveys identified the following issues, challenges and barriers related to safety and violence:

- Human trafficking: women and girls are being brought here and moved around.
- We have a high rate of abuse/neglect in Kern County. We have 51 kids referred each day; 11 per day are substantiated. 98% is neglect related to poverty, substance abuse and teen moms.
- Families need to take care of each other. People are just disenfranchised. There is no social support.
- Seniors experience a lot of isolation. Also, unless family or friends pitch in, access can be a problem.

#### iv. Socioeconomic factors

##### Free or Reduced Price Lunch Program

The percentage of students eligible for the free or reduced price meal program is one indicator of socioeconomic status. In the Kaiser Permanente – Kern service area, 69.6% of the student population are eligible for the free or reduced price meal program, indicating a high level of low-income families. This rate is higher than the county (68.8%) or state rate (58.1%).

##### Free or Reduced Price Lunch Eligibility

	Service Area		Kern County	California
	Number	Percent		
Public school students eligible for free or reduced price lunches	111,838	69.6%	68.8%	58.1%

Source: National Center for Education Statistics, 2013-2014. [NCES - Common Core of Data](#)

##### Public Program Participation

In Kern County, 14.7% of the population receives food stamps. 7.9% of adults are currently receiving Supplemental Security Income (SSI) and 7% receive public assistance. These rates are higher than state rates.

##### Public Program Participation

	Kern County	California
Food Stamp recipients	14.7%	8.1%
Receiving Supplemental Security Income (SSI)	7.9%	5.8%
Receiving cash public assistance	7.0%	4.0%

Source: American Community Survey, 2009-2011, S2501. <http://factfinder.census.gov>

##### Educational Attainment

Among adults, ages 25 and older, in the Kaiser Permanente – Kern service area, over one-fourth of the population (29.1%) have no high school diploma. 26.5% of the population has a high school education. The service area has a smaller percentage of college educated residents than found in the county and the state.

##### Educational Attainment

	Service Area	Kern County	California
Population age 25 and over	442,990	498,699	24,455,010
Less than 9th grade	15.7%	14.5%	10.2%
9 <sup>th</sup> to 12 <sup>th</sup> grade, no diploma	13.4%	13.0%	8.5%
High school graduate	26.5%	26.5%	20.7%
Some college, no degree	23.4%	23.9%	22.1%
Associate degree	6.7%	7.0%	7.8%
Bachelor's degree	9.5%	9.9%	19.4%
Graduate or professional degree	4.8%	5.1%	11.2%

Source: U.S. Bureau of the Census, American Community Survey, 2009-2013, DP02. <http://factfinder.census.gov>



The high school graduation rate from among schools in the Kaiser Permanente – Kern service area is 80.9%. This exceeds the county graduation rate (76.4%) but does not meet the Healthy People 2020 objective, which is a high school graduation rate of 82.4%.

### High School Graduation Rate

	Service Area	Kern County	California
Enrollment cohort	11,976	13,531	495,316
Total graduates	9,687	10,338	398,442
On-time graduation rate	80.9%	76.4%	80.4%

Source: California Department of Education, 2013. <http://www.cde.ca.gov/>

When high school graduation rates are examined by race/ethnicity, students of other races (87.6%) and Asians (86.7%) have the highest graduation rates. Black/African Americans in the service area have the lowest graduation rate (74.8%).

### High School Graduation Rate by Race/Ethnicity

	Service Area	Kern County	California
Other Race	87.6%	84.4%	85.7%
Asian	86.7%	85.8%	91.6%
White	84.3%	80.1%	87.7%
Hispanic or Latino	80.3%	75.4%	75.7%
Black or African American	74.8%	62.4%	68.1%

Source: California Department of Education, 2013. <http://www.cde.ca.gov/>

### Reading below Proficiency

Fourth grade students in schools in the Kaiser Permanente – Kern service area were tested through the standardized STAR test. Results of the English Language component of the test, 46% of the students tested below the “proficient” level. The Healthy People 2020 objective is that 36.3% or fewer students are not proficient in reading. The Kaiser Permanente – Kern indicator has a higher rate of not proficient students on the English Language standardized test.

### 4<sup>th</sup> Grade Reading Below Proficiency

	Service Area	Kern County	California
Children in grade 4 whose reading skills tested below the "proficient" level for the English Language Arts portion of the California STAR test	46%	46%	36%

Source: California Department of Education, 2012-2013. <http://www.cde.ca.gov/>

### Unemployment

The unemployment rate in Kern County shows a decrease from 14.9% in 2011 to 10.4% in 2014. The unemployment rate in the county exceeds the state unemployment rate.

### Unemployment Rate, 2011 + 2014 Comparison

Geographic Area	2011	2014
Kern County	14.9%	10.4%
California	11.7%	7.5%

Source: California Employment Development Department, Labor Market Information, April 2015.  
[www.labormarketinfo.edd.ca.gov/cgi/dataanalysis/AreaSelection.asp?tableName=labforce](http://www.labormarketinfo.edd.ca.gov/cgi/dataanalysis/AreaSelection.asp?tableName=labforce)

Food insecurity is a lack of access to sufficient amounts of safe and nutritious food for normal growth and development, and an active and healthy life. This indicator provides information on whether residents (adults ages 18+ with an income < 200% FPL) have a consistent ability to afford enough food. Higher percentages indicate increased food insecurity. 30.4% of low-income adults in Kern County have food insecurity. Rates of food insecurity in the county are less than state rates.

### Low-Income (<200 FPL) Adults with Food Insecurity

	Kern County	California
Not able to afford enough food	30.4%	38.4%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

### Homelessness

The Kern County Homeless Collaborative conducts a biannual 'point-in-time' count of homeless for the Bakersfield/Kern Continuum of Care (CoC), which is reported to the U.S. Department of Housing and Urban Development (HUD). Recent trends show that rates of homelessness are declining along with the percentage of homeless who are unsheltered.

### Homeless Annual Count, Bakersfield/Kern CoC, 2010 - 2014

Year of Count	Total Homeless	Sheltered	Unsheltered
2010	1,499	44.5%	55.5%
2011	1,439	42.1%	57.9%
2012	1,352	38.4%	61.6%
2013	1,152	47.5%	52.5%
2014	992	58.2%	41.8%

Source: HUD Annual Homeless Assessment Report, 2014. <https://www.hudexchange.info/resource/4074/2014-ahar-part-1-pit-estimates-of-homelessness/>

Among children, 4.2% of public school enrollees in Kern County were recorded as being homeless at some point during the 2013-14 school year, according to the California Department of Education (Source: [kidsdata.org](http://kidsdata.org), January 2015). This rate has increased from 2.6% in 2010-11.

### Community Input – Social and Economic Factors

Stakeholder interviews and community surveys identified the most important socioeconomic, behavioral, environmental and clinical factors contributing to poor health in the community:

- We live in a community where our main economy is oil and agriculture. Our median income is \$42,000. That is 32% less than the state median income. We also have higher unemployment than the state. Our housing is affordable, but a person needs to make about \$16 an hour to afford rent here and not a lot of jobs pay that.
- With the drought and the decreasing of costs of oil, we've experienced a loss of employment for our population. This reduces quality of life and increases crime.
- The percentage of single parent female-led households is about 40% and the majority of them are under the federal poverty level.
- We have a lot of undocumented residents. But in May 2016, all kids under 19 will have Medi-Cal, regardless of immigration status. Chances are, these kids will be insured but they won't be going to the doctor because they're scared they will be deported even though there is a disclaimer that won't happen.
- We don't have enough homeless shelters. The ones we do have are very strict: you have to check in, shower, strip, put all your belongings in a certain area and people are afraid to misplace their possessions. That's all they have.
- A lot the homeless have mental health issues and are alcoholics. If they are under the influence, they are rejected.
- For women, we have them receiving assistance and getting welfare money and they stay in the homeless shelter for months – why is this happening? Why aren't they saving money?
- We have soup kitchens but they are all located in one area of Bakersfield. In outlying areas, there aren't any places to get meals.
- We have poor housing. People don't want to say anything to the landlord for fear of getting kicked out.
- One area of difficulty is housing for low-income individuals. Kern is one of the more affordable areas in the state. Even so, obtaining housing for low income is difficult. We see multiple families living together.
- We are a poor County. 7 out of 10 kids are on our free or reduced lunch plan.
- We are the Appalachia of the West. We experience the poorest outcomes of virtually every County. In addition, we have a large migrant, undocumented population that stays outside the parameters of the health delivery system.
- People are having a hard time affording health insurance even with the new program. Also, those newly unemployed are vulnerable because the pay rate is based on their prior year of salaried employment.
- We have experienced some layoffs in the oil industry. There were 2,700 jobs eliminated here in the last year.
- Along the fringes of the County we still see access issues especially relating to transportation. We have a transportation system but the schedules are limited and stops are limited along the main route of state and county roads. Those who live a distance from those main routes struggle.
- It can be difficult for migrant workers who are transitioning into the community. They can be the neediest because they don't know how to connect to the system for the services.

## ii. Additional community health trends

### Maternal and Infant Health

Maternal and infant health data provide information on healthy pregnancies and infants. The health behaviors of women during and after pregnancy will determine the health and well-being of their children.

#### Births

In 2013, there were 12,712 births in the service area. The majority of births were to mothers who are Latino (65.7%), 24.7% of births were born to White mothers, 5.1% to African-Americans and 3.6% of births were to Asian mothers (*Source: California Department of Health, 2013*).

#### Prenatal Care

In 2013, pregnant women in the service area entered prenatal care early – within the first trimester - at a rate of 76.2%, lower than the state rate of 83.6%. This rate of early entry translates to 23.8% of women entering prenatal care late or not at all. Kern County rates of prenatal care do not meet the Healthy People 2020 benchmark of 77.9% of women entering prenatal care in the first trimester.

#### Prenatal Care Entry in the First Trimester

	Early Prenatal Care	Live Births*	Percent
Kern County	9,947	13,059	76.2%
<b>California</b>	<b>407,064</b>	<b>486,912</b>	<b>83.6%</b>

*Source: California Department of Public Health, 2013. <http://www.apps.cdph.ca.gov/>*

*\*Births in which the first month of prenatal care is unknown are not included in the tabulation.*

#### Low-Birth Weight

Low birth weight is a negative birth indicator. Babies born at a low birth weight are at higher risk for disease, disability and possibly death. The hospital service area has a higher rate of low birth weight babies (70 per 1,000 live births) than does the state (68.2 per 1,000 live births). The rate of low birth weight in the service area (7.0%) is within the Healthy People 2020 objective of 7.8% of low birth weights.

#### Low-Birth Weight Births (Under 2,500 g)

	Low Birth Weight	Live Births	Rate per 1,000 Live Births
Kern County	942	13,463	70.0
<b>California</b>	<b>33,818</b>	<b>495,571</b>	<b>68.2</b>

*Source: California Department of Public Health, 2013. <http://www.apps.cdph.ca.gov/>*

#### Teen Births

In 2013, teen pregnancy rates in the service area occurred at a rate of 109.4 per 1,000 births or 10.9% of total births. This is well above the state rate of 6.2%.

### Births to Teenage Mothers (Under Age 20)

	Births to Teen Mothers	Live Births	Percent
Kern County	1,473	13,463	10.9%
<b>California</b>	<b>30,838</b>	<b>495,571</b>	<b>6.2%</b>

Source: California Department of Public Health, 2013. <http://www.apps.cdph.ca.gov/>

### Preterm Births

A preterm birth is an infant born prior to 37 weeks of gestation. In Kern County, the rate of preterm births has decreased over the last five years. In 2013, 10.3% of live births were preterm.

### Preterm Births in Kern County, 2009 - 2013

	2009	2010	2011	2012	2013
Preterm births	13.5%	12.2%	11.9%	11.1%	10.3%

Source: As cited on [kidsdata.org](http://kidsdata.org), California Dept. of Public Health, Center for Health Statistics, Birth Statistical Master Files; Centers for Disease Control & Prevention, Natality data on CDC WONDER; Martin et al. (2015), Births: Final Data for 2013. National Vital Statistics Reports, 64(1) (Mar. 2015)

### Infant Mortality

Infant mortality reflects deaths of children under one year of age. The infant death rate in the county is 7.0 and the state is 4.7 deaths per 1,000 live births. The county rate is higher than the Healthy People 2020 objective of 6.0 deaths per 1,000 live births. Infant mortality rates are not available for smaller geographies.

### Infant Mortality Rate, 2013

	Infant Deaths	Live Births	Death Rate
Kern County	99	14,145	7.0
<b>California</b>	<b>2,348</b>	<b>494,392</b>	<b>4.7</b>

Source: California Department of Public Health, 2013. <http://www.apps.cdph.ca.gov/vsq/>

### Smoking and Pregnancy

The Maternal and Infant Health Assessment (MIHA) is an annual, statewide-representative survey of women with a recent live birth in California. MIHA collects self-reported information about maternal and infant experiences and about maternal attitudes and behaviors before, during and shortly after pregnancy. According to the results of the 2012 MIHA, 14.3% of women smoked three months before pregnancy, 10.2% smoked during pregnancy and 6.9% smoked after the birth of their babies. These rates of cigarette smoking in Kern County are higher than found in the state.

### Smoking During and After Pregnancy

	Kern County	California
Any smoking, three months before pregnancy	14.7%	11.9%
Any smoking, first or third trimester	10.2%	8.3%
Any smoking, postpartum	6.9%	5.7%

Source: California Department of Public Health, Maternal and Infant Health Assessment Survey, 2012.

### Breast Feeding

Breastfeeding has been proven to have considerable benefits to baby and mother. The California Department of Public Health (CDPH) highly recommends babies be fed only breast milk for the first six months of life. Breastfeeding rates in Kern County are less than found among hospitals in the state. The county exceeds the Healthy People 2020 objective for 81.9% of women to breastfeed their infants.

### In-Hospital Breastfeeding

	Any Breastfeeding		Exclusive Breastfeeding	
	Number	Percent	Number	Percent
Kern County	10,186	87.6%	6,282	54.0%
California	396,602	92.9%	275,706	64.6%

### Community Input – Maternal and Infant Health

Stakeholder interviews and community surveys identified the following issues, challenges and barriers related to maternal and infant health:

- Women and children involved in prostitution and sex trafficking receive a lot of negative responses to how they present themselves so they do not seek care. They also have their own unaddressed trauma and unmet needs.
- There is an intergenerational factor in terms of teen pregnancy. They grow up seeing this in their family unit, so it's normal. They aren't able to escape it or leave it or make changes, so it gets passed on.
- Because we are a relatively conservative County, it is looked down upon to have different sexual health issues and pregnancies. A number of women who have undesired pregnancy experience biases when deciding on adoption vs. abortion.
- We found that many girls don't realize they are pregnant until the end of their 1<sup>st</sup> or in their 2<sup>nd</sup> trimester, so accessing timely care is an issue.
- First 5 funds have been cut with the drop in tobacco taxes. I'd really love to see a more comprehensive home visitation model.
- We need to do a better job discussing sexual health in educational institutions.
- Education is limited or spotty because the school board does not see this as a priority or the direct impact on our community.
- For low-birth weight issues there is a lot of evidence that genetics are involved and also generational trauma and stress. Women of color and with lower income means may be struggling with substance abuse, gang violence, getting food on the table, domestic violence.
- African American women of childbearing age have worse child health outcomes compared to other populations.
- Kern County has the highest rates of teen pregnancy in the state. We also have higher rates of infant mortality among African Americans for the last 28 years.

- I volunteered for a year with Covenant Services and was a mentor. The young woman I mentored was a HS girl who got pregnant. She wanted to love something that was hers. She wanted to be pregnant. She would do better than her own mom did for her.
- Often the oldest child gets stuck caring for the youngest and girls try to escape their place by becoming pregnant.
- I have some struggles with the Black Infant Health program. The model is confined by the state. We need to look for alternative models so people aren't falling through all the cracks. I want to bring resources to them and find out their needs. If they are just kicked out of program and we forget about them, what are we accomplishing?



### iii. Prioritized list of health needs

The health needs were ranked in the following priority order:

Health Need	Points
Overweight and obesity	880
Mental health	780
Access to care	600
Diabetes	380
Cardiovascular disease	340
Substance abuse	320
Asthma	240
Maternal and infant health	140
Cancer	80
STD/HIV/AIDS	80
Oral health	40
Environmental health	40

### D. Community Assets, Capacities and Resources Available to Respond to Identified Health Needs

Community assets are resources potentially available to meet the identified health need. Kaiser Permanente – Kern solicited community input through key stakeholder interviews, a community survey and a community convening to identify resources potentially available to address the significant health needs, including programs, organizations, or facilities. A gap analysis of community assets was not included. These identified resources are listed in the table below. This is not a comprehensive list of all available resources. For additional resources refer to Healthy Kern County at [www.healthykern.org](http://www.healthykern.org) and 211 Kern County at <http://www.capk.org/211Kern/>.

Significant Health Needs	Community Resources
Access to health care	<ul style="list-style-type: none"><li>• Our County has 19 local community collaboratives that are linkages. We have resource centers. We also have a large nonprofit clinic that is spread out and other community clinics.</li><li>• Dignity Health and Cal State University Nursing program do screenings in the community.</li><li>• The Advanced Center for Eyecare is a resource for optometry for people who are uninsured or underinsured.</li><li>• Dignity Health's Community health programs and their promotoras.</li><li>• Call to Action Kern 2010 looks at policy and system changes for health issues.</li><li>• Prison realignment in jail. People are being linked to Medi-Cal before they're released.</li><li>• County Hospital's 3-year residency program was going to close. Clinica Sierra Vista took it over in 2014. Our first class will graduate in 2017. Every year we will have 6 primary care residents graduating.</li></ul>

Significant Health Needs	Community Resources
	<ul style="list-style-type: none"> <li>• The Hispanic Chamber hosts Binational Health Week and provides free vaccinations, screenings and health education.</li> <li>• Kern County Department of Public Health.</li> <li>• Veterans Assistance Foundation.</li> </ul>
Asthma	<ul style="list-style-type: none"> <li>• Call to Action Building Healthy Communities (BHC) partnership looks at how we can support health. Within that framework we looked at schools with school wellness policies to do innovative physical activity and make it attractive for kids to be active, and changing the food in schools.</li> <li>• Faith organizations are creating joint use agreements to promote being physically active as well as health fairs and healthy options.</li> <li>• Asthma Coalition of Kern County.</li> <li>• Kern County Call to Action.</li> <li>• Local worksite wellness programs.</li> <li>• Kern County Housing Authority has a no smoking policy in all their housing.</li> <li>• American Lung Association.</li> <li>• Clinica Sierra Vista.</li> </ul>
Cancer	<ul style="list-style-type: none"> <li>• American Cancer Society.</li> <li>• American Lung Association.</li> <li>• Building Healthy Communities.</li> <li>• The Kern County Cancer funds medication and transportation costs.</li> <li>• Comprehensive Blood and Cancer Center.</li> <li>• Delano Relay for Life.</li> <li>• Links for Life.</li> <li>• Lemonade Locks.</li> <li>• Tehachapi Cancer Foundation.</li> <li>• Mercy Hospital Support Group.</li> <li>• San Joaquin Caregiver Support group</li> </ul>
Cardiovascular disease	<ul style="list-style-type: none"> <li>• Call to Action Building Healthy Communities (BHC) partnership looks at how we can support health. Within that framework we looked at schools with school wellness policies to do innovative physical activity and make it attractive for kids to be active, and changing the food in schools.</li> <li>• Faith organizations are creating joint use agreements to promote being physically active as well as health fairs and healthy options.</li> <li>• Elementary schools raise awareness on obesity and are innovating physical education to encourage walking and safe routes to school in collaboration with the city. It's not about team sports as much as it's individually based so people learn to be active for the rest of their lives vs. basketball and team sports. It's about running, and aerobics that doesn't require a team to do it. And encouraging walking to schools.</li> <li>• Kern County Call to Action.</li> <li>• Local worksite wellness programs.</li> </ul>

Significant Health Needs	Community Resources
	<ul style="list-style-type: none"> <li>• Kern County Housing Authority has a no smoking policy in all their housing.</li> <li>• Clinica Sierra Vista.</li> </ul>
Diabetes	<ul style="list-style-type: none"> <li>• Dr. Kumar does a quarterly diabetes awareness campaign at the Vascular and Leg Center. We had all the Chambers and church leaders come and people who had amputations talked about the importance of watching their sugars and what happens after amputations.</li> <li>• Call to Action Building Healthy Communities (BHC) partnership looks at how we can support health. Within that framework we looked at schools with school wellness policies to do innovative physical activity and make it attractive for kids to be active, and changing the food in schools.</li> <li>• Faith organizations are creating joint use agreements to promote being physically active as well as health fairs and healthy options.</li> <li>• Elementary schools raise awareness on obesity and are innovating physical education to encourage walking and safe routes to school in collaboration with the city. It's not about team sports as much as it's individually based so people learn to be active for the rest of their lives vs. basketball and team sports. It's about running, and aerobics that doesn't require a team to do it. And encouraging walking to schools.</li> <li>• Delano Diabetes Clinic.</li> <li>• Kern County Call to Action.</li> <li>• Local worksite wellness programs.</li> <li>• Kern County Housing Authority has a no smoking policy in all their housing.</li> <li>• Clinica Sierra Vista.</li> </ul>
Environmental health	<ul style="list-style-type: none"> <li>• Eastern Kern Air Pollution Control District.</li> <li>• Asthma Coalition of Kern County and Kern County Department of Public Health have an Asthma Resource Directory.</li> <li>• The America Lung Association reports air quality for Kern County and Bakersfield in its State of the Air report.</li> </ul>
Maternal and infant health	<ul style="list-style-type: none"> <li>• Medically Vulnerable Care Coordination Program provides coordinated services to improve outcomes for Kern County infants and children, ages 0-5, who are at risk of costly, medical and developmental issues.</li> <li>• Black Infant Health.</li> <li>• Clinica Sierra Vista.</li> <li>• Omni Family Health.</li> <li>• Family resources centers are run by local school districts. They provide links to health for underserved communities. This is run through Kern County Superintendent of Schools Office. They collaborate with local school districts in underserved communities. They provide information to parents and students in</li> </ul>

Significant Health Needs	Community Resources
	<p>the community, give services and linkages like the local food bank, and work with the homeless collaborative to ensure information gets out about rent assistance, Section 8, rapid re-housing, etc.</p> <ul style="list-style-type: none"> <li>• Junior League has a program called GAP that works with foster youth for self-esteem and sense of value and importance and working on goal setting to help prevent teen pregnancy.</li> <li>• Gloria Nelson Center for Women and Children.</li> <li>• Alliance Against Family Violence and Sexual Assault.</li> <li>• Kern County Department of Public Health.</li> <li>• WIC.</li> </ul>
Mental health	<ul style="list-style-type: none"> <li>• Access Kern County Network for Children is a mental health network to help get a diagnosis and where to get help.</li> <li>• Kern County Mental Health and Alliance Against Family Violence offer critical short and long term counseling to patients who have Medi-Cal.</li> <li>• California State University Bakersfield (CSUB) has a master's program for clinical counseling and they have a clinic available to the public.</li> <li>• Mercy House on Mount Vernon.</li> <li>• National Association for Mental Illness (NAMI) is active in Kern.</li> <li>• There is an effort to collaborate better between the mental health department, sheriff, and other agencies. We also have a collaborative partnership to look at those mentally ill and in jail and increase those services. We already have this in our jail facilities. As soon as they get out, they help them transition to the outside world.</li> <li>• Children's Services works with all schools to improve access to mental health care.</li> <li>• Delano just got funding to build a Domestic Violence shelter.</li> <li>• Henrietta Weill Counseling Center in Delano.</li> <li>• If we have a known suicide, we send volunteers to the Coroner's office to work with family survivors. There is a lot of trauma guilt, etc. When they connect this way, the likelihood that they will seek care for themselves goes up.</li> <li>• We are piloting an open crisis stabilization unit at Ridgecrest Regional Hospital. People stay up to 23 hours, so they're not inpatient. SB82 funds. Mimic what we have in Bakersfield. Separate entrances for kids and adults and voluntary and non-voluntary.</li> <li>• We are working with hospitals and the police to identify people in the ED who really need linkages to mental health. We are following-up with people outside of the ED to make sure that they are getting services and not refusing them.</li> <li>• Restorative justice: Standard school district has some flexibility in how they use funds so they brought in</li> </ul>

Significant Health Needs	Community Resources
	<p>counselors and connections with mental health and behavioral services with Clinica Sierra Vista with a different mindset. If we have a middle school student that is acting out, let's bring them in to redirect that anger and manage the stress and interact with others.</p>
Oral health	<ul style="list-style-type: none"> <li>• The dental hygienist program at Taft College provides very affordable cleanings.</li> <li>• Many nonprofit partners provide educational outreach on how to brush teeth and try to get the community to rethink what they are drinking.</li> <li>• Omni Family Health.</li> <li>• Nurse Family Partnership (NFP) is working with families to prevent kids from falling asleep with a bottle in their mouth and doing education about cleaning gums, even before they get teeth.</li> <li>• We're starting a dental collaborative here in Kern with health plans, schools, and the Kern County Dental Society. We're just starting to strategize what we need in our County.</li> <li>• 105 medical assistants trained at Clinica Sierra Vista about fluoride varnish and dental health education so when kids come, it can be addressed for everyone. Medi-Cal covers the treatment.</li> </ul>
Overweight and obesity	<ul style="list-style-type: none"> <li>• Community Leadership Bakersfield.</li> <li>• Friendship House afterschool program is getting kids more active.</li> <li>• American Heart Association's Go Red Heart Health program does a grocery store walk with a nutritionist. It takes 3 hours and they walk down each aisle with the group and identify what people like to buy, what they should buy, and they discuss how marketing is used to get people to buy the wrong foods.</li> <li>• We're doing a jog and walk path. Also doing more bike routes. We have a bike master plan but we don't have enough space for it.</li> <li>• School programs in Delano and Bakersfield. They promote walking activity and healthy eating with kids and family, (k-5) and (k-8).</li> <li>• Reducing obesity is one of the goals of the Kern County Call to Action Initiative. The Prescription for Health Program was a pilot with providers to do education prescriptions for healthy eating and activity. There were challenges with provider time. Currently, we're looking at data to see if the pilot impacted the patient population at all.</li> <li>• The Kern Food Policy Council (KFPC) is a forum for individuals from many sectors of the community to share ideas, experiences, skills, and knowledge to alleviate hunger and develop a healthy, sustainable food system in Kern County. The KFPC aims to inform policy decisions that impact the food system in Kern County.</li> </ul>

Significant Health Needs	Community Resources
	<ul style="list-style-type: none"> <li>• Parks and Recreation in Bakersfield fed over 900 meals last month at our MLK center. For the first time, we are working with schools to provide afterschool snacks and dinner to kids at the center. They already get a healthy lunch at school, so now they are getting two healthy meals and a snack before they go home. Without us, many of them would go to bed hungry. We serve about 150 snacks/meals a day, five days a week.</li> <li>• City of Delano had an employee get fit program last year. It was a year-long wellness program for city employees with free Zumba, juicing, walking with your supervisor, etc. We'd love to pick up again but we're short staffed. We're also thinking about getting that out to the community.</li> <li>• Schools are doing instant recess in the classroom, SPARK curriculum, after school programs, walking groups. There are a number of school based or community gardens.</li> <li>• In the Recreation center we have sports, peewee basketball, cheer camp, coed adult softball, tennis lessons, volleyball, open gym, loaded fitness class, martial arts, yoga, Zumba, racquetball.</li> <li>• USDA made changes in meal requirements in schools.</li> <li>• We have a Second Chance breakfast program in schools to tackle food insufficiency.</li> <li>• UC Co-op extension has done healthy cooking classes.</li> <li>• A clinic did a great Saturday class on cooking with vegetables. They brought different kinds of veggies and had people try and sample them.</li> <li>• Kaiser has a farmer's market on Sundays.</li> <li>• Kern County Nutrition Education and Obesity Prevention program.</li> </ul>
STD/HIV/AIDS	<ul style="list-style-type: none"> <li>• Planned Parenthood.</li> <li>• Clinica Sierra Vista.</li> <li>• Kern County Department of Public Health has a website where you can ask questions and get a response in 24 hours.</li> <li>• Latino Leaders of Kern County.</li> <li>• Girl scouts for girls 7-11 is a really positive program here.</li> <li>• County Office of Education does sex education in HS and elementary schools in Bakersfield. But we are a conservative County so abstinence teaching is viewed as best.</li> <li>• Family PACT.</li> </ul>
Substance abuse	<ul style="list-style-type: none"> <li>• Oildale Leadership Alliance does prevention, awareness and intervention.</li> <li>• Church Without Walls does services and kids programs.</li> </ul>

Significant Health Needs	Community Resources
	<ul style="list-style-type: none"> <li>• Global Family works with girls in these areas to empower them and calm the intergenerational dysfunction.</li> <li>• We have a multidisciplinary task force with the Bakersfield police department and DHS and targeting children 8-12 and 11-14 to do preventive education around substance abuse and alcohol abuse.</li> <li>• County programs, like the Mental Health department provide substance abuse treatment. They have residential beds for treatment.</li> <li>• Kern Stop Meth Now Coalition puts a lot of effort into this. They are using a social marketing strategy. The Mental Health Department plays a lead and many agencies are participating, as well as law enforcement and the private sector.</li> <li>• There are few clinically based programs in town, a lot of sober living programs, 12 steps, Good Samaritan, and Aspire Action Family Counseling.</li> <li>• Programs like Just Say No through the police department are no longer funded with budget issues in the state of CA.</li> <li>• Teen Challenge USA is a residential rehab facility outside of Bakersfield. It's a well-known local program but goes beyond Kern.</li> </ul>



## **VII. KAISER PERMANENTE – KERN 2013 IMPLEMENTATION STRATEGY EVALUATION OF IMPACT**

### **A. Purpose of 2013 Implementation Strategy Evaluation of Impact**

Kern County's 2013 Implementation Strategy report was developed to identify activities to address health needs identified in the 2013 CHNA. This section of the CHNA Report describes and assesses the impact of these activities. For more information on Kern County service area's Implementation Strategy report, including the health needs identified in the facility's 2013 service area, the health needs the facility chose to address, and the process and criteria used for developing Implementation Strategies, please visit the Kern county Public Affairs Department at 5055 California Avenue Suite 110, Bakersfield, CA 93309. For reference, the list below includes the 2013 CHNA health needs that were prioritized to be addressed by Kern County in the 2013 Implementation strategy report.

1. Access to Care
2. Obesity and Overweight
3. Chronic Conditions
4. Broader Health Care System Needs in Our Communities - Research and Workforce

Kern County is monitoring and evaluating progress to date on their 2013 Implementation Strategy for the purpose of tracking the implementation of those strategies as well as to document the impact of those strategies in addressing selected CHNA health needs. Tracking metrics for each prioritized health need include the number of grants made, the number of dollars spent, the number of people reached/served, collaborations and partnerships, and Kern County in-kind resources. In addition, Kern County tracks outcomes, including behavior and health outcomes, as appropriate and where available.

As of the documentation of this CHNA report in March 2016, Kern County had evaluation of impact information on activities from 2014 and 2015. While not reflected in this report, Kern County will continue to monitor impact for strategies implemented in 2016.

### **B. 2013 Implementation Strategy Evaluation of Impact Overview**

In the 2013 IS process, Kern County planned for and drew on a broad array of resources and strategies to improve the health of communities and vulnerable populations, such as grant making, in-kind resources, collaborations and partnerships, as well as several internal Kern County programs including, charitable health coverage programs, future health professional training programs, and research. Based on years 2014 and 2015, an overall summary of these strategies is described below, followed by tables highlighting a subset of activities used to address each prioritized health need.

- **Kern County Programs:** From 2014-2015, Kern County supported several health care and coverage, workforce training, and research programs to increase access to appropriate and effective health care services and address a wide range of specific community health needs, particularly impacting vulnerable populations. These programs included:
  - **Medicaid:** Medicaid is a federal and state health coverage program for families and individuals with low incomes and limited financial resources. Kern County provided services for Medicaid beneficiaries, both members and non-members.
  - **Medical Financial Assistance:** The Medical Financial Assistance (MFA) program provides financial assistance for emergency and medically necessary services, medications, and supplies to patients with a demonstrated financial need. Eligibility is based on prescribed levels of income and expenses.
  - **Charitable Health Coverage:** Charitable Health Coverage (CHC) programs provide health care coverage to low-income individuals and families who have no access to public or private health coverage programs.
  - **Workforce Training:** Supporting a well-trained, culturally competent, and diverse health care workforce helps ensure access to high-quality care. This activity is also essential to making progress in the reduction of health care disparities that persist in most of our communities.
  - **Research:** Deploying a wide range of research methods contributes to building general knowledge for improving health and health care services, including clinical research, health care services research, and epidemiological and translational studies on health care that are generalizable and broadly shared. Conducting high-quality health research and disseminating its findings increases awareness of the changing health needs of diverse communities, addresses health disparities, and improves effective health care delivery and health outcomes.
- **Grant Making:** For 70 years, Kaiser Permanente has shown its commitment to improving Total Community Health through a variety of grants for charitable and community-based organizations. Successful grant applicants fit within funding priorities with work that examines social determinants of health and/or addresses the elimination of health disparities and inequities. From 2014-2015, Kern County had 39 grant payments amounting to a total of \$433,126 in service of 2013 health needs. Additionally, Kern County has funded significant contributions to a donor advised fund (DAF), managed by the California Community Foundation, in the interest of funding effective long-term, strategic community benefit initiatives. During 2014-2015, a portion of money managed by this foundation was used to make 36 grant payments totaling \$3,856,500 in service of 2013 health needs. An illustrative list of active grants is provided in each health need section below.

- **In-Kind Resources:** Kaiser Permanente's commitment to Total Community Health means reaching out far beyond our membership to improve the health of our communities. Volunteerism, community service, and providing technical assistance and expertise to community partners are critical components of Kaiser Permanente's approach to improving the health of all of our communities. From 2014-2015, Kern County donated several in-kind resources in service of 2013 Implementation Strategies and health needs; an illustrative list is provided in each health need section below.
- **Collaborations and Partnerships:** Kaiser Permanente has a long legacy of sharing its most valuable resources: its knowledge and talented professionals. By working together with partners (including nonprofit organizations, government entities, and academic institutions), these collaborations and partnerships can make a difference in promoting thriving communities that produce healthier, happier, more productive people. From 2014-2015, Kern County engaged in several partnerships and collaborations in service of 2013 Implementation Strategies and health needs; an illustrative list is provided in each health need section below.

### C. 2013 Implementation Strategy Evaluation of Impact by Health Need

#### **Kern County Priority Health Need: Access to Care**

<p>Long-Term Goal</p> <ul style="list-style-type: none"> <li>- Increase access to health care and mental health care for the medically underserved</li> </ul> <p>Intermediate Goals</p> <ul style="list-style-type: none"> <li>- Improve access to free and low cost services</li> <li>- Increase health care coverage among vulnerable populations</li> <li>- Improve timely access to needed medical and mental health care</li> <li>- Reduce workforce shortages</li> </ul>		
<p><b>Access to Care</b> <b>Administered Program Highlights</b></p>		
Program Name	Program Descriptions	Results to Date
<b>Medicaid</b>	Medicaid is a federal and state health coverage program for families and individuals with low incomes and limited financial resources. Kern County provided services for Medicaid beneficiaries, both members and non-members.	<ul style="list-style-type: none"> <li>• In 2014, \$813,530 was spent on the Medicaid program and 2,606 Medi-Cal managed care members were served</li> <li>• In 2015, \$4,430,849 was spent on the Medicaid program and 4,057 Medi-</li> </ul>

		Cal managed care members were served
<b>Medical Financial Assistance</b>	The Medical Financial Assistance (MFA) program provides financial assistance for emergency and medically necessary services, medications, and supplies to patients with a demonstrated financial need. Eligibility is based on prescribed levels of income and expenses.	<ul style="list-style-type: none"> <li>• In 2014, \$29,563 was expended for 295 MFA recipients</li> <li>• In 2015, \$238,071 was expended for 352 MFA recipients</li> </ul>
<b>Charitable Health Coverage</b>	Charitable Health Coverage (CHC) programs provide health care coverage to low-income individuals and families who have no access to public or private health coverage programs.	<ul style="list-style-type: none"> <li>• In 2014, \$470,882 was spent on the CHC program and 840 individuals received CHC</li> <li>• In 2015, \$301,287 was spent on the CHC program and 745 individuals received CHC</li> </ul>

**Access to Care  
Grant-Making Highlights**

**Grant Making Snapshot:** During 2014-2015, there were 18 grant payments, totaling \$178,000, addressing the priority health need in the Kern County service area. In addition, a portion of the money managed by a donor advised fund (DAF), The California Community Foundation, was used to support 17 grant payments, totaling \$1,642,500; DAF grants are denoted by asterisks (\*). Donor advised fund (DAF) grants may cover multiple service areas and address multiple health needs. All grant amounts reflect the amount paid in 2014 or 2015 and may not reflect the total grant amount awarded.

<b>Grantee</b>	<b>Grant Amount</b>	<b>Project Description</b>	<b>Results to Date</b>
Advanced Center for Eyecare	\$15,000	The Kern County Vision Project serves to raise awareness and provide education and eye care services to the uninsured and under-insured population of Kern County.	In the program to date, 4,075 \$1.00-\$2.00 eye exams were performed. Patients are being tracked through the program including the types of services they received, demographic data, and exam outcomes. Additionally, collaborative partners have educated the uninsured populations in the

Grantee	Grant Amount	Project Description	Results to Date
			community and have marketed these services by posting flyers and brochures with community agencies.
Kern County Children and Families Commission	\$10,000	Use coordinated services to measurably improve outcomes for Kern County infants and children 0 -- 5 at risk of costly, lifelong medical and developmental issues.	The commission intends to ensure that children ages 0 to 5 have consistent health insurance coverage and that their families have a medical home. Additionally, the commission aims to hold bi-weekly provider meetings and training sessions to support integration of care.
Court Appointed Special Advocates of Kern County	\$11,000	This project will provide 1) quarterly trainings sessions on trauma-informed therapy and 2) mental health advocacy for 120 child cases identified that have inaccurate Passports.	The project is providing training in mental health therapies and best practices which will increase the knowledge of each advocate. The project has also began monitoring advocacy efforts and monitors 120 children to ensure needs are met.
California Primary Care Association	\$250,000*	CPCA Patient Centered Health Home (PCHH) Initiative Support aims to strengthen community clinics and health centers and their regional networks through the implementation of this project that will help ensure that California has a strong health care system to provide quality services.	CPCA has successfully recruited and hired 15 coaches in order to sustain the PCHH initiative. CPCA has designed and delivered a four day training and orientation for coaches while also identifying the content/tools for three learning modules for training purposes. CPCA developed over 30 hours of learning module content and organized the first annual Health and Wellness Expo featuring Community Clinic and Health Center (CCHC) presentations on a variety of topics including workplace wellness, diabetes

Grantee	Grant Amount	Project Description	Results to Date
			self-management support, photo-therapy, and financial counseling.
California Court Appointed Special Advocate Association	\$60,000*	Provide quality training opportunities for CalCASA program staff and volunteers on topics such as case supervision, working with children and families with mental health issues or with incarcerated parents, working with children with severe emotional needs and support regarding implementation of recent laws	CalCASA will provide 200 hours of technical assistance to the eight Southern California programs focusing on case-by-case legal support, youth health promotion and prevention, program sustainability and other emerging issues. CalCASA will conduct four quality assurance site visits and support program staff in implementing recommendations and will implement a Wellness Training Series on shared learning and best practice exchange among local chapter staff, volunteers, and community partners. Potential reach is 8,300.
California Family Health Council Inc.	\$75,000*	CFHC's Advancing Quality Sexual and Reproductive Health Care in Diverse Settings project proposes to leverage its quality improvement (QI) system to advance health center ability to use data to improve quality and to better integrate QI practices into everyday clinic processes.	CFHC QI system will be used to advance quality sexual and reproductive health care service delivery throughout CFHC's State wide Title X network of health centers. The work will continue to drive QI through performance measurement, action planning, and technical assistance at the same time enabling more targeted health center QI efforts by creating provider-specific data and assistance for interested health centers. Additional expected outcomes include Title X performance measure processes and integration of QI theory into

Grantee	Grant Amount	Project Description	Results to Date
			everyday clinic practices.

**Kern County Priority Health Need: Obesity and Overweight**

Long-Term Goal

- Reduce incidence of overweight and obesity.

Intermediate Goals

- Increase healthy eating among service area residents.
- Increase active living among residents of the service area.

**Obesity and Overweight  
Grant-Making Highlights**

**Grant Making Snapshot:** During 2014-2015, there were 16 Kern County grant payments, totaling \$175,926, addressing the priority health need in the Kern County service area. In addition, a portion of the money managed by a donor advised fund (DAF), The California Community Foundation, was used to support 15 grant payments, totaling \$1,014,000; DAF grants are denoted by asterisks (\*). Donor advised fund (DAF) grants may cover multiple Kern County service areas and address multiple health needs. All grant amounts reflect the amount paid in 2014 or 2015 and may not reflect the total grant amount awarded.

Grantee	Grant Amount	Project Description	Results to Date
Cal State Bakersfield Foundation	\$13,758	CSUB and the Buttonwillow USD will offer a Read & Ride Program, which will provide 30 bike workstations for students, aimed at addressing childhood obesity.	This program aims to increase physical activity during school days, improve fitness levels, enhance knowledge in building physically active lifestyles, and improve word recognition and comprehension in student participants.
City of McFarland	\$18,800	To build a sustainable community garden to promote healthy eating and physical activity.	In building this community garden, the program aims to (a) develop partnerships with private, public/government, and non-profits to provide a garden space; (b) provide education and training; (c) partner with McFarland Unified School District and Local clinics for education;



Grantee	Grant Amount	Project Description	Results to Date
			and, (d) provide physical resources for the garden (i.e. water, tools, plants/seeds, hoses, and mulch).
Golden Hills Parent/Teacher Organization	\$5,000	The PTO would like to construct a large physical fitness equipment cluster for the 1st through 5th grade students at the Golden Hills Elementary School.	This parent-teacher organization aims to (a) construct a fitness cluster to be used during the 2015-2016 academic year and (b) evaluate the fitness cluster to help identify strengths and needed improvements for the fitness cluster as well as assess changes in students' physical fitness.
County of Kern	\$50,000*	The HEAL Partnership Grant aims to a) implement a school wellness plan, b) enhance nutrition education, c) pilot a water project at one school site, d) enhance physical activity during the school day, and e) enhance streetscaping opportunities.	Some of the accomplishments were achieved to date include: a) the wellness committee group has grown and has engaged parents in enhancing school wellness policies, b) implemented smarter lunchroom assessments at one school and will continue with others, c) water pilot project is planned to expand to three elementary school campuses, d) and incorporated a PA curriculum (SPARK) into various school avenues.
United Way of Kern County	\$50,000 DAF*	This grant supports developing a comprehensive food assessment for Kern County.	United Way of Kern County will undertake a participatory assessment of Kern County's food system – the production, processing, distribution, access/consumption, and waste management practices – and will develop a food assessment report that includes a vision statement, indicators, and

Grantee	Grant Amount	Project Description	Results to Date
			implementation plan.
City of Bakersfield, Department of Recreation and Parks	\$31,500*	Provide swim lessons, passes, and water safety and healthy beverage education classes for low-income youth and families.	The Operation Splash program in the City of Bakersfield will reach 500 low-income youth through swim passes and swim lessons and 2,223 youth and adults through the rethink your drink educational campaign.
California WIC Association	\$50,000*	This grant supports leveraging WIC for prevention.	Increased baby-friendly services at hospitals increased overall breastfeeding rates statewide and by hospital. Pilot and evaluate provision of reimbursable preventive nutrition services in at least one local WIC agency. Potential reach of over 1.4 million individuals.
Community Partners	\$350,000*	Community Partners provides technical assistance and strategic support for coalition building, resident engagement, and leadership through peer-to-peer learnings, webinars, teleconferences for the HEAL Zone and HEAL Partnership grant communities.	Community Partners provided technical assistance and strategic support to ten HEAL grantees, their partners, and resident/youth leaders to apply the knowledge, skills, and competencies to successfully implement their HEAL Community Action Plan strategies in 2015.

**Obesity and Overweight  
Collaboration/Partnership Highlights**

Organization/Collaborative Name	Collaborative/Partnership Goal	Results to Date
Food Policy Council	To support the education and policies to bring healthy local food to individuals of kern	The collaborative is currently conducting a countywide food assessment and is working with

Organization/Collaborative Name	Collaborative/Partnership Goal	Results to Date
	county	the Department of Public Health to ensure that Kern County schools have access to the appropriate policies and resources to implement sustainable changes in their individual schools.
Kern County Call to Action	In an effort to break silos & improve on existing collaborations, the Call to Action brought leaders from different sectors as one to combat chronic disease and obesity in Kern County.	The collaborative continues to work across multiple sectors in the community to improve health. Current activities of the healthcare workgroup include increasing breastfeeding rates, implementation of the prescription for health program, and work around the "frequent" fliers for EMT and ED care.
Kern Cares	Kern Cares is the designated Child Abuse Prevention Council for Kern County, KCNC formed Kern Cares in 2010 to coordinate Countywide efforts to prevent and respond to child abuse and neglect. The KCNC Children's Advocacy Committee guides Kern Cares' outreach.	Working with both internal stakeholders (Suspected Child Abuse and Neglect committee) and Kern Cares, KP has provided information and support to help lower child abuse rates in Kern County. The link between childhood trauma and chronic disease has been documented extensively through the ACE study. The collaborative work helps to identify best practices and resources for the prevention of child abuse and neglect. By sharing medical and community best practices, Kern Cares contributes to reducing and preventing diabetes and other chronic health conditions.
<b>Obesity and Overweight In-Kind Resources Highlights</b>		

<b>Recipient</b>	<b>Description of Contribution and Purpose/Goals</b>
City of Bakersfield Parks and Recreation Department	By providing health education classes in a community setting, is bringing a much needed service to one of the most impoverished neighborhoods in our county. These classes are provided in a safe and nurturing environment where attendees have the ability to work together on their fitness and health related goals.
Multiple schools in the Bakersfield City School District	By providing expert health professionals to discuss important health information with parents and students, KP is improving the community's health literacy.
Multiple Rotary Clubs in Kern County	By providing much needed health education regarding end of life decisions, KP is helping to improve the health literacy of the community.

#### **Impact of Regional Initiatives Addressing: Obesity and Overweight**

In addition to the illustrated grants listed above, Kaiser Permanente designs Regional Health Initiatives that are implemented in one or more Kern County service areas to address the priority health needs. These initiatives are multi-year investments that support policy, advocacy and/or system changes in communities, including support for clinic systems to enhance capacity, service provision and or coordination. Kaiser Permanente invests in external evaluation for Regional Health Initiatives, and where possible, the results to date will reflect the most recent evaluation findings.

Operation Splash programs reach out to underserved youth and provide them with opportunities to receive aquatic skill acquisition and water safety instruction through City Parks and Recreation swimming pools. The swim lessons enable greater access to physical activity for youth. Almost all centers provide opportunities for learning about healthy beverage education through Healthy Beverage campaigns that educate about the nutritional content of soda and other sugary drinks, and encourage youth to choose healthier beverages such as water. Kaiser Permanente has supported Operation Splash for its Southern California region since 2008.

Kaiser Permanente's HEAL (Healthy Eating, Active Living) Partnership grant initiative is awarded a place-based approach that aims to lower the prevalence of obesity and overweight by increasing access to fresh fruit, vegetables and healthy beverages, as well as increasing safe places to be play and be physically active. Participating school districts and schools implement policies, programs and environmental system changes to impact healthy eating and active living behavior among students, parents and/or school staff. For the specific project implemented in the Kern County service area and the results to date, please see the listing above for the HEAL Partnership grant project coordinated by County of Kern.

#### **Kern County Priority Health Need: Chronic Conditions**

##### **Chronic Conditions Grant-Making Highlights**

**Grant Making Snapshot:** During 2014-2015, there were 5 Kern County grant payments, totaling \$79,200, addressing the priority health need in the Kern County service area. All grant amounts reflect the amount paid in 2014 or 2015 and may not reflect the total grant amount awarded.

Grantee	Grant Amount	Project Description	Results to Date
Alzheimer's Disease Association of Kern County Inc.	\$25,000	This grant will be used to increase access to adult day care, and will provide concurrent respite to caregivers.	The program was able to increase the amount of time that clients with dementia spent in adult care which contributed toward improvements in health and well-being for these clients. As a result, caregivers are receiving respite which contributes toward improvement in health and wellbeing for these individuals.
Housing Authority of the County of Kern	\$14,200	The ACTIVE: Mind, Body, and Hearts program targets senior and disabled populations to get them moving and better educated about chronic diseases.	In order to improve mobility in seniors and those with disabilities, the program (a) will provide in March tai chi classes, (b) increased individuals' use of physical activity equipment, and (c) held the Kern County Senior Games in which 38 participants attended.
Latino Coalition for a Healthy California*	\$75,000 <sup>*1</sup>	The Latino Coalition for a Healthy California (LCHC) received core operating support to continue to serve as the leading voice for Latino health in California by initiating and advancing policies which help build healthy communities.	LCHC continues to conduct advocacy related activities including but not limited to: educating California's legislators on health issues; hosting community forums to raise awareness and critical consciousness on key health issues; and sponsoring technical trainings to increase the capacity of communities to advocate and educate their neighbors and elected officials on issues affecting Latino health. LCHC will provide eight regional network meetings, two community forums; one technical training/workshop and participate in four regional health

<sup>1</sup> This organization and its projects support multiple health needs, including chronic conditions, access to care and community safety.

Grantee	Grant Amount	Project Description	Results to Date
			fairs to prevent chronic disease and overconsumption of sugar.

## PRIORITY HEALTH NEED V: BROADER HEALTH CARE SYSTEM NEEDS IN OUR COMMUNITIES – WORKFORCE

Kern County Workforce Development Highlights			
<p>Long Term Goal:</p> <ul style="list-style-type: none"> <li>To address health care workforce shortages and cultural and linguistic disparities in the health care workforce</li> </ul>			
<p>Intermediate Goal:</p> <ul style="list-style-type: none"> <li>Increase the number of skilled, culturally competent, diverse professionals working in and entering the health care workforce to provide access to quality, culturally relevant care</li> </ul>			
<p><b>Summary of Impact:</b> During 2014-2015, a portion of money managed by a donor advised fund at California Community Foundation was used to award two grants, totaling \$150,000, that address this need. The list of grants is provided below; DAF grants are denoted by asterisks (*). All grant amounts reflect the amount paid in 2014 or 2015 and may not reflect the total grant amount awarded. Kern County also provided trainings and education for 2 nurse practitioner or other nursing beneficiaries (School of Anesthesia), 4 other health (non-MD) beneficiaries (Dolores Jones program, pharmacy, and radiology), as well as internships for 2 high school and/or college students as part of the Health Career Connection (HCC) program.</p>			
Grant Highlights			
Grantee	Grant Amount	Project Description	Results to Date
California Institute for Nursing and Health Care (CINHC)	\$100,000*	To provide expert technical assistance to registered nursing programs at California state universities (CSUs) and their identified California community college (CCC) partners in Southern California. It will also help schools implement an associate degree to a bachelor of science in nursing pathway, facilitating fast tracking and efficient	CINHC will facilitate engagement and partnership to develop, implement, and sustain the CCMNE across all 10 CSU's and respective CCC's. CINHC will engage interested private universities and colleges within the region, including deans, directors, and faculty. Lastly, CINHC will conduct a curriculum review, mapping process, and development of integrated pathways based on prior success strategies that are consistent with evidence based models.

		implementation of the California Collaborative Model of Nursing Education (CCMNE).	
Campaign for College Opportunity (CCO)	\$50,000*	This grant supports an in-depth research report to analyze trends in California science, technology, engineering, and math (STEM)/health workforce needs. The STEM/Health Workforce Report will focus on factors affecting demand and supply; public higher education funding policies; and programs to help meet workforce demands. This grant supports an in-depth research report to analyze trends in California science, technology, engineering, and math (STEM)/health workforce needs. The STEM/Health Workforce Report will focus on factors affecting demand and supply; public higher education funding policies; and programs to help meet workforce demands.	The Campaign for College Opportunity will develop and disseminate the STEM/Health Workforce Report to increase awareness among the public and policymakers of the growing need for STEM health workers in California and the role California community colleges play in filling the demand. CCO has completed the report and the general release will occur in June 2016. The report's release will be accompanied by a media and communications strategy including a webinar, briefings with key stakeholders (in education, business, community and civic organizations) along with policymakers in Sacramento.

#### In-Kind Resources Highlights

Recipient	Description of Contribution and Purpose/Goals
Individuals and organizations in the health care and medical workforce.	Kaiser Permanente Southern California Region's Department of Professional Education offered Advanced Practice and Allied Health Care Educational Programs for allied health care providers throughout Southern California. In 2015, across Kaiser Permanente Southern California Region, 644 community-based nurses, nurse practitioners, physician assistants, imaging professionals, clinical laboratory scientists, community audiologists and speech pathologists, and other health care professionals participated in symposia at no cost.



Collaboration/Partnership Highlights	
Organization/ Collaborative Name	Collaborative/ Partnership Goal
Sierra Middle School Students	The Kaiser Permanente Hippocrates Circle Program is designed to provide youth from under-represented communities and diverse backgrounds with an awareness of career opportunities as a physician.

## PRIORITY HEALTH NEED VI: BROADER HEALTH CARE SYSTEM NEEDS IN OUR COMMUNITIES – RESEARCH

Kern County Research Highlights			
Long Term Goal:			
<ul style="list-style-type: none"> <li>To increase awareness of the changing health needs of diverse communities</li> </ul>			
Intermediate Goal:			
<ul style="list-style-type: none"> <li>Increase access to, and the availability of, relevant public health and clinical care data and research</li> </ul>			
<p><b>Summary of Impact:</b> Kaiser Permanente conducts, publishes, and disseminates research to improve the health and medical care of members and the communities served. The Southern California Region Department of Research and Evaluation (DRE) conducted a total of 988 studies in 2014 and 1,404 studies in 2015 across all regional hospitals, totaling \$16,385,832. Research focuses on clinical trials, building scientific expertise in health services and policy, and implementation science to bridge the gap between research and practice. In addition, a portion of money managed by a donor advised fund (DAF) at California Community Foundation was used to award two grants, totaling \$1,050,000 that address this need. An illustrative grant is provided below. All grant amounts reflect the amount paid in 2014 or 2015 and may not reflect the total grant amount awarded.</p>			
Grant Highlights			
Grantee	Grant Amount	Project Description	Results to Date
UCLA Center for Health Policy Research	\$500,000 *	The California Health Interview Survey (CHIS) investigates key public health and health care policy issues, including health insurance coverage and access to health services, chronic health conditions and their prevention and management, the health of children, working age	At the end of the grant period, UCLA Center for Health Policy Research interviewed approximately 41,500 households and completed 78,127 screenings along with 40,125 adult, 2,255 adolescent and 5,514 child interviews. In addition, 12 AskCHIS online trainings were completed.

		adults, and the elderly, health care reform, and cost effectiveness of health services delivery models.	
Collaboration/Partnership Highlights			
Organization/ Collaborative Name	Collaborative/ Partnership Goal		Results to Date
Kern Medical Center	Over the past year, a trusting partnership was formed with Kern Medical, Arrowhead Regional Medical Center (ARMC), and the KPSC Regional Nursing Research Program. Consultation services and evidence-based resources have been provided by Practice Specialist Cecelia L. Crawford, DNP, RN, and other staff of KPSC Patient Care Services. These resources were specific to mobility, ambulation and other programs such as hospital acquired pressure ulcer reduction, elder care, and pain management. It is anticipated that the programs will impact various nurse sensitive indicators such as patient falls, average hospital length of stay, average ICU length of stay, hospital acquired pressure ulcers, and other deconditioning effects of immobility.		The collaborative partnership has assisted Kern Medical in designing a Mobility Ambulation Program that integrates major components of Safe Patient Handling. Kern Medical has formally been requested to submit a 2016 Kaiser Permanente SCAL Community Benefit Grant to support this work. The implementation of this evidence-based program is planned for 2nd Quarter of 2016. Kern Medical values the partnership: "Working with Cecelia and Kaiser has truly been the epitome of a partnership. We value the ability to participate in such activities and look forward to future projects."

## **VIII. APPENDICES**

- A. Secondary Data Sources and Dates
- B. Community Input Tracking Form
- C. Community Survey Summary Report
- D. Health Need Profiles
- E. Glossary of Terms

## **Appendix A: Secondary Data Sources and Dates**

1. California Cancer Registry, Age-Adjusted Invasive Cancer Incidence Rates by County in California, 2008-2012. 2014.
2. California Department of Education. 2012-2013.
3. California Department of Education. 2013.
4. California Department of Education, FITNESSGRAM®; Physical Fitness Testing. 2013-2014.
5. California Department of Justice, Office of the Attorney General, Crime Statistics. 2014.
6. California Department of Public Health, CDPH – Birth Profiles by ZIP Code. 2011.
7. California Department of Public Health, CDPH – Birth Profiles by ZIP Code. 2012.
8. California Department of Public Health, CDPH – Birth Profiles by ZIP Code. 2013.
9. California Department of Public Health, CDPH – Breastfeeding Statistics. 2012.
10. California Department of Public Health, CDPH – Breastfeeding Statistics. 2013.
11. California Department of Public Health, CDPH – Death Public Use Data. University of Missouri, Center for Applied Research and Environmental Systems. 2010-2012.
12. California Department of Public Health, CDPH – Tracking. 2005-2012.
13. California Department of Public Health, Center for Infectious Disease, Yearly Summaries of Selected General Communicable Diseases in California, 2011-2014.
14. California Employment Development Department, Labor Market Information. 2015.
15. California Office of Statewide Health Planning and Development, OSHPD Patient Discharge Data. 2011-2013.
16. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2006-2010.
17. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2006-2012.
18. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2011-2012.
19. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. US Department of Health & Human Services, Health Indicators Warehouse. 2005-2009.
20. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-2012.
21. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012.
22. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. US Department of Health & Human Services, Health Indicators Warehouse. 2010.
23. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. US Department of Health & Human Services, Health Indicators Warehouse. 2012.
24. Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network. 2008.
25. Centers for Disease Control and Prevention, National Vital Statistics System. Centers for Disease Control and Prevention, Wide Ranging Online Data for Epidemiologic Research. 2006-2010.

26. Centers for Disease Control and Prevention, National Vital Statistics System. Centers for Disease Control and Prevention, Wide Ranging Online Data for Epidemiologic Research. 2007-2010.
27. Centers for Disease Control and Prevention, National Vital Statistics System. Centers for Disease Control and Prevention, Wide Ranging Online Data for Epidemiologic Research. 2007-2011.
28. Centers for Disease Control and Prevention, National Vital Statistics System. University of Wisconsin Population Health Institute, County Health Rankings. 2008-2010.
29. Centers for Disease Control and Prevention, National Vital Statistics System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-2012.
30. Centers for Medicare and Medicaid Services. 2012.
31. Child and Adolescent Health Measurement Initiative, National Survey of Children's Health. 2011-2012.
32. Dartmouth College Institute for Health Policy & Clinical Practice. Dartmouth Atlas of Health Care. 2012.
33. Environmental Protection Agency, EPA Smart Location Database. 2011.
34. Federal Bureau of Investigation, FBI Uniform Crime Reports. 2010-2012.
35. Feeding America. 2012.
36. Healthy Kern County, [www.healthykern.org](http://www.healthykern.org).
37. HUD Annual Homeless Assessment Report, 2014.
38. Kern County Network for Children, 2015 Report Card
39. Kidsdata.org, January 2015.
40. Multi-Resolution Land Characteristics Consortium, National Land Cover Database. 2011.
41. National Center for Education Statistics, NCES – Common Core of Data. 2012-2013.
42. National Oceanic and Atmospheric Administration, North America Land Data Assimilation System (NLDAS). 2014.
43. New America Foundation, Federal Education Budget Project. 2011.
44. Nielsen, Nielsen Site Reports. 2014.
45. South Coast Air Quality Management District, Air Quality. 2014.
46. State Cancer Profiles. National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results Program. 2007-2011.
47. University of California Center for Health Policy Research, California Health Interview Survey. 2009.
48. University of California Center for Health Policy Research, California Health Interview Survey. 2012.
49. University of California Center for Health Policy Research, California Health Interview Survey. 2014.
50. University of California Center for Health Policy Research, California Health Interview Survey. Neighborhood Edition. 2011-2012.
51. University of Wisconsin Population Health Institute, County Health Rankings. 2012-2013.
52. University of Wisconsin Population Health Institute, County Health Rankings. 2014.
53. US Census Bureau, American Community Survey. 2009-2013.
54. US Census Bureau, American Housing Survey. 2011, 2013.
55. US Census Bureau, County Business Patterns. 2011.

56. US Census Bureau, County Business Patterns. 2012.
57. US Census Bureau, County Business Patterns. 2013.
58. US Census Bureau, Decennial Census. 2000-2010.
59. US Census Bureau, Decennial Census, ESRI Map Gallery. 2010.
60. US Census Bureau, Small Area Income & Poverty Estimates. 2010.
61. US Department of Agriculture, Economic Research Service, USDA – Food Access Research Atlas. 2010.
62. US Department of Agriculture, Economic Research Service, USDA – Food Environment Atlas. 2011.
63. US Department of Agriculture, Economic Research Service, USDA – Child Nutrition Program. 2013.
64. US Department of Education, EDFacts. 2011-2012.
65. US Department of Health & Human Services, Administration for Children and Families. 2014.
66. US Department of Health & Human Services, Center for Medicare & Medicaid Services, Provider of Services File. June 2014.
67. US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2012.
68. US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2013.
69. US Department of Health & Human Services, Health Resources and Services Administration, Health Professional Shortage Areas. March 2015.
70. US Department of Housing and Urban Development. 2013.
71. US Department of Justice, FBI, Uniform Crime Reporting Statistics. 2012.
72. US Department of Labor, Bureau of Labor Statistics. June 2015.
73. US Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System. 2011-2013.
74. US Drought Monitor. 2012-2014.
75. US Environmental Protection Agency. Toxics Release Inventory Program, 2014.

## **Appendix B: Community Input Tracking Form**

<b>Data Collection Method Employed</b>	<b>Who Participated / Title of event / Type of Input</b>	<b>Number of Participants</b>	<b>Who Participant(s) Represent(s)</b>	<b>Position with respect to the group</b>	<b>Date</b>	<b>Comments / Notes</b>
e.g. community forum, focus group, interview, online or in-person survey, written correspondence, etc.	Community member's title/role, organization, event name, input during identification, prioritization (or both), etc.	Number of people who participated	List all that apply & describe: (a) health department rep; (b) medically underserved, (c) minority population; (d) low-income community	List all that apply: (a) community leader; (b) community representative; (c) community member	Date that community input was gathered	
Survey	Community residents identification	935	Medically underserved, minority population, low-income community	Community members	September 21 - October 23, 2015	Electronic survey 503 responses. Hard copy version in English and Spanish 432 responses
Interview, Community Forum	Vice President, Mission Integration, Mercy Hospitals of Bakersfield Identification and prioritization	1	medically underserved, minority population, low-income community	community representative	10/5/2015 1/19/2016	
Interview	President, Tel-Tec Security identification	1		community representative	10/5/2015	
Interview	Assistant Director, Kern County Department of Human Services identification	1	health department representative, medically underserved, minority population, low-income community	community representative	10/7/2015	
Interview	Director, Community Affairs, Jim Burke Ford identification	1		community representative	10/8/2015	
Interview	Property Manager, Mercy Services Corporation identification	1	medically underserved, minority population, low-income community	community representative	10/8/2015	
Interview	Occupational Health Nurse, Aera Energy identification	1		community representative	10/8/2015	
Interview	Director, City of Bakersfield Parks and Recreation Department identification	1	medically underserved, minority population, low-income community	community representative	10/8/2015	
Interview	Chief of Programs, Clinica Sierra Vista identification	1	medically underserved, minority population, low-income community	community representative	10/9/2015	
Interview	Recreation Manager, Delano Parks and Recreation identification	1	minority population, low-income community	community representative	10/9/2015	



Data Collection Method Employed	Who Participated / Title of event / Type of Input	Number of Participants	Who Participant(s) Represent(s)	Position with respect to the group	Date	Comments / Notes
Interview	Executive Director, Kern County Network for Children identification	1	medically underserved, minority population, low-income community	community representative	10/9/2015	
Interview	President and Chief Executive Officer, Black Chamber of Commerce Identification	1	minority population, low-income community	community leader, community representative	10/15/2015	
Interview, Community Forum	Director of Community Wellness, Kern County Department of Public Health Identification and prioritization	1	health department representative, medically underserved, minority population, low-income community	community representative	10/16/2015 1/19/2016	
Interview	President, Kern Economic Development Corporation identification	1	medically underserved, minority population, low-income community	community representative	10/19/2015	
Interview	Lead Coordinator, Global Family Care Network identification	1	medically underserved, minority population, low-income community	community representative	10/20/2015	
Interview, Community Forum	President, Foundation Financial Identification and prioritization	1	minority population	community representative	10/22/2015 1/19/2016	
Interview, Community Forum	Coordinator, Kern County Department of Public Health Identification and prioritization	1	health department representative, medically underserved, minority population, low-income community	community representative	10/22/2015 1/19/2016	
Interview	Senior Public Health Nurse, Kern County Department of Public Health identification	1	health department representative, medically underserved, minority population, low-income community	community representative	10/22/2015	
Interview, Community Forum	Community Project Specialist, Kern County Department of Public Health Identification and prioritization	1	health department representative, medically underserved, minority population, low-income community	community representative	10/22/2015 1/19/2016	
Interview	Senior Public Health Nurse, Kern County Department of Public Health identification	1	health department representative, medically underserved, minority population, low-income community	community representative	10/22/2015	
Interview	Senior Public Health Nurse, Kern County Department of Public Health identification	1	health department representative, medically underserved, minority population, low-income community	community representative	10/22/2015	

Data Collection Method Employed	Who Participated / Title of event / Type of Input	Number of Participants	Who Participant(s) Represent(s)	Position with respect to the group	Date	Comments / Notes
Interview	Director, Kern County Department of Mental Health identification	1	health department representative, medically underserved, minority population, low-income community	community leader, community representative	10/26/2015	
Interview	Health Services Coordinator Delano Union Elementary School District identification	1	medically underserved, minority population, low-income community	community representative	10/27/2015	
Interview	Chancellor, Kern Community College District identification	1	minority population, low-income community	community leader, community representative	10/29/2015	
Interview	Director, Marketing and Member Services, Kern Health Systems identification	1	medically underserved, minority population, low-income community	community representative	10/29/2015	
Interview	Manager of Health Education and Disease Management, Kern Health Systems identification	1	medically underserved, minority population, low-income community	community representative	10/29/2015	
Interview	Director of Public Relations, Bakersfield Chamber of Commerce identification	1		community representative	11/5/2015	
Interview	Executive Director, Advanced Center for Eyecare identification	1	medically underserved, minority population, low-income community	community representative	11/5/2015	
Interview	Community Member identification	1		community member	11/6/2015	
Interview	Manager, Policy, Government and Public Affairs Chevron Identification	1		community representative	11/6/2015	
Interview	Director, Hispanic Chamber of Commerce	1	minority population, low-income community	community leader, community representative	11/9/2015	
Interview, Community Forum	Executive Director, Housing Authority of the County of Kern Identification and prioritization	1	medically underserved, minority population, low-income community	community leader, community representative	11/9/2015 1/19/2016	
Interview	Services Coordinator, Mercy Services Corporation identification	1	medically underserved, minority population, low-income community	community representative	11/16/2015	
Interview	Director of Sales and Marketing, Bright House Networks	1		community representative	11/18/2015	

Data Collection Method Employed	Who Participated / Title of event / Type of Input	Number of Participants	Who Participant(s) Represent(s)	Position with respect to the group	Date	Comments / Notes
	identification					
Community Forum	Special Projects Manager, Kern Medical prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Program Director, Kern County Department of Human Services prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Administrative Intern, Kern Medical prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Director of Development, American Red Cross Kern Chapter prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Health Education Coordinator, Dignity Health prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Senior Health Educator, Kern County Environmental Health Services Division prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Councilmember, City of Bakersfield prioritization	1	medically underserved, minority population, low-income community	community leader	1/19/2016	
Community Forum	Health Officer, Kern County Public Health Services Department prioritization	1	health department representative	community leader	1/19/2016	
Community Forum	Supervisor, Homemaker Care Program, Dignity Health Mercy and Memorial Hospitals prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Coordinator School Health, Bakersfield City School District prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Manager, Art & Spirituality Center, Mercy and Memorial Hospitals prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Regional Director, Mercy and Memorial Hospitals prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	

Data Collection Method Employed	Who Participated / Title of event / Type of Input	Number of Participants	Who Participant(s) Represent(s)	Position with respect to the group	Date	Comments / Notes
Community Forum	Program Manager, Community Health Initiative, Dignity Health prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Community Benefit, CBISA Coordinator, Mercy and Memorial Hospitals prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Executive Director, Bike Bakersfield prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	VP Community Impact, United Way of Kern County prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Manager, Community Wellness Program, Mercy and Memorial Hospitals prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Community Liaison and Educator, Alzheimer Disease Association of Kern County prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	President/CEO, Garden Pathways prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Marketing, Delano Regional Medical Center prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	VP/COO, Bakersfield Memorial Hospital prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Coordinator, Dignity Health prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Program Manager, CASA of Kern County prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Grant and Research Supervisor, Community Action Partnership of Kern prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Marketing Assistant, Delano Regional Medical Center prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Director of Information Management,	1	medically underserved, minority population, low-income community	community representative	1/19/2016	

Data Collection Method Employed	Who Participated / Title of event / Type of Input	Number of Participants	Who Participant(s) Represent(s)	Position with respect to the group	Date	Comments / Notes
	Delano Regional Medical Center prioritization					
Community Forum	Account Manager, Kaiser Permanente prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	Health Educator, Kaiser Permanente prioritization	1	medically underserved, minority population, low-income community	community representative	1/19/2016	
Community Forum	CFO, Dignity Health prioritization	1	medically underserved, minority population, low-income community	community leader	1/19/2016	
Community Forum	VP, Business Development, Mercy Hospitals of Bakersfield prioritization	1	medically underserved, minority population, low-income community	community leader	1/19/2016	

### **Appendix C: Community Survey Summary Report**

A community survey was distributed to residents in Kern County from September 21 – October 23, 2015. The survey was available in an electronic format through a Survey Monkey link, and in a paper copy format in English and Spanish. The hospitals distributed the surveys to their clients, in hospital waiting rooms and service sites, and through social media, including posting the survey link on hospital Facebook pages. The survey was also distributed to community partners who made them available to their clients. A written introduction to the survey questions explained the purpose of the survey and assured participants the survey was voluntary, and that they would remain anonymous. For community members who were illiterate, an agency staff member read the survey introduction and questions to the client in his/her preferred language and marked his/her responses on the survey. The survey received 935 respondents. A summary of the survey results follows.

#### **What is the biggest health issue facing your community? Top 8 Health Issues**

<b>Health Issues</b>	<b>Number of Respondents</b>
Obesity	169
Diabetes	162
Heart disease	64
Cancer	51
Addiction/Drug abuse	49
Air Quality/Pollution	49
Asthma	38
Mental health	37

#### **More Health Issues**

<b>Health Issues</b>	<b>Number</b>	<b>Health Issues</b>	<b>Number</b>
Flu	26	Poverty	13
Poor diet	23	Valley fever	12
Underinsured/Access	23	Homelessness	12
Cost of insurance/Care	20	Chronic disease	11
Allergies	20	Teen pregnancy	11
Lack of insurance	18	Hypertension	10
Cholesterol	17	STDs	9
Need more doctors	16	Smoking	9
Lack of exercise	15	Food	8
Dental	14	Preventive services and immunizations	8
Transportation	14	Undocumented services	7
Long waits for doctor appointments	14	ER overcrowding/misuse/quality	7
Distance to get to doctor	13	Navigating the system/Patient education	7

Other (1-6): pesticides, thyroid, arthritis, Hepatitis C, lack of services, vandalism, clothing, lack of education for elderly, autism/ADHD, information on services, affordable housing, stress, violence, jobs, poor parenting

**Where do you or your family members go most often to receive routine health care services?**

Location	Number of Respondents
Primary care physician/My doctor/Family doctor	326
Clinica Sierra Vista	114
Kaiser	78
Clinic/Free Clinic/Community Health Center	30
Omni	24
Bakersfield	15
Delano	10
San Joaquin	10
Dignity Health	7
Kern	7

Other (1-6): urgent care, Memorial, Mexico, Shafter, Hospital, Sagebrush, rural, Senior Center, Zacoalco, Fernando Bravo, High Grove, Poly Clinic, Bakersfield Family Medical Center, CBCC, Welly, Gemcare, Mt. Mesa, Arvin, Lamont, ER, Health Fairs, Lancaster, Palmdale, Dept. Human Services, Frazier Mountain, Visalia, San Luis Obispo

**What kinds of problems do you or your family face obtaining care or supportive services?**

Problems Faced	Number of Respondents
Long waits to get appointments/long waits at the doctor's office	126
Financial	122
Transportation/Distance	91
None	78
No insurance/Doctor does not take insurance	65
Finding Time with work/children	49
Referral/Gatekeeper process	30
Mental health	16

Other (1-12): child care, after hours needed, urgent care clinic, dr. does not listen or take time, holistic care, getting medications, lack of knowledge of resources, need better doctors, need more doctors, language barriers.

**What would make it easier for you and your family to obtain care?**

Easier to Obtain Care	Number of Respondents
Health insurance/Affordable insurance/Lower costs for care/lower co-pays	119
Transportation	50
After-hour clinic hours	47
Shorter waits	31
More doctors/staff	24
More appointments	20
Healthcare that is convenient/local/close to work	11
More doctors/dentists take Medi-Cal/Denti-Cal	9
No referral/gatekeeper	9
Dental coverage/cost relief	9

Other (1-8): jobs, food, help for seniors, mental health, education on access, more urgent care, bilingual services, free community services, more clinics, increased communication with doctors and insurance, support for caregivers, coordination of emergency services, health outreach, more compassionate care, national health coverage, low-income housing, easier to get medical

records, more holistic care, navigation services, better customer service, in home care

**What type of support or services do you see a need for in this community?**

Support or Services	Number of Respondents
Transportation	49
Food that is healthy and affordable	36
Mental health	36
More clinics and services	31
Healthy living education	29
Affordable dental care	27
Specialists	26
More physical activities	23
Support for insurance and care costs	23
Free/Low cost services	20

Other (1-19): clothing, grocery stores, support groups, homeless center, parks and green space, community garden, air quality, urgent care, sober living/addiction counseling, after hour appointments, bilingual, better doctors, medication costs, vision, jobs, mortgage assistance, family planning, in-home care, elderly care, navigation services, housing, autism, preventive services, better customer service, undocumented care, quality doctors, holistic care, stress management

**In the past year, what healthy changes have you made in taking care of your health?**

Healthy Changes	Number of Respondents
Healthy eating/Diet/Exercise	417
See doctor more	29
Routine check-up	9
Got insurance/Researched options	6
Stop smoking	4
Follow doctor orders	4

Others (1-3): not drink alcohol, worked more, medication, stopped using drugs, alternative medicine, leave of absence from work, dental, flu shot, be more social to reduce loneliness, meditation, air filter in house, had surgery

**Other Comments**

Top 5 Categories

- Need for better customer service
- More education and outreach/free services
- More mental health resources
- Reduce long ED wait times
- Keep up the great work

**Age of Respondents**

Age	Percent
Under age 20	0.7%
20-29	10.0%
30-39	19.3%
40-49	18.6%
50-59	24.1%
60-69	13.3%
70-79	10.0%



80 and over	4.0%
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### Insurance Coverage

Insurance Coverage	Percent
No health care insurance	10.6%
Medicaid/Medi-Cal	24.6%
Medicare	10.1%
Employer-based insurance (includes HMO)	51.1%
Other or don't know	3.6%

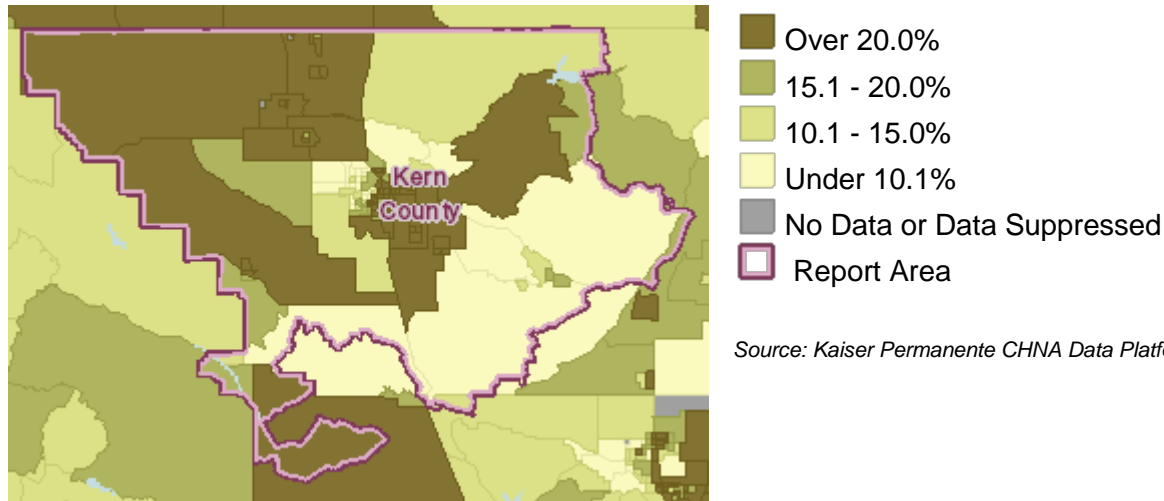
## **Appendix D: Health Need Profiles**

## Health Need Profile: Access to Health Care

Access to comprehensive, quality health care services is important for health equity and for increasing the quality of a healthy life. Health care access is a key requirement for early detection of illnesses, chronic disease management and reduction of Emergency Room usage (Healthy People 2020).

### Health Outcome Statistics

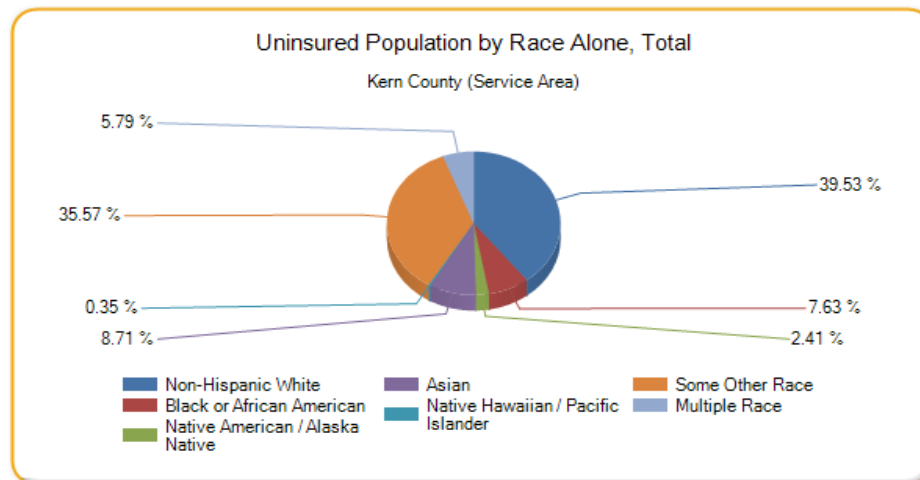
#### Uninsured Population, Percent by Tract, ACS 2009-2013



In the Kaiser Permanente – Kern service area, 35.9% of the population has Medi-Cal coverage. Over one-fifth of the population (20.8%) is uninsured, which translates to 79.2% who have health insurance. This is less than the Healthy People 2020 objective of 100% health insurance coverage (American Community Survey, 2009-2013).

### Health Disparities

When uninsured rates are examined by race, over a third of Whites and other races have are uninsured.



Source: Kaiser Permanente CHNA Data Platform

## Key Health Drivers

**HPSA** – A "Health Professional Shortage Area" (HPSA) is defined as a geographic area designated as having a shortage of primary medical care, dental or mental health professionals. 31.8% of the population in the Kaiser Permanente – Kern service area is living in a HPSA for primary care (U.S. Department of Health & Human Services, Health Resources and Services Administration, March 2015).

**Usual Source of Care** – Residents who have a medical home have access to a primary care provider. In Kern County, 85.4% of residents have a usual source of care. The source of care for 54.1% of Kern County residents is a doctor's office, HMO, or Kaiser. Clinics and community hospitals are the source of care for 25.8% of residents. 14.6% of residents have no source of care (CHIS, 2014).

**Delayed Care** – Among residents of Kern County, 7.9% delayed or did not get medical care and 8.4% delayed or did not obtain prescription medications when needed. 62.2% delayed care due to the cost of care or lack of insurance (CHIS, 2014).

## Assets and Opportunities – Community Resources

Community assets are resources potentially available to meet the identified health need.

Our County has 19 local community collaboratives that are linkages. We have resource centers. We also have a large nonprofit clinic and other community clinics.

Call to Action Kern 2010 looks at policy and system changes for health issues.

The Hispanic Chamber hosts Binational Health Week and provides free vaccinations, screenings and health education.

The Advanced Center for Eyecare is a resource for optometry for people who are uninsured or underinsured.

## Community Input

At-risk children and families don't necessarily seek care on a regular basis. They are in survivor mode and struggle with basic needs. It's always crisis mode.

If people need to access care after regular office hours, it can be hard to maneuver urgent care versus ED treatment.

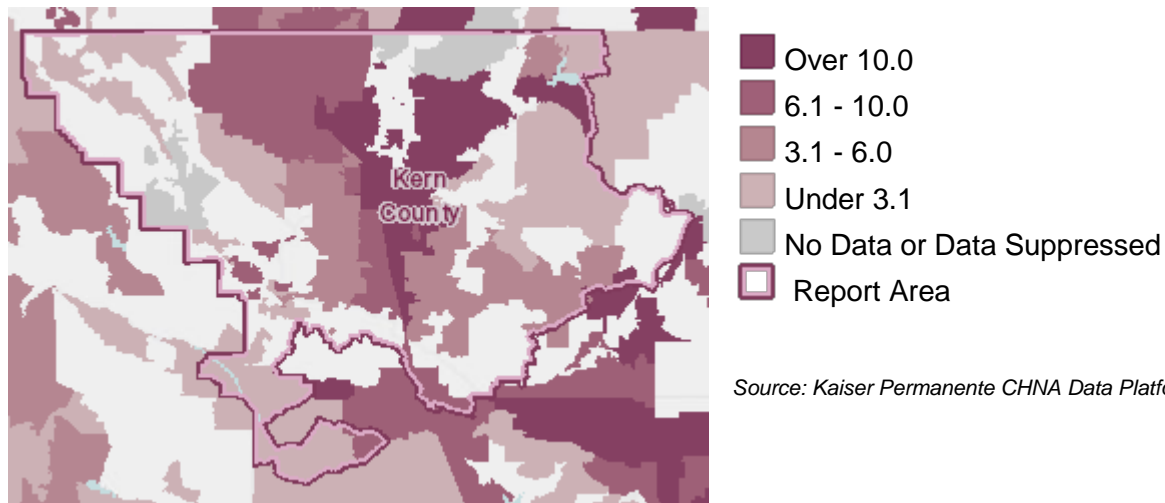
We need specialty care, especially pediatrics. You need to go out of County for care. This is a hard reality for families, lost work time, etc.

## Health Need Profile: Asthma

Asthma is a chronic disease that with preventive treatment can prevent symptoms and attacks and enable individuals who have asthma to lead active lives. Asthma episodes can range in severity from mild to life threatening. Symptoms of asthma include wheezing, coughing, chest tightness, and shortness of breath (*Healthy People 2020*).

### Health Outcome Statistics

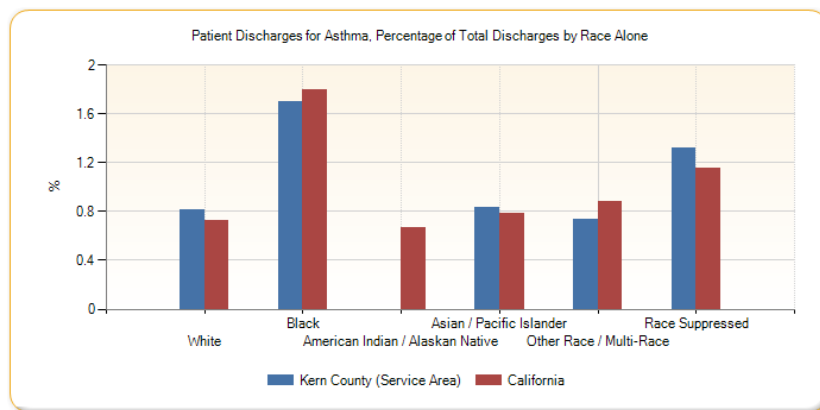
#### Asthma Hospital Discharges, Rate (Per 10,000 Pop.) by ZCTA, OSHPD 2011



Asthma is a condition that when managed can prevent hospitalizations. The overall hospitalization discharge rate for asthma in the Kaiser Permanente – Kern service area is 10.6 per 10,000 persons. This is lower than the county (10.8) but higher than the state rate (8.9 per 10,000 persons) (*OSHPD, 2011*). The population diagnosed with asthma in Kern County is 9.4%. 44% of county asthmatics take medication to control their symptoms. Among county children and youth, 8.9% have been diagnosed with asthma and 13.6% take medication to control their symptoms (*CHIS, 2014*).

### Health Disparities

When compared to state rates, Whites and Asian/Pacific Islanders have high rates of hospitalizations for asthma.



Source: Kaiser Permanente CHNA Data Platform

## Key Health Drivers

**Smoking** – Being a smoker, exposure to secondhand smoke or having a mother who smoked during pregnancy have been shown to increase the chances of developing asthma. 12.5% of teens are current cigarette smokers, which is greater than the state rate of 3.5% teen smokers (CHIS, 2014).

**Overweight/Obesity** – In Kern County, 27.2% of the adult population reported being overweight while 15.6% of teens and 18.2% of children in the county are overweight (CHIS, 2014).

**Air Quality** – The Environmental Protection Agency provides information on toxic chemical releases. Disposal of the chemicals can occur in air, water, wells, and landfills. In 2014, Kern County disposed of more than 7 million pounds of hazardous air pollutants (U.S. EPA, 2014).

## Assets and Opportunities – Community Resources

Community assets are resources potentially available to meet the identified health need.

Kern County Housing Authority has a no smoking policy in all their housing.

Asthma Coalition of Kern County and Kern County Department of Public Health have an Asthma Resource Directory. [http://kernpublichealth.com/wp-content/uploads/2015/09/ACKC-Asthma-Resource\\_-Directory\\_2015.pdf](http://kernpublichealth.com/wp-content/uploads/2015/09/ACKC-Asthma-Resource_-Directory_2015.pdf)

The America Lung Association reports air quality for Kern County and Bakersfield in its State of the Air report.

California Breathing is dedicated to improving the lives of people with asthma through the implementation of the Strategic Plan for Asthma in California. California Breathing focuses on disease surveillance, increasing capacity of partners, and improving environmental conditions that cause or exacerbate asthma.

## Community Input

Arvin has some of the worst air quality in the country, not just the state. With asthma we are at the mercy of geography. Poor air quality gets trapped. We are also a major highway corridor.

If you suffer from asthma then you may not go outside and be active and then you are gaining weight and you're not eating healthy food.

Smoking rates are down but we still have higher rates than the state average.

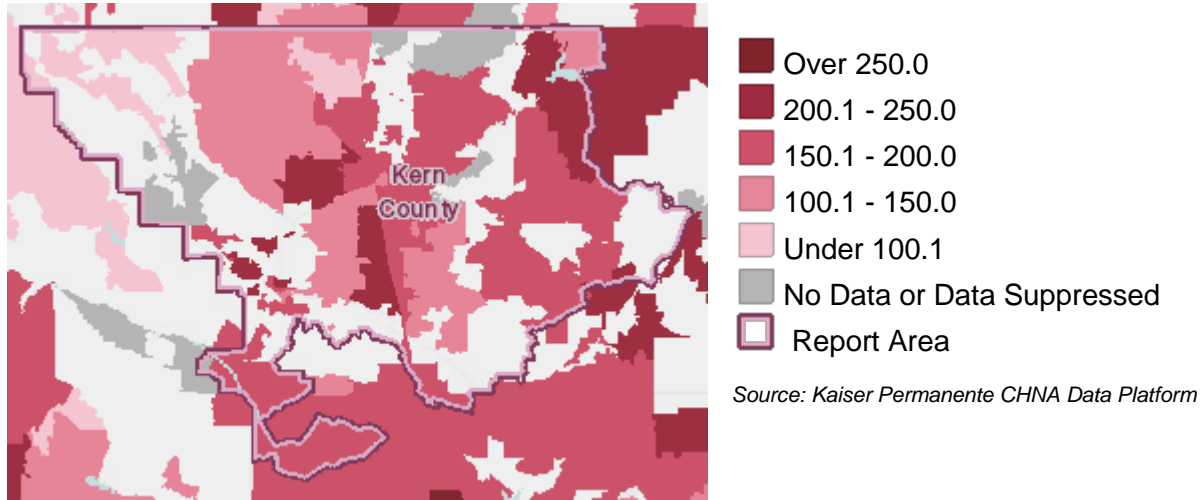
A huge environmental challenge is that we can't get rid of our air so asthma, allergies and sinusitis are very prevalent.

## Health Need Profile: Cancer

Cancer remains the second leading cause of death in the United States; heart disease is the leading cause of death. Many cancers are preventable by reducing risk factors such as: use of tobacco products, physical inactivity and poor nutrition, obesity, and ultraviolet light exposure. Other cancers can be prevented by getting vaccinated and screening is effective in identifying some types of cancers (*Healthy People 2020*).

### Health Outcome Statistics

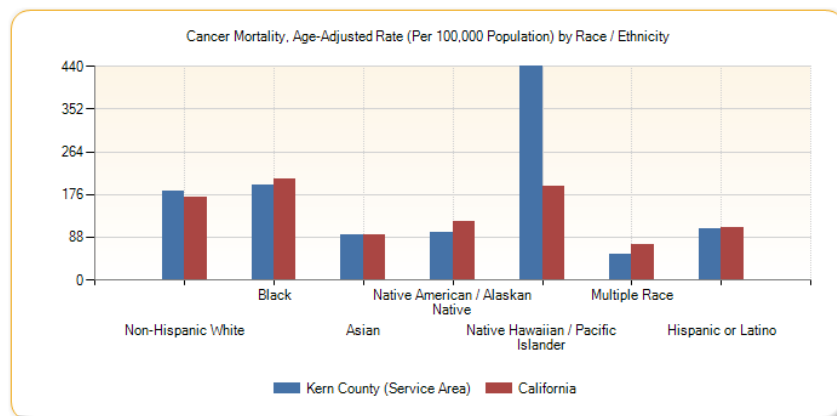
#### Cancer Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by ZCTA, CDPH 2010-2012



Cancer is the second highest cause of death after heart disease in the service area. The rate of age-adjusted death due to malignant neoplasm (cancer) is 159.5 per 100,000 persons in the service area. This is lower than the county rate, and the Healthy People 2020 objective of cancer death of 160.6 per 100,000 persons (*CDPH, 2010-2012*).

### Health Disparities

Cancer mortality is elevated among Native Hawaiian/Pacific Islanders and Whites in the service area when compared to state rates among these populations.



Source: Kaiser Permanente CHNA Data Platform

## Key Health Drivers

**Smoking** – Smoking increases the risk of developing cancer. In Kern County, 10.1% of adults are current smokers; these smoking rates are lower than the Healthy People 2020 objective of 12% (CHIS, 2014).

**Overweight** – Over one-fourth of the adult population is overweight in the county (24.2%). 15.6% of teens and 18.2% of children in the county are overweight (CHIS, 2014).

**Physical Inactivity** – For school-aged children in Kern County, 33.8% engage in physical activity for at least one hour a day, 7 days a week. Children were less likely to visit a park, playground or open space in the last month, at 75.2%, compared to the state rate of 83.9% (CHIS, 2014).

**Diets High in Fat** – In Kern County, 81.7% of children and teens consume fast food at least once a week, higher than the state rate of 72.4%. Among adults in the county, 61.9% consume fast food at least once a week, comparable to the state rate (62.7%) (CHIS, 2014).

## Assets and Opportunities – Community Resources

Community assets are resources potentially available to meet the identified health need.

The Kern County Cancer fund helps with medication and transportation costs.

The American Cancer Society and American Lung Association support education, outreach and screenings for cancer.

Links for Life / The Carol Barraza Women's Health Resource Center was started in 1992 to promote breast cancer awareness and provide services for women coping with cancer.

Tehachapi Cancer Foundation provides resources and support to those with cancer and their families.

## Community Input

Our agricultural industry adds a lot of pesticides and herbicides to our environment, which can especially impact the health of kids. Building Healthy Communities is working on increasing the distance of active spraying that can be done within a school radius to 1 mile while school is in session. Currently we have a ¼ mile mandate.

We have higher than average rates of breast cancer. There are theories that it's related to the hormones and chemicals in our livestock. The body retains these chemicals.

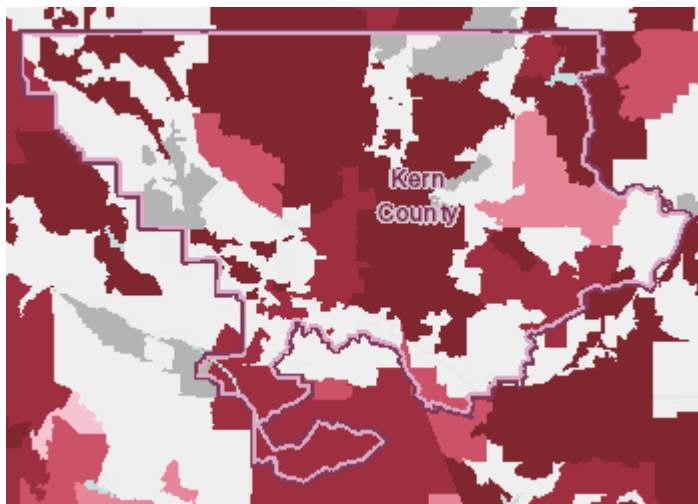


## Health Need Profile: Cardiovascular Disease

Cardiovascular disease includes conditions that impact the heart and vascular system. Conditions may include heart disease, stroke, high blood cholesterol and high blood pressure. A number of factors influence the development and management of cardiovascular disease: overweight, physical inactivity, and diets high in sugar and fat.

### Health Outcome Statistics

#### Heart Disease Death Rate (per 100,000 persons), 2010-2012

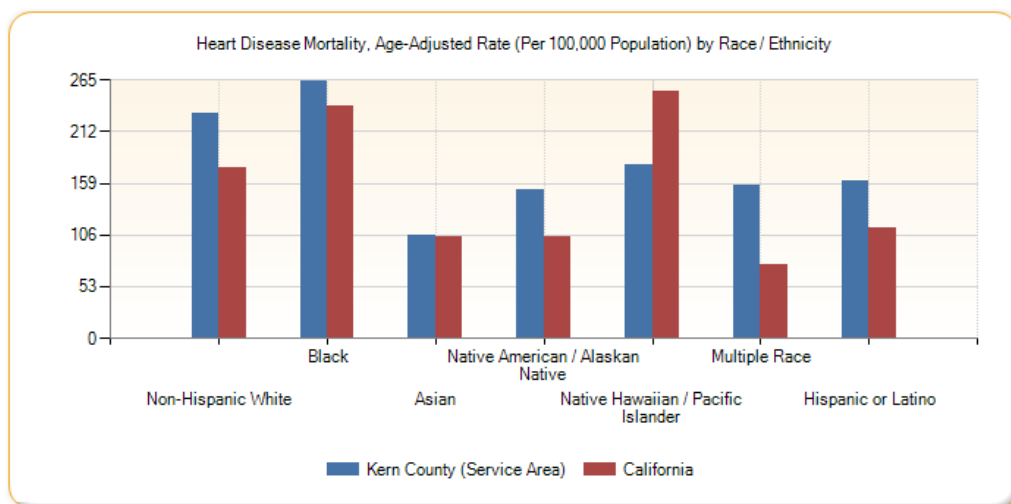


Source: Kaiser Permanente CHNA Data Platform

Heart disease is the leading cause of death in the service area. The rate of death, age-adjusted for coronary heart disease is 217.2 per 100,000 persons. This exceeds the county rate (214.3), and the Healthy People 2020 objective, which is a mortality rate due to heart disease of 100.8 per 100,000 persons (CDPH, 2010-2012).

### Health Disparities

Whites, Blacks, Latinos and Native Americans/Alaskan Natives have high rates of heart disease mortality when compared to the state.



Source: Kaiser Permanente CHNA Data Platform

## Key Health Drivers

**Park Access** – 40.1% of the population in the Kaiser Permanente – Kern service area lives within one-half mile of a park. This exceeds the county (37.8%) rate but is lower than the state (58.6%) rate (*U.S. Census, 2010*).

**Overweight** – Over one-fourth of the adult population is overweight in the county (24.2%). 15.6% of teens and 18.2% of children in the county are overweight (*CHIS, 2014*).

**Physical Inactivity** – For school-aged children in Kern County, 33.8% engage in physical activity for at least one hour a day, 7 days a week. Children were less likely to visit a park, playground or open space in the last month, at 75.2%, compared to the state rate of 83.9% (*CHIS, 2014*).

**Diets High in Fat** – In Kern County, 81.7% of children and teens consume fast food at least once a week, higher than the state rate of 72.4%. Among adults in the county, 61.9% consume fast food at least once a week, comparable to the state rate (62.7%) (*CHIS, 2014*).

## Assets and Opportunities – Community Resources

Community assets are resources potentially available to meet the identified health need.

Call to Action Building Healthy Communities (BHC) partnership supports health. They support schools with school wellness policies on how to do innovative physical activity and make it attractive for kids to be active, and changing the food in schools.

Faith organizations are creating joint use agreements to promote being physically active as well as health fairs and healthy options.

Kern County participates in the Nutrition Education and Obesity Prevention program, spearheading efforts to provide nutrition education and promote physical activity countywide. The program supports community gardens, free physical activity classes, and improved access to fresh and healthy foods.

## Community Input

Because we have such high rates of cardiac issues, we could collaborate better and use more social media to remind people to walk, eat well, support one another with community challenges, go to parks and use facilities that are available.

There are social aspects to our convenience culture and the types of food that are available. We have a lot of genetic modifications to most of our fruits and veggies and we're eating highly processed foods.

We are the worst county in CA for heart disease. This goes back to diet and exercise and ethnicity. A lot of diets and traditional meals are high fat and heavy foods.

## Health Need Profile: Dental Health

Low-income individuals, particularly children and minorities, are more likely to have poor oral health. Poor oral health can be both a result of certain health conditions and a cause of poor health (*Healthy People 2020*).

### Health Outcome Statistics

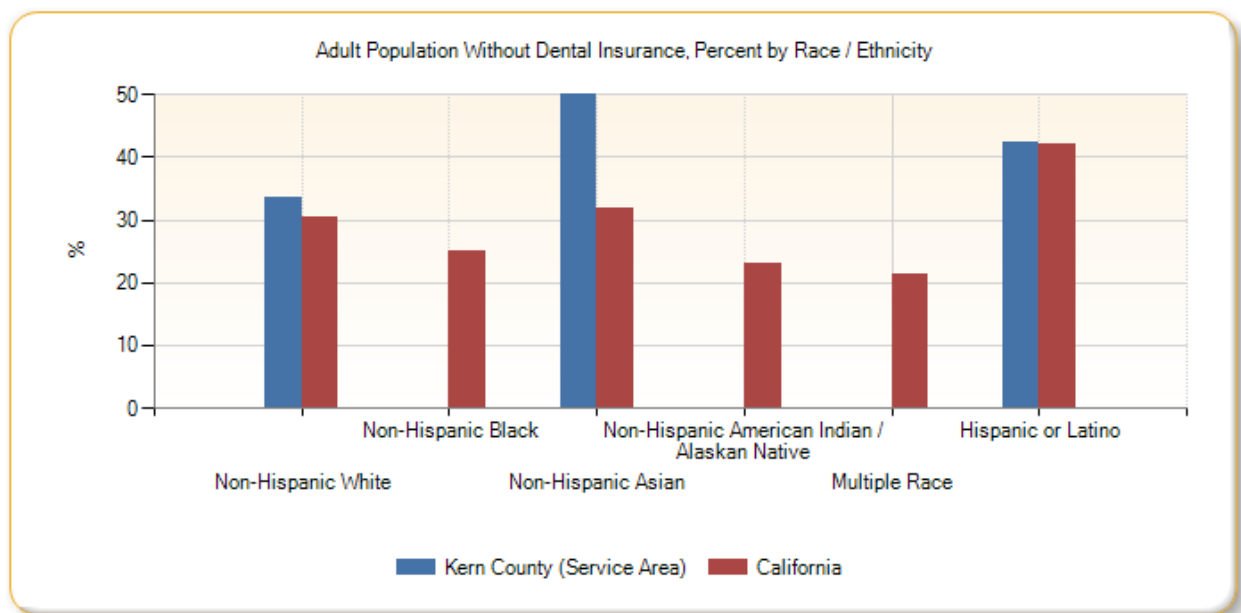
Poor dental health - in Kern County, 14.8% of the adult population reported poor dental health. This is higher than the state rate of 11.3%. Poor dental health is defined as having six or more of permanent teeth removed due to tooth decay, gum disease, or infection. Poor dental health indicates lack of access to dental care and/or social barriers to utilization of dental services.

	Kern County	California
Poor dental health	14.8%	11.3%

Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](#). Additional data analysis by [CARES](#), 2006-10.

### Health Disparities

In Kern County, Whites and Asians lack dental insurance in higher rates than found in the state.



Source: Kaiser Permanente CHNA Data Platform

## Key Health Drivers

**Smoking** – Smoking increases the risk of poor dental health. In Kern County, 10.1% of adults are current smokers; these smoking rates are lower than the Healthy People 2020 objective of 12% (CHIS, 2014).

**Premature Birth / Low Birth Weight:** Premature birth and low birth weight babies have been linked as causative factors in causing gum disease. In Kern County the rate of low birth weight babies is 7%, which is slightly higher than the California rate of 6.8% (CDPH, 2012). In 2013, 10.3% of births were preterm (before 37 weeks gestation) (KidsData.org, 2009-2013).

**Soda Consumption** – In Kern County, 17.0% of children consume at least two sodas or sweetened drinks a day. County adults are less likely to consume higher rates of sweetened drinks (7.6%) compared to state averages (CHIS, 2014).

## Assets and Opportunities – Community Resources

Community assets are resources potentially available to meet the identified health need.

Nurse Family Partnership (NFP) is working with families to prevent kids from falling asleep with a bottle in their mouth and doing education about cleaning gums, even before they get teeth.

We're starting a dental collaborative here in Kern with health plans, schools, and the Kern County Dental Society. We're just starting to strategize what we need in our County.

105 medical assistants trained at Clinica Sierra Vista about fluoride varnish and dental health education so when kids come, it can be addressed for everyone. Medi-Cal covers the treatment.

## Community Input

We identified a need for more dental care in our community. Young children in particular and for toddlers there are shortages of early screenings and treatment.

There used to be a lot of campaigns about baby bottle tooth decay but maybe it fell off the radar. We see kids who are very overweight and with very poor oral hygiene.

Private insurance may not have dental coverage. And if they do, they have high deductibles.

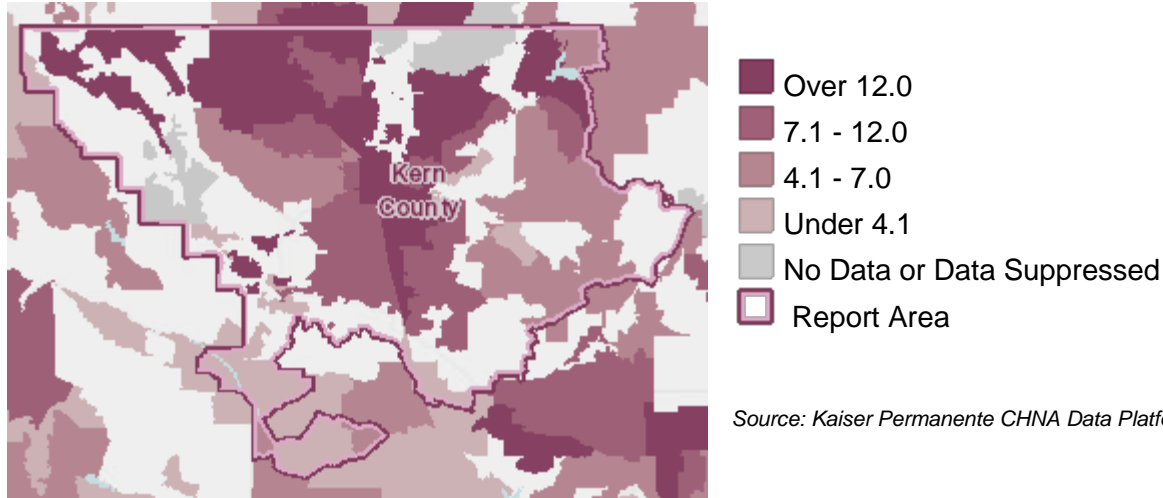
For our mentally ill and substance abusers, they have horrific dental hygiene. Meth abusers lose their teeth too.

## Health Need Profile: Diabetes

Living with uncontrolled diabetes can lead to severe health consequences that include heart disease, stroke and kidney failure. Diabetes is a costly chronic condition that can lead to disability, loss of productivity and premature death.

### Health Outcome Statistics

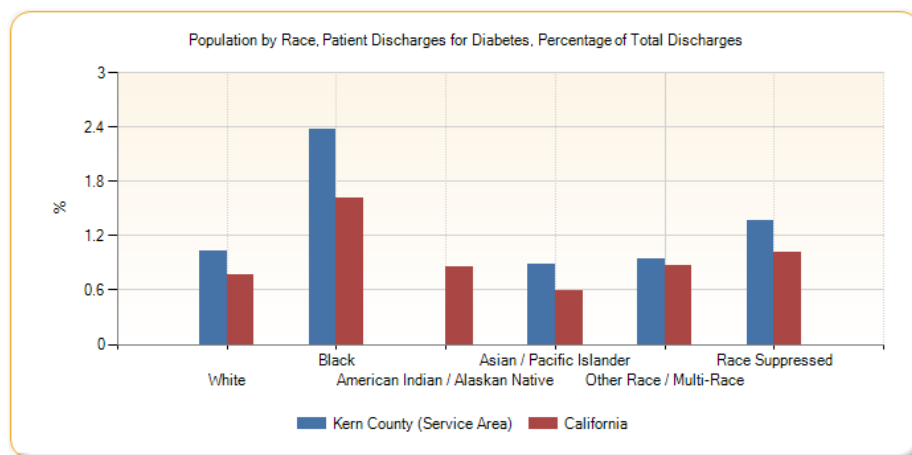
#### Diabetes Hospital Discharges, Rate (Per 10,000 Pop.) by ZCTA, OSHPD 2011



Diabetes is a growing concern in the community; 10.3% of adults in Kern County have been diagnosed with diabetes, which is higher than the state rate (CHIS, 2014). The Agency for Healthcare Research and Quality developed Prevention Quality Indicators (PQIs) that identify hospital admissions that may be avoided through access to high-quality outpatient care. Four PQIs are related to diabetes: long-term complications; short-term complications; amputation; and uncontrolled diabetes. Hospitalization rates were higher for these conditions in Kern County than for California, particularly for long and short-term complications of diabetes (OSHPD).

### Health Disparities

In the service area, hospitalization for diabetes is high among all races/ethnicities, except for American Indian/Alaskan Native, when compared to state rates.



Source: Kaiser Permanente CHNA Data Platform

## Key Health Drivers

**Smoking** – Smoking increases the risk of developing diabetes. In Kern County, 10.1% of adults are current smokers; these smoking rates are lower than the Healthy People 2020 objective of 12% (CHIS, 2014).

**High Blood Pressure** – A co-morbidity factor for diabetes is hypertension (high blood pressure). In Kern County, 40.3% of adults have been diagnosed with high blood pressure, and of those, 64.3% take medication to control their hypertension. The rate of reported diagnosis is higher than the state rate (CHIS, 2014).

**Overweight** – Over one-fourth of the adult population is overweight in the county (24.2%). 15.6% of teens and 18.2% of children in the county are overweight (CHIS, 2014).

**Diets High in Fat** – In Kern County, 81.7% of children and teens consume fast food at least once a week, higher than the state rate of 72.4%. Among adults in the county, 61.9% consume fast food at least once a week, comparable to the state rate (62.7%) (CHIS, 2014).

## Assets and Opportunities – Community Resources

Community assets are resources potentially available to meet the identified health need.

Dr. Kumar does a quarterly diabetes awareness campaign at the Vascular and Leg Center. We had all the Chambers and church leaders come and people who had amputations talked about the importance of watching their sugars and what happens after amputations.

Elementary schools raise awareness on obesity and are innovating physical education to encourage walking and safe routes to school in collaboration with the city. It's not about team sports as much as it's individually based so people learn to be active for the rest of their lives vs. basketball and team sports. It's about running, and aerobics that doesn't require a team to do it.

## Community Input

Contributing to diabetes is the weather in this area. It's a barrier to making active lifestyle choices.

Chronic disease goes back to education. Diabetes can be largely controlled by diet and changing lifestyles.

The challenge with diabetes is the understanding that what you eat and your physical activity and medications impact this disease. Many people have co-morbidities and they may focus more efforts on the other diseases than diabetes.

## Health Need Profile: Environmental Health

Humans interact with the environment constantly. These interactions affect quality of life, years of healthy life lived, and health disparities. Environmental health consists of preventing or controlling disease, injury, and disability related to the interactions between people and their environment (*Healthy People 2020*).

### Health Outcome Statistics

Valley Fever is an illness caused by a fungus found in the soil. Kern County has very high rates of Valley Fever. Rates of Valley Fever in Kern County have been decreasing from a rate of 217.3 per 100,000 persons in 2012 to 102.0 in 2014.

#### Valley Fever, Cases and Rates, per 100,000 Persons, 2012 - 2014

	2012		2013		2014	
	Cases	Rates	Cases	Rates	Cases	Rates
Kern County	1,860	217.3	1,659	191.7	890	102.0
California	4,147	11.0	3,318	8.7	2,217	5.8

Source: California Department of Public Health, Center for Infectious Disease, Yearly Summaries of Selected General Communicable Diseases in California, 2011 – 2014.

In Kern County, 13.5% of the population may be getting drinking water from public water systems with at least one health-based violation. This is higher than the population exposed to unsafe water in the state (2.7%).

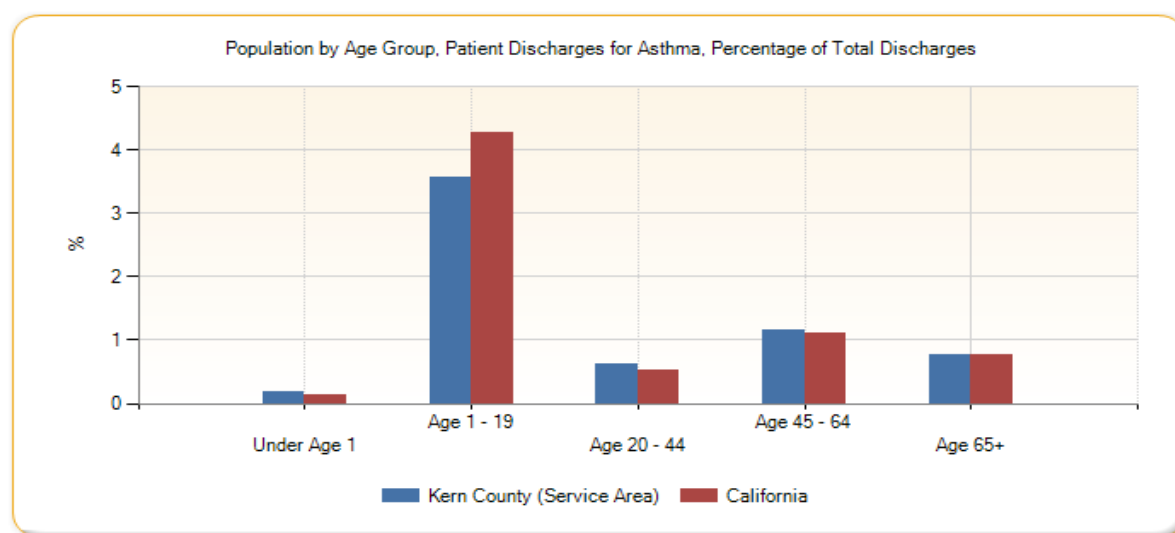
### Unsafe Drinking Water

	Kern County	California
Population exposed to unsafe drinking water	13.5%	2.7%

Source: University of Wisconsin Population Health Institute, County Health Rankings. 2012-2013.

### Health Disparities

Poor air quality can affect asthma rates among community residents.



Source: Kaiser Permanente CHNA Data Platform

## Key Health Drivers

**Drought Severity** – In Kern County, the percentage of weeks in drought from January 1, 2012 – December 31, 2014 was 98%, which is higher than found in California (92.8%) (*US Drought Monitor 2012-2014*).

**Pollutants** – The Environmental Protection Agency provides information on toxic chemical releases. Disposal of the chemicals can occur in air, water, wells, and landfills. In 2014, Kern County disposed of more than 7 million pounds of hazardous air pollutants (*U.S. EPA, 2014*).

## Assets and Opportunities – Community Resources

Community assets are resources potentially available to meet the identified health need.

Eastern Kern Air Pollution Control District.

Asthma Coalition of Kern County and Kern County Department of Public Health have an Asthma Resource Directory. [http://kernpublichealth.com/wp-content/uploads/2015/09/ACKC-Asthma-Resource-Directory\\_2015.pdf](http://kernpublichealth.com/wp-content/uploads/2015/09/ACKC-Asthma-Resource-Directory_2015.pdf)

The America Lung Association reports air quality for Kern County and Bakersfield in its State of the Air report. [http://www.stateoftheair.org/2014/states/california/kern-06029.html?ak\\_proof=1](http://www.stateoftheair.org/2014/states/california/kern-06029.html?ak_proof=1)

## Community Input

We have air pollutants coming from the desert valley area and farming and oil industries. Air quality affects everyone, especially newborns.

A huge environmental challenge is that we can't get rid of our air so asthma, allergies and sinusitis are very prevalent.

We live in an arid climate with lots of dust and particulate matters. We are in a bowl so inversion takes place and traps air.

In the county we received an F grade for ozone levels from the American Lung Association.

The Air Pollution Control District monitors organizations from an emissions standpoint. Our air has improved dramatically over the last 20 years.



## Health Need Profile: Maternal and Infant Health

The risk of maternal and infant mortality and pregnancy-related complications can be reduced by increasing access to quality before pregnancy and between pregnancies care. Healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential (*Healthy People 2010*).

### Health Outcome Statistics

In 2012, the number of live births in the service area was 13,120. The majority of the births were to mothers who are Hispanic/Latino (64.1%); 24.4% of mothers were White.

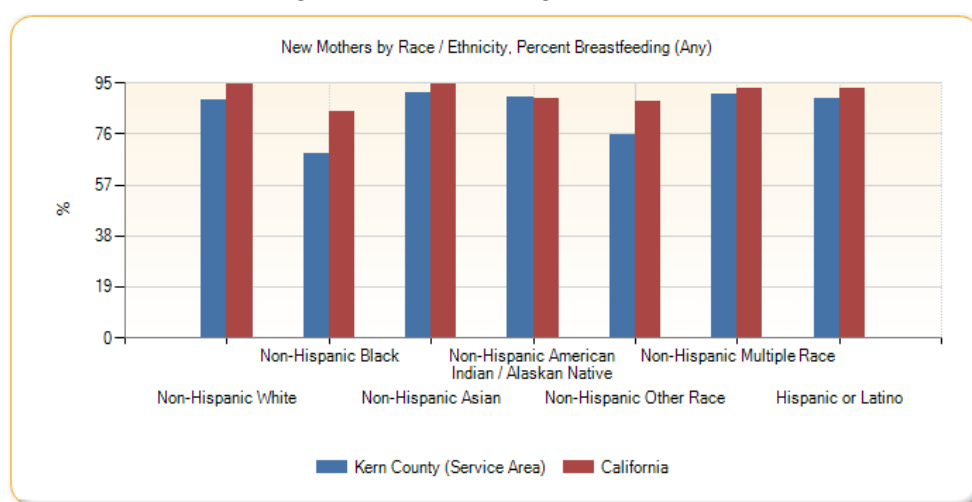
**Prenatal Care** – Pregnant women are recommended to enter prenatal care in the first trimester. Among pregnant women in the service area, 77.5% entered prenatal care in the first trimester. This is a lower rate than the state rate of 83.8%. The area rate of early entry into prenatal care is slightly lower than the Healthy People 2020 objective of 77.9% of women entering prenatal care in the first trimester.

**Low-Birth Weight** – Low birth weight is a negative birth indicator. Babies born at a low birth weight (under 2500g at birth) are at higher risk for disease, disability and possibly death. For this measurement, a lower rate is a better indicator. The Kaiser Permanente – Kern service area rate of low birth weight babies is 6.6% (66.2 per 1,000 live births). This is lower than the state rate of 6.8%. The service area compares favorably to the Healthy People 2020 objective of 7.8% of births being low birth weight.

(California Department of Public Health, 2012)

### Health Disparities

In the service area, mothers of all races/ethnicities, except for American Indian/Alaskan Native have lower rates of breastfeeding than found among mothers in the state.



Source: Kaiser Permanente CHNA Data Platform

## Key Health Drivers

**Educational Attainment** – Lack of educational attainment is an associated risk factor for teen pregnancy and lack of prenatal care. Among adults, ages 25 and older, in the Kaiser Permanente – Kern service area, over one-fourth of the population (29.1%) have no high school diploma. 26.5% of the population has a high school education (*American Community Survey, 2009-2013*).

**Children Living in Poverty** – The percentage of children, ages 0-17, living in households with income below the Federal Poverty Level (FPL) is 32.7%, which is higher than the state rate of 22.2% of children living in poverty. When examined by race/ethnicity, 47.8% of Black/African American children are living in poverty, 40.9% of Native Hawaiian/Pacific Islander children are in poverty, and 39% of Hispanic/Latino children are living in poverty. White (18.6%) and Asian (19.3%) children are among the populations with the lowest levels of poverty in the service area (*American Community Survey, 2009-2013*).

## Assets and Opportunities – Community Resources

Community assets are resources potentially available to meet the identified health need.

The Medically Vulnerable Care Coordination Program provides coordinated services to improve outcomes for Kern County infants and children, ages 0-5, who are at risk of costly, medical and developmental issues.

Junior League has a program called GAP that works with foster youth for self-esteem and sense of value and importance and working on goal setting to help prevent teen pregnancy.

The Gloria Nelson Center for Women and Children (GNC) is a newly constructed rural health clinic. This health care facility was established to create and provide options to the growing community of Delano.

## Community Input

Because we are a relatively conservative County, it is looked down upon to have different sexual health issues and pregnancies. A number of women who have undesired pregnancy experience biases when deciding on adoption vs. abortion.

We found that many girls don't realize they are pregnant until the end of their 1<sup>st</sup> or in their 2<sup>nd</sup> trimester, so accessing timely care is an issue.

African American women of childbearing age have worse child health outcomes compared to other populations.

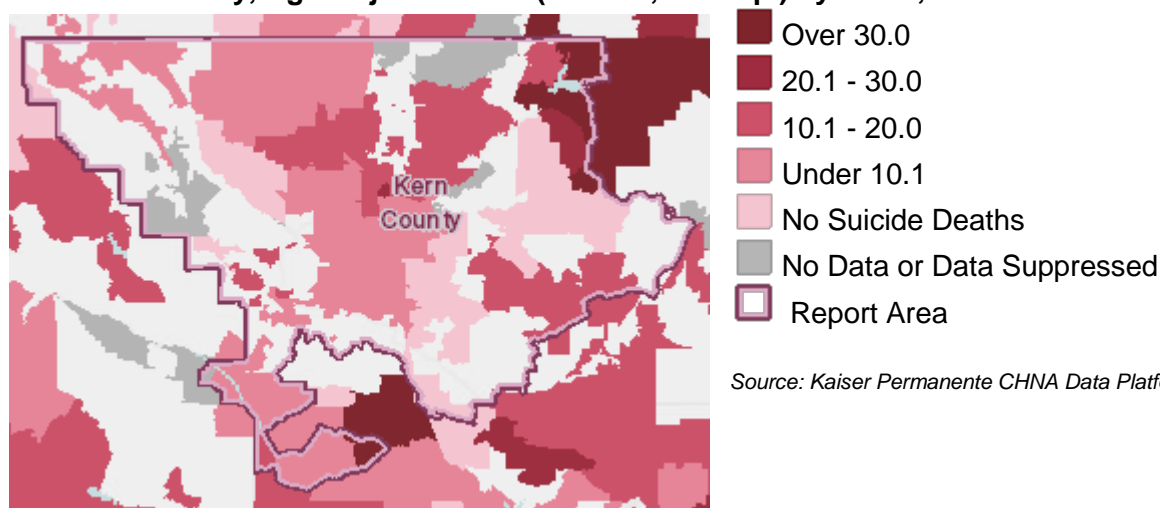
## Health Need Profile: Mental Health

Mental illness is a common cause of disability. Untreated disorders may leave individuals at-risk for substance abuse, self-destructive behavior, and suicide. Additionally, mental health disorders can have a serious impact on physical health and are associated with the prevalence, progression and outcome of chronic diseases (*Healthy People 2020*).

### Health Outcome Statistics

In Kern County, 3.4% of adults had seriously considered suicide. In the Kaiser Permanente – Kern service area, the age-adjusted rate of suicide is 9.8 per 100,000 persons. This is less than the Healthy People 2020 objective of 10.2 per 100,000 persons.

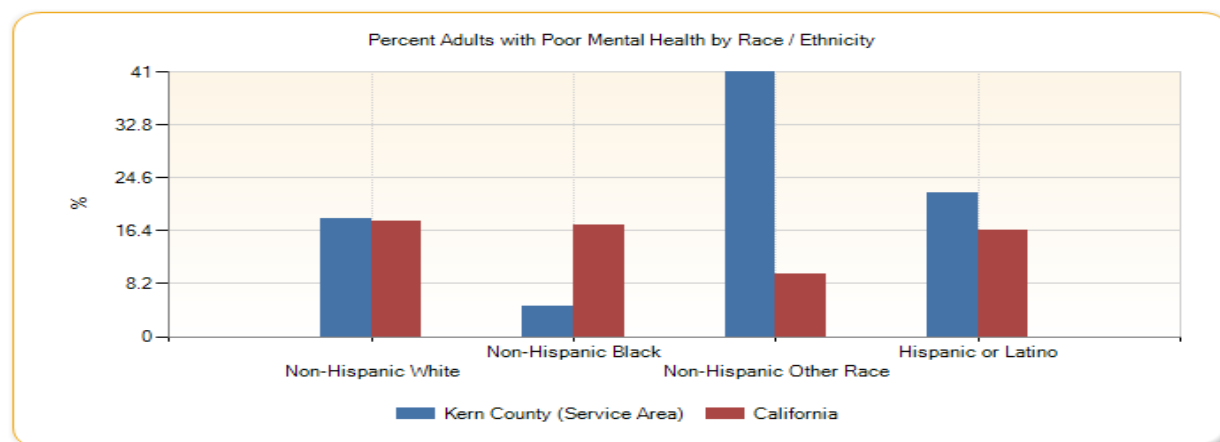
#### Suicide Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by ZCTA, CDPH 2010-2012



In Kern County, 17.1% of adults experienced serious psychological distress in the past year. 21.4% of adults needed help for emotional, mental health, alcohol or drug issues, and 85.5% of those who sought or needed help did not receive treatment. The Healthy People 2020 objective is for 64.6% of adults with a mental disorder to receive treatment (35.4% who do not receive treatment).

### Health Disparities

Latino, White and other race adults have high percentages of poor mental health.

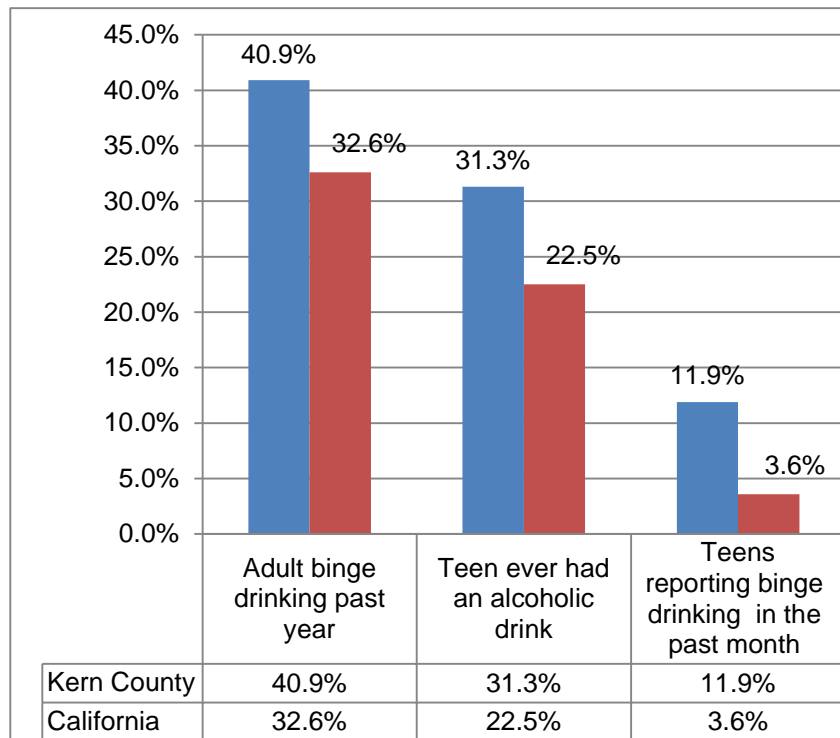


Source: Kaiser Permanente CHNA Data Platform

## Key Health Drivers

**Substance Abuse** – mental illness is common among those who suffer with substance abuse. Rates for alcohol use in Kern County are higher among adults and teens than compared to the state (*CHIS, 2014*).

**Social or Emotional Support** - social and emotional support is necessary for good mental health. Among adults in Kern County, 26.8% reported they received insufficient social and emotional support all or most of the time (*CHIS, 2014*).



## Assets and Opportunities – Community Resources

Community assets are resources potentially available to meet the identified health need.

Children's Services works with schools to improve access to mental health care.

Kern County Mental Health and Alliance Against Family Violence offers critical short and long term counseling.

Access Kern County Network for Children is a mental health network to help children and their families get a diagnosis and information on where to get help.

There is an effort to improve collaboration among the mental health department, sheriff department, and other agencies. There is a collaborative partnership to look at those who are mentally ill and in jail for those services.

## Community Input

A lot of homelessness is related to mental health issues. We have a few facilities that offer immediate or around-the-clock mental health services, hope, and beds. Their beds are consistently full, so there is more need than available services.

Culturally some groups view mental health as a weakness and don't talk about it.

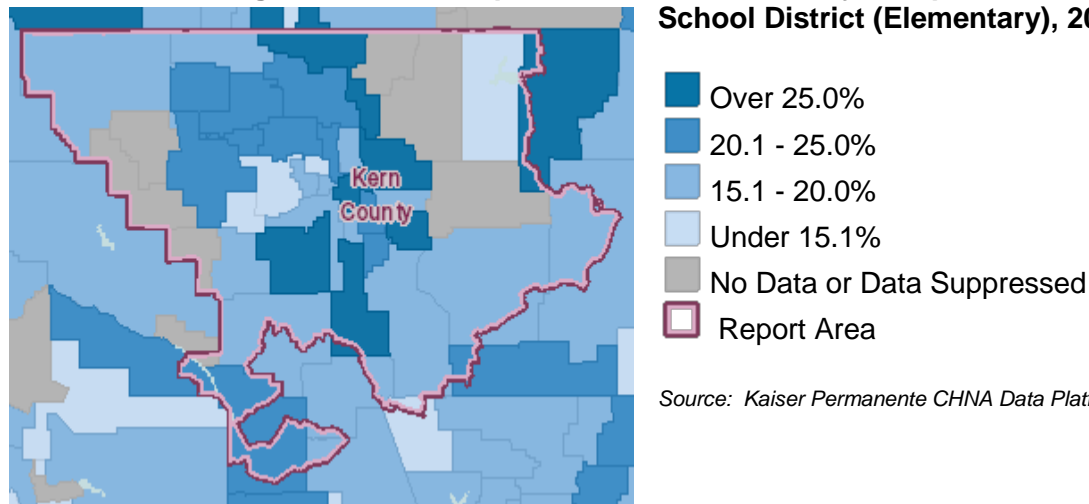
Our mental health plan is for the serious and persistent issues, and not for people with insurance who could be treated by a primary provider.

### Health Need Profile: Overweight and Obesity

Being overweight or obese affects a wide range of health issues and are major risk factors for diabetes, cardiovascular disease, and other chronic diseases. Physical activity plays a key role in levels of overweight and obesity, and in the development and management of chronic diseases. Healthy eating and nutrition programs also promote a healthy body weight.

#### Health Outcome Statistics

##### Students Overweight / in 'Needs Improvement' Zone for Body Composition , Percent by School District (Elementary), 2013-2014

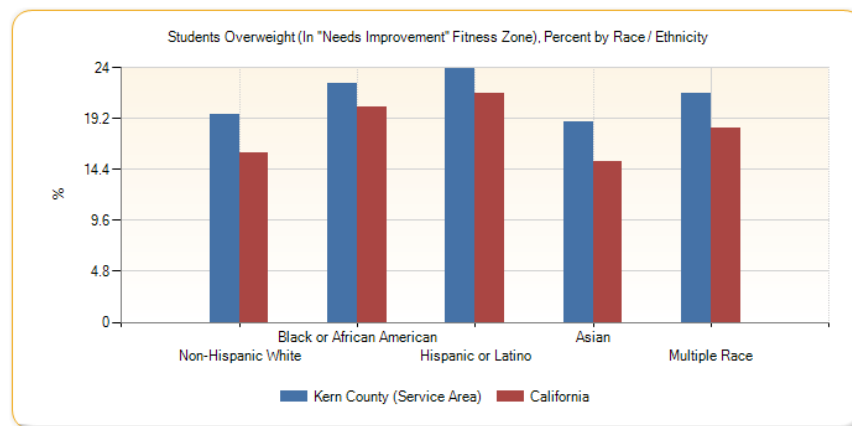


Source: Kaiser Permanente CHNA Data Platform

The physical fitness test (PFT) for students in California schools is the FitnessGram®. One of the components of the PFT is measurement of body composition. Children who do not meet the “Healthy Fitness Zone” criteria for body composition are categorized as needing improvement or at high risk (overweight/obese). 48.8% of Bakersfield area fifth graders and 41.2% of ninth graders scored as needing improvement or at high risk for the body composition criterion (California Department of Education, 2013-2014).

#### Health Disparities

In the service area, students of all races/ethnicities have higher rates of overweight when compared to the state.



Source: Kaiser Permanente CHNA Data Platform

## Key Health Drivers

**Diets High in Fat** – In Kern County, 81.7% of children and teens consume fast food at least once a week, higher than the state rate of 72.4%. Among adults in the county, 61.9% consume fast food at least once a week, comparable to the state rate (62.7%) (CHIS, 2014).

**Soda Consumption** – 17.0% of children in Kern County consume at least two sodas or sweetened drinks a day. County adults are less likely to consume higher rates of sweetened drinks (7.6%) compared to state averages (CHIS, 2014).

**Fresh Fruits and Vegetables** – 48.6% of children and 33.5% of teens in Kern County consume five fruits and vegetables in a day. A majority of adults (76%) report that they could usually or always find fresh fruits and vegetables in the neighborhood. In contrast, 22.6% of adults sometimes or never found fresh produce in the neighborhood, higher than the state average (CHIS, 2011-2012, 2014).

**Physical Inactivity** – For school children in Kern County, 33.8% engage in physical activity for at least one hour a day, 7 days a week. Children were less likely to visit a park, playground or open space in the last month, at 75.2%, compared to the state rate of 83.9% (CHIS, 2014).

## Assets and Opportunities – Community Resources

Community assets are resources potentially available to meet the identified health need.

The Friendship House afterschool program is getting kids more active.

Reducing obesity is one of the goals of the Kern County Call to Action Initiative. The Prescription for Health Program was a pilot with providers to do education prescriptions for healthy eating and activity.

The Kern Food Policy Council (KFPC) is a forum for individuals from many sectors of the community to share ideas, experiences, skills, and knowledge to alleviate hunger and develop a healthy, sustainable food system in Kern County. The KFPC aims to inform policy decisions that impact the food system in Kern County.

## Community Input

There is fast food on every corner in poor neighborhoods. It's relatively cheap and it fills the stomach and tastes good. Our culture is focused on what's convenient, versus what our body needs.

Recently a Wal-Mart opened in East Bakersfield. It's nice to have a neighborhood store with groceries. There are low-income apartments nearby so now people in the area can access that resource.

Often people don't have enough money to buy fresh food and produce so they buy noodles or go to the food bank for canned foods.

## Health Need Profile: STD/HIV/AIDS

STDs and HIV/AIDS continue to be major public health problems. STDs refer to more than 25 infectious organisms that are transmitted primarily through sexual activity. STD prevention is an essential primary care strategy for improving reproductive health. HIV is a preventable disease. Effective HIV prevention interventions have been proven to reduce HIV transmission (*Healthy People 2020*).

### Health Outcome Statistics

Rates of Chlamydia in Kern County are 719.5 per 100,000 persons, higher than the state rate of 453.4. The rate of Gonorrhea is 176.8 per 100,000 persons, which is higher than the state rate of 116.8. Primary and Secondary Syphilis (16.2) is also higher than the state average.

### Sexually Transmitted Diseases

	Kern County		California Rate
	Cases	Rate	
Chlamydia	6,276	719.5	453.4
Gonorrhea	1,542	176.8	116.8
Primary & Secondary Syphilis	141	16.2	9.9
Early Latent Syphilis	59	4.6	6.8

Source: California Department of Public Health, 2014. <http://www.cdph.ca.gov/data/statistics/Pages/STDDDataTables.aspx>

HIV/AIDS – In 2013 there were 1,208 cases of persons living with HIV/AIDS in Kern County.

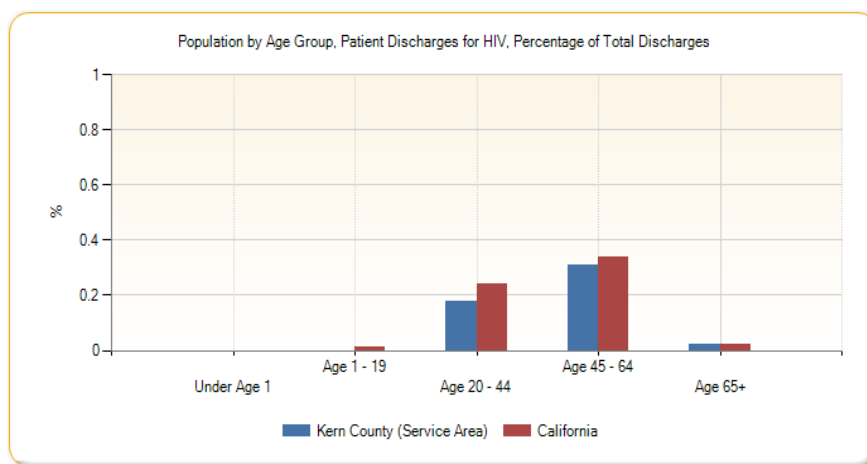
### HIV/AIDS Cases

	Total Cases	Living Cases	Percent Deceased
Kern County	2,049	1,208	41%
California	169,734	73,291	57%

Source: California Department of Public Health, HIV AIDS Surveillance in California, 2013. <http://www.cdph.ca.gov/data/statistics/Pages/OAHIVAIDSStatistics.aspx>

### Health Disparities

Adults, ages 45-64 in Kern County have the highest rates of illness with HIV requiring hospitalization.



Source: Kaiser Permanente CHNA Data Platform

## Key Health Drivers

**Economic Disparity** – STDs are more likely to occur in low-income populations. In the Kaiser Permanente – Kern service area, 45.4% of the population is low-income (200% or below FPL). 35.9% of the state population is low-income (*American Community Survey, 2009-2013*).

**Alcohol Use** – In Kern County, 40.9% of adults engaged in binge drinking; 31.3% of teens indicated they had tried an alcoholic drink. 11.9% of teens have reported binge drinking in the past month (*CHIS, 2014*).

**Drug Use** – In Kern County, 10.7% of teens have tried drugs and 9.7% have used marijuana in the past year. Teen marijuana use is higher than among teens in the state (8.6%) (*CHIS, 2012*).

## Assets and Opportunities – Community Resources

Community assets are resources potentially available to meet the identified health need.

The Kern Lifeline Project offers case management services to persons living with HIV/AIDS that includes: referrals for basic needs (dental, vision, and transportation, food, hygiene products, substance abuse treatment, mental health services, vision care). The project provides behavioral health counseling, therapy, psychiatric services and outpatient substance abuse treatment, support groups in both English and Spanish, advocacy to medical health care, emergency housing assistance. The program also provides Rapid HIV Testing to the community that is supported by funding by the Kaiser Foundation.

Planned Parenthood – Offers STD testing, treatment and vaccines, and HIV testing.

## Community Input

With an economic crisis, prevention programs are always the first to go and the result is explosive rates of STDs. We are starting to see HIV infections in adolescents. We had 7 last year, the highest number ever.

If you want birth control, you have to go to the Department of Public Health or a nonprofit and not a lot of kids are doing that.

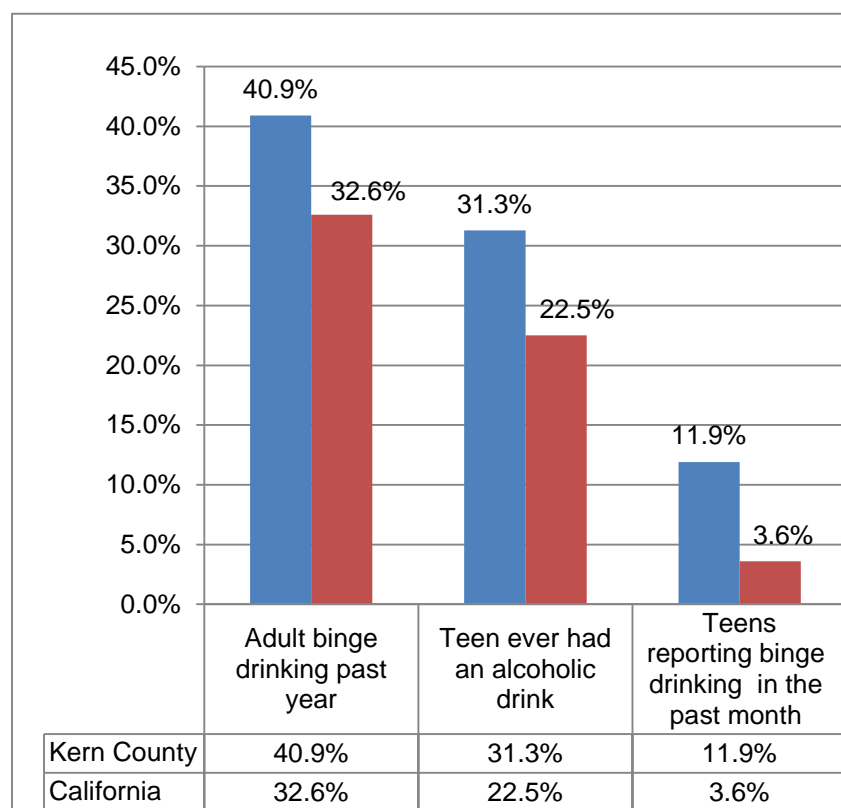
This County is in the middle of a syphilis outbreak. Young mothers have no prenatal care and come to the ED to deliver babies with congenital syphilis. Treatment takes over 3 weeks and it's very hard to keep track of them after they leave.



## Health Need Profile: Substance Abuse (Alcohol/Drugs/Tobacco)

Smoking is a contributing cause to disease and death. It increases the risk of developing heart disease, stroke and cancer. Alcohol and drug abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems (*Healthy People 2020*).

### Health Outcome Statistics



In Kern County, 10.7% of teens have tried drugs and 9.7% have used marijuana in the past year. Teen marijuana use is higher than among teens in the state.

In Kern County, 10.1% of adults are current smokers; these smoking rates are lower than the Healthy People 2020 objective of 12%.

12.5% of teens are current cigarette smokers, which is greater than the state rate of 3.5% teen smokers. 21.6% of teens in Kern County have smoked an e-cigarette (*CHIS, 2014*).

### Health Disparities

Cigarette smoking among American Indians/Alaskan Natives and Whites is higher in Kern County than in the state. These smoking rates are lower than the Healthy People 2020 objective of 12%.

#### Current Smokers, Adults and Teens by Race/Ethnicity

	Kern County	California
American Indian/Alaska Native	58.6%	29.9%
White	14.9%	12.6%
Latino	8.2%	9.1%
Black	5.7%	15.0%

Source: California Health Interview Survey, 2014.

## Key Health Drivers

**Homelessness** – Substance abuse issues are prevalent among the homeless. Recent trends show that rates of homelessness are declining along with the percentage of homeless who are unsheltered. In 2014, 41.8% of homeless were unsheltered (*HUD, Annual Homeless Assessment Report, 2014*).

**Mental Health Issues** – Substance abuse is often a behavior associated with mental health issues. In Kern County, 17.1% of adults had serious psychological distress compared to 9.6% of adults in California (*CHIS, 2014*).

**Crime** – Substance abuse may fuel crime. In Kern County the overall violent crime rate is 561.1 per 100,000 persons. This is higher than the state rate of 425.0. The county rate for assault (393.6) is also higher than the state rate (249.4). Rates for robbery and rape in the county are less than the state rates (*FBI, 2010-2012*).

## Assets and Opportunities – Community Resources

Community assets are resources potentially available to meet the identified health need.

County programs, like the Mental Health Department, provide substance abuse treatment. They have residential beds for treatment.

Kern Stop Meth Now Coalition is using a social marketing strategy. The Mental Health Department plays a lead and many agencies are participating, as well as law enforcement and the private sector.

There are few clinically-based programs in town, a lot of sober living programs, 12 steps, Good Samaritan, and Aspire Action Family Counseling.

Teen Challenge USA is a residential rehab facility outside of Bakersfield. It's a well-known local program that goes beyond Kern.

## Community Input

Drugs are readily available. Kids watch parents and they aren't setting a good example. Kids think this is a part of life.

We have a lot of functional addicts and issues of denial so they don't seek treatment, even the ones who can afford it.

Pot use has increased. Meth use is high with adults. A lot of people in fields like transportation and agriculture are addicted and there has been a big comeback of heroin.

Meth is everywhere and pot is pervasive because it's so easy to get and widely available. It's in the high schools and is the gateway to other drugs.

## **Appendix E: Glossary of Terms**

The following terms are used throughout the Community Health Needs Assessment report. They represent concepts that are important to understanding the findings and analysis in this report.

**Age-adjusted rate.** The incidence or mortality rate of a disease can depend on the age distribution of a community. Because chronic diseases and some cancers affect older adults disproportionately, a community with a higher number of older adults might have a higher mortality or incidence rate of some diseases than another community that may have a higher number of younger people. An incidence or mortality rate that is age-adjusted takes into the consideration of the proportions of persons in corresponding age groups, which allows for more meaningful comparison between communities with different age distributions.

**Benchmarks.** A benchmark serves as a standard by which a community can determine how well or not well it is doing in comparison for specific health outcomes. For the purpose of this report, one of two benchmarks is used to make comparison with the medical center area. They are Healthy People 2020 objectives and state (California) averages.

**Death rate.** See *Mortality rate*.

**Disease burden.** Disease burden refers to the impact of a health issue not only on the health of the individuals affected by it, but also the financial cost in addressing this health issue, such as public expenditures in addressing a health issue. The burden of disease can also refer to the disproportionate impact of a disease on certain populations, which may negatively affect their quality of life and socioeconomic status.

**Health condition.** A health condition is a disease, impairment, or other state of physical or mental ill health that contributes to a poor health outcome.

**Health disparity.** Diseases and health problems do not affect all populations in the same way. Health disparity refers to the disproportionate impact of a disease or a health problem on specific populations. Much of research literature on health disparity focuses on racial and ethnic differences in how these communities experience the diseases, but health disparity can be correlated with gender, age, and other factors, such as veteran, disability, and housing status.

**Health driver.** Health drivers are behavioral, environmental, social, economic and clinical care factors that positively or negatively impact health. For example, smoking (behavior) is a health driver for lung cancer, and access to safe parks (environmental) is a health driver for obesity/overweight. Some health drivers, such as poverty or lack of insurance, impact multiple health issues.

**Health indicator.** A health indicator is a characteristic of an individual, population, or environment which is subject to measurement (directly or indirectly) and can be used to describe one or more aspects of the health of an individual or population.

**Health outcome.** A health outcome is a snapshot of a disease in a community that can be described in terms of both morbidity and mortality (e.g. breast cancer prevalence, lung cancer mortality, homicide rate, etc.).

**Health need.** A health need is a poor health outcome and its associated health driver, or a health driver associated with a poor health outcome where the outcome itself has not yet arisen as a need.

**Hospitalization rate.** Hospitalization rate refers to the number of patients being admitted to a hospital and discharged for a disease, as a proportion of total population.

**Incidence rate.** Incidence rate is the number of *new* cases for a specific disease or health problem within a given time period. It is expressed either as a fraction (e.g. percentage) or a density rate (e.g., x number of cases per 10,000 people), in order to allow for comparison between different communities. It should not be confused with *prevalence rate*, which measures the proportion of people found to have a specific disease or health problem.

**Morbidity rate.** Morbidity rate refers to the frequency with which a disease appears within a population. It is often expressed as a *prevalence rate* or *incidence rate*.

**Mortality rate.** Mortality rate refers to the number of deaths in a population due to a disease. It is usually expressed as a density rate (e.g. x number of cases per 10,000 people). It is also referred to as “death rate.”

**Prevalence rate.** Prevalence rate is the proportion of total population that currently has a given disease or health problem. It is expressed either as a fraction (e.g. percentage) or a density rate (e.g., x number of cases per 10,000 people), in order to allow for comparison between different communities. It should not be confused with incidence rate, which focuses only on *new* cases. For instance, a community may experience a decrease in new cases of a certain disease (incidence) but an increase in the total of number suffering that disease (prevalence) because people are living longer due to better screening or treatment for that disease.

**Primary data.** Primary data are new data collected or observed directly from first-hand experience. They are typically qualitative (not numerical) in nature. For this community health needs assessment, primary data were collected through a survey and interviews with key stakeholders. These primary data describe what is important to the people who provide the information and are useful in interpreting secondary data.

**Relative worth method.** The Relative Worth method is a ranking strategy where each participant receives a fixed number of points. The points are then assigned to health needs based on the size of the problem (relative portion of population afflicted by the problem); or seriousness of the problem (impact at individual, family, and community levels).

**Secondary data.** Secondary data are data that have been collected and published by another entity. They are typically quantitative (numerical) in nature. Secondary data are useful in highlighting in an objective manner health outcomes that significantly impact a community.