



# **Adventist Health Tehachapi Valley Hospital**

# **Community Health Needs Assessment**

2018

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### Introduction

#### **Background and Purpose**

Adventist Health Tehachapi Valley Hospital is a 24-bed critical access hospital located in Eastern Kern County. The Tehachapi Valley Healthcare District received voter approval and entered into a long-term lease for hospital operations with the Roseville, California-based Adventist Health system. Adventist Health took over operations of the hospital on November 1, 2016. The hospital provides 24-hour emergency care with three trauma beds, radiology, laboratory, physical therapy and respiratory services. Primary care services are provided through the Adventist Health Community Care clinics, which are family practice clinics owned and operated by Adventist Health Tehachapi Valley (AHTV).

Adventist Health is a faith-based, nonprofit integrated health system serving more than 75 communities in California, Washington, Oregon and Hawaii. Our mission is "Living God's love by inspiring health, wholeness and hope." Our vision is "Compelled by our mission to live God's love by inspiring health, wholeness and hope, we will transform the health experience of our communities by improving physical, mental and spiritual health, enhancing interactions, and making care more accessible and affordable." We owe much of our heritage and organizational success to the Seventh-day Adventist Church, which has long been a promoter of prevention and whole person care. Inspired by our belief in the loving and healing power of Jesus Christ, we aim to bring physical, mental and spiritual health and healing to our neighbors of all faiths. Every individual, regardless of his/her personal beliefs, is welcome in our facilities. We are also eager to partner with members of other faiths to enhance the health of the communities we serve."

As required by state and federal law, Adventist Health Tehachapi Valley Hospital has undertaken a Community Health Needs Assessment (CHNA). California's Senate Bill 697 and the Patient Protection and Affordable Care Act through the IRS section 501(r)(3) regulations direct nonprofit hospitals to conduct a Community Health Needs Assessment and develop an Implementation Strategy every three years. The previous CHNA was conducted in 2015 by the Tehachapi Valley Healthcare District.

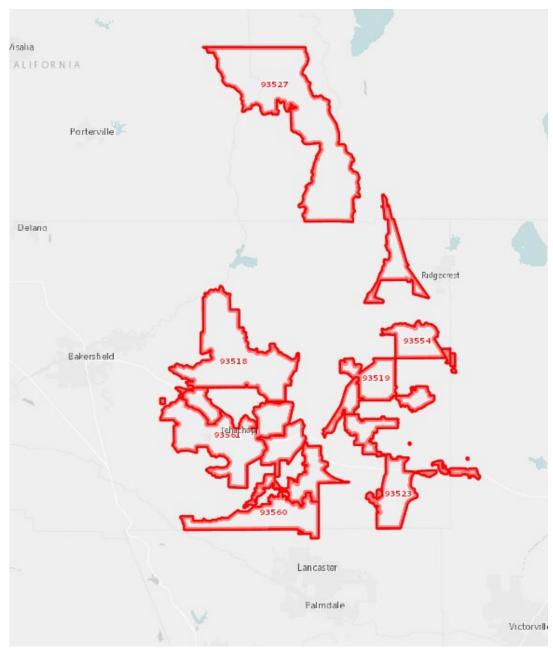
## **Community Description**

Adventist Health Tehachapi Valley Hospital is located at 115 W. E Street, Tehachapi, CA 93561. The service area for the hospital includes 11 communities consisting of 14 ZIP Codes and 2 P.O. Box ZIP codes in Kern County; P.O. Box ZIP Codes are not included in the data collection and analysis due to a lack of available data.

ZIP Code	Place*
93516	Boron
93518	Caliente
93505	California City
93524	Edwards AFB
93527	Inyokern
93528, 93554, 93558	Johannesburg
93531	Keene
93501, 93519 (and P.O. Box 93502)	Mojave
93523	North Edwards
93560	Rosamond
93561 (and P.O. Box 93581)	Tehachapi

#### Adventist Health Tehachapi Valley Hospital Service Area

\* When 'Place Names' are used within the report, they primarily refer to the geographic area covered by a ZIP Code, rather than the incorporated city that bears that name.



### Adventist Health Tehachapi Valley Hospital Service Area Map

Source: by Census Tract. Accessed from Community Commons. http://www.communitycommons.org/.

#### **Project Oversight**

The Community Health Needs Assessment process was overseen by: Kiyoshi Tomono Associate Vice President Community Partnership Adventist Health Bakersfield & Tehachapi Valley

#### Consultant

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 AHTV Community Health Needs Assessment. She was joined by Denise Flanagan, BA. 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

### Methods

### **Secondary Data Collection**

Secondary data were collected from a variety of local, county, and state sources to present community demographics, social, economic factors and environmental factors, health access, birth characteristics, mortality and morbidity, health behaviors, and mental health and substance abuse. Analyses were conducted at the most local level possible for the hospital service area, given the availability of the data.

Sources of data include the Office of Statewide Health Planning and Development, U.S. Census American Community Survey, Healthy Kern County, California Health Interview Survey, County Health Rankings, California Department of Education, California Department of Public Health, California Employment Development Department, Kern County Homeless Collaborative, National Cancer Institute, California Department of Justice, and others. When pertinent, these data sets are presented in the context of Kern County and California, framing the scope of an issue as it relates to the broader community.

Secondary data for the 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, or percent), county and state comparisons (when available), the data source, data year and an electronic link to the data source. Analysis of secondary data includes an examination and reporting of health disparities for some health indicators. The report includes benchmark comparison data that measures AHTV data findings as compared to Healthy People 2020 objectives. Healthy People 2020 objectives are a national initiative to improve the public's health by providing measurable objectives and goals that are applicable at national, state, and local levels.

### **Primary Data Collection**

Stakeholder surveys were used to gather information and opinions from persons who represent the broad interests of the community served by the hospital. Twelve surveys were completed in November and December, 2017. For the surveys, community stakeholders identified by AHTV were contacted and asked to participate in the needs assessment. Survey stakeholders included individuals who are leaders and representatives of medically underserved, low-income, and minority populations, or local health or other departments or agencies that have "current data or other information relevant to the health needs of the community served by the hospital facility." Input was obtained from the Kern County Department of Public Health.

The identified stakeholders were invited by email to participate in the survey. The survey was available in an electronic format through a Survey Monkey link. An introduction to the survey questions explained the purpose of the survey and assured participants the survey was voluntary, and their responses would remain confidential. A list of the stakeholder survey respondents, their titles and organizations can be found in Attachment 1.

### **Public Comment**

In compliance with IRS regulations 501(r) for charitable hospitals, a hospital Community Health Needs Assessment (CHNA) and Implementation Strategy are to be made widely available to the public and public comment is to be solicited. The previous Community Health Needs Assessment and Implementation Strategy were made widely available to the public on the website <u>https://www.adventisthealth.org/tehachapivalley/pages/aboutus/community-benefits.aspx</u>. Public comment was solicited on the reports, however, to date, no written comments have been received.

### **Identification of Significant Health Needs**

#### **Review of Primary and Secondary Data**

Initially, significant health needs were identified through a review of the secondary health data collected and analyzed prior to the interviews and the survey. Health needs were identified from the 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 need indicators 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 of these 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. The primary data collection process was designed to validate secondary data findings, identify additional community issues, solicit information on disparities among subpopulations, ascertain community assets to address needs and discover gaps in resources.

#### **Significant Health Needs**

The following significant health needs were determined:

- Access to Health Care
- Asthma
- Cancer
- Cardiovascular Disease
- Dental Care
- Diabetes
- Environmental Health (air quality and water safety)
- Lung Disease
- Maternal and Infant Health
- Mental Health
- Overweight and Obesity
- Sexually Transmitted Infections
- Substance Abuse

Analysis of the primary data occurred through a process that compared and combined responses to identify themes. Primary data findings were used to corroborate the secondary data-defined health needs, serving as a confirming data source. The responses are included in Attachment 2.

### **Resources to Address Significant Needs**

Through the interview process, community stakeholders identified community resources to address the significant health needs. The identified community resources are presented in Attachment 3.

### **Priority Health Needs**

The identified significant health needs were prioritized with input from the community. Community stakeholder surveys were used to gather input on the significant health needs. The following criteria were used to prioritize the health needs:

- The perceived severity of a health issue or health factor/driver as it affects the health and lives of those in the community;
- The level of importance the hospital should place on addressing the issue.

The stakeholders were asked to rank each identified health need. The percentage of responses were noted as those that identified the need as having severe or very severe impact on the community, had worsened over time, and had a shortage or absence of resources available in the community. Not all survey respondents answered every question, therefore, the response percentages were calculated based on respondents only and not on the entire sample size. Among the respondents, cancer, mental health and substance abuse had the highest scores for severe impact on the community. Substance abuse, overweight and obesity, and STIs had the highest rankings for worsened over time with the survey participants. Cancer, substance abuse, and mental health were rated highest on insufficient resources available to address the need among the survey participants.

Significant Health Needs	Severe and Very Severe Impact on the Community	Worsened Over Time	Insufficient or Absent Resources
Access to Health Care	54.6%	9.1%	81.8%
Asthma	20.0%	25.0%	66.7%
Cancer	80.0%	30.0%	100%
Cardiovascular Disease	33.3%	22.2%	77.8%
Dental Care	0%	11.1%	20.0%
Diabetes	50.0%	40.0%	50.0%
Environmental Health (air quality and water safety)	22.2%	14.3%	0%
Lung Disease	16.7%	16.7%	33.3%
Maternal and Infant Health	55.6%	44.4%	77.8%
Mental Health	66.7%	37.5%	87.5%
Overweight and Obesity	50.0%	50.0%	57.1%
Sexually Transmitted Infections	16.7%	50.0%	50.0%
Substance Abuse	60.0%	70.0%	100%

#### Significant Health Needs Ranked by Importance Score

The stakeholders were also asked to rank order the health needs according to highest level of importance in the community. The total score for each significant health need (possible score of 4) was divided by the total number of responses for which data were provided, resulting in an overall average for each health need. Survey participants ranked access to care, cancer, and cardiovascular disease as the top priority needs in the service area. Calculations from community stakeholders resulted in the following prioritization of the significant health needs:

Significant Health Needs	Priority Ranking (Total Possible Score of 4)
Access to Health Care	3.75
Cancer	3.75
Cardiovascular Disease	3.73
Mental Health	3.64
Diabetes	3.60
Substance Abuse	3.58
Asthma	3.25
Lung Disease	3.10
Sexually Transmitted Infections	3.09
Overweight and Obesity	3.00
Dental Care	2.73
Environmental Health (air quality and water safety)	2.50

Community input on these health needs is detailed in Attachment 2.

### Impact Evaluation

Adventist Health Tehachapi Valley Hospital developed and approved an Implementation Strategy to address significant health needs identified in the 2015 Community Health Needs Assessment. The hospital chose to address: access to community health and wellness events with emphasis on prevention, education, early detection and treatment of chronic conditions, such as: diabetes, heart disease, stroke and cancer; and free or low-cost screenings, performed in conjunction with sister hospital facilities. The following section outlines the impact made on the selected significant health needs since the change in operations of the hospital to Adventist Health in November 2016.

- The hospital provided financial assistance through free and discounted care for health care services, consistent with Adventist Health's financial assistance policy.
- In 2017, the hospital provided a flu shot clinic that was free and open to the public.
- The hospital provided a cash contribution to the Tehachapi Farmers Market to encourage access to nutritious, wholesome produce. Hospital representatives

distributed health information to the public at the Farmers Market events.

- The hospital also supported the Tehachapi Health & Senior Resource Fair, offering low cost lab tests and screening services. This included low-cost blood tests for prostate cancer and low-cost mammograms.
- Adventist Health Tehachapi Valley financially supported the American Cancer Society Relay for Life Event. The donation helped fund groundbreaking cancer research and patient care programs. Hospital representatives distributed health information to raise cancer awareness.

### **Demographics**

#### Population

A total of 82,096 people live in the 1,822 square mile land area served by Adventist Health Tehachapi Valley Hospital (AHTV). The population density for the area is estimated at 45.05 persons per square mile.

#### Population of the Service Area

	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
AHTV Service Area	82,096	1,822.49	45.05
Kern County	865,736	8,131.98	106.46
California	38,421,464	155,787.96	246.63

Source: U.S. Census Bureau, American Community Survey, 2011-2015, DP05. <u>http://factfinder.census.gov.</u> Source geography: Tract. Accessed from Community Commons. <u>http://www.communitycommons.org/</u>.

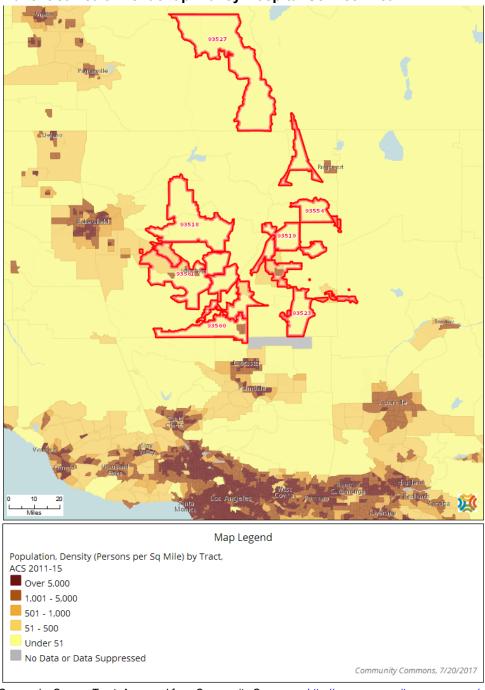
The area served by the hospital experienced a 1.3% decline in population from 2010. This was in contrast to the growth seen in the state and in Kern County of 3.1%. Areas showing the highest rate of growth have been in Johannesburg, though the overall numbers (68 and 159 individuals, respectively) were small. North Edwards, Rosamond and Boron also showed growth, while the other areas showed population declines.

	ZIP Code	Total Population, 2010 Census	Current Population Estimate	Total Population Change, 2010 to Current	Percent Population Change, 2010 to Current
Boron	93516	2,299	2,326	27	1.2%
Caliente	93518	1,146	954	-192	-16.8%
California City	93505	14,038	13,165	-873	-6.2%
Edwards AFB	93524	229	177	-52	-22.7%
Inyokern	93527	2,387	1,876	-511	-21.4%
Johannesburg	93528	172	118	-54	-31.4%
Johannesburg	93554	72	140	68	94.4%
Johannesburg	93558	125	284	159	127.2%
Keene	93531	509	363	-146	-28.7%
Mojave	93501	5,467	5,125	-342	-6.3%
Mojave	93519	101	67	-34	-33.7%
North Edwards	93523	3,074	3,469	395	12.8%
Rosamond	93560	18,910	20,209	1,299	6.9%
Tehachapi	93561	34,630	33,823	-807	-2.3%
AHTV Service Are	ea	83,159	82,096	-1,063	-1.3%
Kern County		839,631	865,736	26,105	3.1%
California	0010.0	37,253,956	38,421,464	1,167,508	3.1%

#### Population Growth by Area

Source: U.S. Census Bureau, 2010 Census, DP-1; American Community Survey, 2011-2015, DP05. http://factfinder.census.gov

#### Population Density by ZIP Code Adventist Health Tehachapi Valley Hospital Service Area



Source: by Census Tract. Accessed from Community Commons. http://www.communitycommons.org/.

Children and youth, ages 0-17 make up 24.1% of the population in the service area, which is similar to the state (23.9%) but lower than the county rate (29.6%). The service area has 9.5% young adults (18-24), 53.4% adults aged 25 to 64, and 13.0% seniors.

	AHTV Serv	vice Area	Kern County		California	
	Number	Percent	Number	Percent	Number	Percent
Age 0-4	5,582	6.8%	72,598	8.4%	2,511,776	6.5%
Age 5-17	14,189	17.3%	183,311	21.2%	6,662,567	17.3%
Age 18-24	7,801	9.5%	96,390	11.1%	3,989,263	10.4%
Age 25-44	21,007	25.6%	238,039	27.5%	10,792,267	28.1%
Age 45-64	22,869	27.9%	192,047	22.2%	9,668,271	25.2%
Age 65+	10,648	13.0%	83,351	9.6%	4,797,320	12.5%
Total	82,096	100.0%	865,736	100.0%	38,421,464	100.0%

#### Population by Age

Source: U.S. Census Bureau, American Community Survey, 2011-2015, DP05. http://factfinder.census.gov

When examined by place, North Edwards, Boron and Rosamond have the highest concentrations of children and youth in the service area. Johannesburg 93554 and Mojave 93519 have higher percentages of seniors than the county or state. Overall, the median age for the AHTV service area (37.8) is higher than in Kern County (31.1).

	ZIP Code	Ages 0-17	Ages 18-64	Ages 65+	Median Age
Boron	93516	31.7%	51.7%	16.6%	39.3
Caliente	93518	18.1%	56.9%	24.9%	52.0
California City	93505	21.0%	68.2%	10.8%	36.1
Edwards AFB	93524	0.0%	100.0%	0.0%	22.3
Inyokern	93527	17.7%	63.8%	18.6%	48.9
Johannesburg	93528	22.9%	77.1%	0.0%	30.9
Johannesburg	93554	0.0%	21.4%	78.6%	68.2
Johannesburg	93558	0.0%	71.1%	28.9%	58.2
Keene	93531	22.9%	56.7%	20.4%	53.4
Mojave	93501	24.2%	62.2%	13.5%	34.8
Mojave	93519	0.0%	40.3%	59.7%	78.7
North Edwards	93523	39.7%	56.3%	4.0%	26.2
Rosamond	93560	28.5%	61.4%	10.1%	32.6
Tehachapi	93561	21.5%	63.4%	15.0%	41.6
AHTV Service Area		24.1%	62.9%	13.0%	37.8
Kern County		29.6%	60.8%	9.6%	31.1
California		23.9%	63.6%	12.5%	35.8

#### Population by Age and ZIP Code

Source: U.S. Census Bureau, American Community Survey, 2011-2015, DP05. http://factfinder.census.gov

Seniors living alone may be isolated and lack adequate support systems. In the service area, rates of seniors living alone range from 0% in Keene and Johannesburg 93554 to 100% in Mojave.

#### Seniors Living Alone

	ZIP Code	Percent
Boron	93516	29.5%
Caliente	93518	31.1%
California City	93505	21.4%
Edwards AFB	93524	No Data
Inyokern	93527	36.5%
Johannesburg	93528	No Data
Johannesburg	93554	0%
Johannesburg	93558	8.5%
Keene	93531	0%
Mojave	93501	31.9%
Mojave*	93519	100%
North Edwards	93523	25.0%
Rosamond	93560	21.5%
Tehachapi	93561	23.5%
Kern County	22.8%	
California		23.3%

Source: U.S. Census Bureau, American Community Survey, 2011-2015. Accessed from Healthy Kern County,<u>www.healthykern.org</u>. \* Care should be taken when interpreting rates for a ZIP Code with a small population.

#### Gender

Of the service area population, 54.4% are male and 45.6% are female.

#### **Population by Gender**

	AHTV Service Area	Kern County	California
Male	54.4%	51.3%	49.7%
Female	45.6%	48.7%	50.3%

Source: U.S. Census Bureau, American Community Survey, 2011-2015, DP05. http://factfinder.census.gov

#### **Race/Ethnicity**

The service area population is primarily White (57.5%). More than one-fourth of the population (27.6%) is Hispanic or Latino. Black or African Americans represent 8.5% of the population, and Asians 2.2%. The area has a larger percentage of Whites and a smaller percentage of Hispanics or Latinos than Kern County or California.

#### Race/Ethnicity

	AHTV Service Area		Kern County		California	
	Number	Percent	Number	Percent	Number	Percent
White	47,205	57.5%	317,048	36.6%	14,879,258	38.7%
Hispanic or Latino	22,646	27.6%	441,496	51.0%	14,750,686	38.4%
Black or African American	7,010	8.5%	46,058	5.3%	2,160,795	5.6%
Other or Multiple	2,917	3.6%	17,086	2.0%	1,156,977	3.0%
Asian	1,809	2.2%	38,202	4.4%	5,192,548	13.5%
American Indian Alaskan Native	348	0.4%	4,846	0.6%	142,191	0.4%
Native Hawaiian Pacific Islander	161	0.2%	1,000	0.1%	139,009	0.4%

Source: U.S. Census Bureau, American Community Survey, 2011-2015, DP05. <u>http://factfinder.census.gov</u>

The populations of Rosamond and Mojave 93501 are more than one-third Hispanic or Latino. Edwards AFB (19.2%) and California City (19%) have the highest percentage of Black or African Americans in the service area. Johannesburg 93528 (22.9%) and Edwards AFB (17.5%) have the highest percentage of Asians in the service area.

#### Population by Race and Ethnicity and ZIP Code

	ZIP Code	Asian	Black	Latino	White
Boron	93516	2.8%	13.1%	16.7%	62.5%
Caliente	93518	0.0%	0.0%	10.3%	81.9%
California City	93505	3.0%	19.0%	29.8%	43.9%
Edwards AFB	93524	17.5%	19.2%	5.1%	52.0%
Inyokern	93527	1.7%	1.0%	4.4%	90.6%
Johannesburg	93528	22.9%	0.0%	0.0%	77.1%
Johannesburg	93554	0.0%	0.0%	27.1%	72.9%
Johannesburg	93558	0.0%	0.0%	7.7%	92.3%
Keene	93531	0.0%	0.0%	0.0%	92.0%
Mojave	93501	0.2%	9.2%	49.8%	37.9%
Mojave*	93519	0.0%	0.0%	0.0%	100.0%
North Edwards	93523	1.1%	9.5%	7.5%	75.4%
Rosamond	93560	3.5%	10.6%	35.7%	44.0%
Tehachapi	93561	1.5%	3.5%	23.8%	68.3%
AHTV Service Area		2.2%	8.5%	27.6%	57.5%
Kern County		4.4%	5.3%	51.0%	36.6%
California		13.5%	5.6%	38.4%	38.7%

Source: U.S. Census Bureau, American Community Survey, 2011-2015, DP05. <u>http://factfinder.census.gov</u>

\* Care should be taken when interpreting rates for a ZIP Code with a small population.

#### Language

In the hospital service area, 78.9% of residents speak English only. Spanish is spoken in 18.0% of homes. Other languages are spoken in 2.2% of households.

	AHTV Service Area	Kern County	California
Speaks only English	78.9%	56.5%	56.1%
Speaks Spanish	18.0%	38.6%	28.8%
Speaks Asian/PI language	1.9%	2.6%	9.7%
Speaks other Indo-European language	0.1%	1.7%	4.4%
Speaks other language	0.2%	0.6%	1.0%

#### Language Spoken at Home, Population 5 Years and Older

Source: U.S. Census Bureau, American Community Survey, 2011-2015, DP02. http://factfinder.census.gov

Mojave 93501 (35.4%), Rosamond (24.7%) and California City (19.4%) have the highest rates of Spanish speakers. In the Edwards AFB area, 15.3% of the population speaks an Asian/Pacific Islander language in the home.

#### Language Spoken at Home by ZIP Code

	ZIP Code	English	Spanish	Asian/PI	Other Language
Boron	93516	86.4%	11.5%	1.8%	0.4%
Caliente	93518	88.1%	6.1%	0.2%	5.6%
California City	93505	77.5%	19.4%	2.8%	0.3%
Edwards AFB	93524	81.4%	2.3%	15.3%	1.1%
Inyokern	93527	94.6%	0.3%	0.0%	5.1%
Johannesburg	93528	100.0%	0.0%	0.0%	0.0%
Johannesburg	93554	100.0%	0.0%	0.0%	0.0%
Johannesburg	93558	100.0%	0.0%	0.0%	0.0%
Keene	93531	99.4%	0.0%	0.0%	0.6%
Mojave	93501	62.1%	35.4%	0.0%	2.5%
Mojave*	93519	100.0%	0.0%	0.0%	0.0%
North Edwards	93523	95.6%	2.1%	0.4%	1.9%
Rosamond	93560	71.2%	24.7%	3.1%	1.1%
Tehachapi	93561	82.6%	14.8%	1.4%	1.2%
AHTV Service Area		78.9%	18.0%	1.9%	1.2%
Kern County		56.5%	38.6%	2.6%	2.2%
California		56.1%	28.8%	9.7%	5.4%

Source: U.S. Census Bureau, American Community Survey, 2011-2015, DP02. <u>http://factfinder.census.gov</u> \* Care should be taken when interpreting rates for a ZIP Code with a small population.

The California Department of Education publishes rates of "English Learners," defined as the percentage of students whose primary language is not English and who lack

sufficient English language skills necessary for academic success. In the Tehachapi Unified School District, 302 students (6.9%), were classified English Learners.

#### English Learners (EL)

	Number	Percentage
Tehachapi Unified School District	302	6.9%
Kern County	38,825	21.0%
California	1,332,405	21.4%

Source: California Department of Education DataQuest, 2014-2015. http://dg.cde.ca.gov/dataguest/

#### Veterans

In the hospital service area, 13.0% of the civilian population, 18 years and older, are veterans.

#### **Veteran Status**

	AHTV Service Area	Kern County	California	
Veteran status	13.0%	6.7%	6.1%	
Source: U.S. Census Bureau, American Community Survey, 2011-2015, DP02, http://factfinder.census.gov				

Source: U.S. Census Bureau, American Community Survey, 2011-2015, DP02. <u>I</u>

#### Citizenship

In the hospital service area, 9.7% of the population is foreign born. Of the foreign born, 51.6% are not citizens.

#### **Foreign Born Residents and Citizenship**

	AHTV Service Area	Kern County	California
Foreign born	9.7%	20.3%	27.0%
Not a U.S. citizen	51.6%	67.6%	51.5%

Source: U.S. Census Bureau, American Community Survey, 2011-2015, DP02. http://factfinder.census.gov

### Social, Economic and Environmental Factors

#### Social and Economic Factors Ranking

The County Health Rankings rank counties according to health factors data. Social and economic indicators are examined as a contributor to the health of a county's residents. California's 57 evaluated counties (Alpine excluded) are ranked according to social and economic factors with 1 being the county with the best factors to 57 for that county with the poorest factors. This ranking examines: unemployment, high school graduation rates, children in poverty, social support, and others. Kern County is ranked 51, in the bottom 20% of all California counties on social and economic factors.

#### Social and Economic Factors Ranking, 2017

	County Ranking (out of 57)		
Kern County	51		
Source: County Health Rankings, 2017. www.countyhealthrankings.org/app/california/2017/rankings/factors/4			

#### Poverty

Poverty thresholds are used for calculating all official poverty population statistics. They are updated each year by the Census Bureau. For 2015, the Federal Poverty Level for one person was \$11,770 and for a family of four \$24,250. Among the residents in the AHTV service area, 18.4% are at or below 100% of the federal poverty level (FPL) and 39.3% are low-income (200% of FPL or below). Poverty rates are lower than Kern County but higher than California. Caliente, Boron and Mojave 93501 have approximately one-third of their residents at or below poverty level, and a high percentage of low-income residents; Johannesburg 93528 and 93554 also have high rates of low-income residents.

	ZIP Code	Below 100% Poverty	Below 200% Poverty
Boron	93516	33.4%	61.1%
Caliente	93518	35.1%	55.6%
California City	93505	22.9%	43.0%
Edwards AFB	93524	N/A	N/A
Inyokern	93527	13.3%	25.3%
Johannesburg	93528	0.0%	100.0%
Johannesburg	93554	10.7%	70.0%
Johannesburg	93558	9.2%	36.3%
Keene	93531	24.5%	24.5%
Mojave	93501	32.9%	59.0%
Mojave*	93519	0.0%	46.3%
North Edwards	93523	16.9%	40.0%

#### Ratio of Income to Poverty Level

	ZIP Code	Below 100% Poverty	Below 200% Poverty
Rosamond	93560	18.5%	44.6%
Tehachapi	93561	12.8%	29.1%
AHTV Service Area		18.4%	39.3%
Kern County		23.5%	48.2%
California		16.3%	36.1%

Source: U.S. Census Bureau, American Community Survey, 2011-2015, S1701. <u>http://factfinder.census.gov</u> \* Care should be taken when interpreting rates for a ZIP Code with a small population.

In Caliente, Keene and Boron more than 50% of the children are living in poverty. Among service area seniors, 7.4% are living in poverty. In Caliente 17.6% of seniors are living in poverty. Among Females who are Head of Household (HoH) with children, high rates of poverty exist in North Edwards (52%) and Mojave 93501 (48.8%). Some rates are not provided for smaller geographies due to low counts and/or high margins of error that make rates unstable.

#### Poverty Levels of Children, Seniors, and Female Head of Household with Children

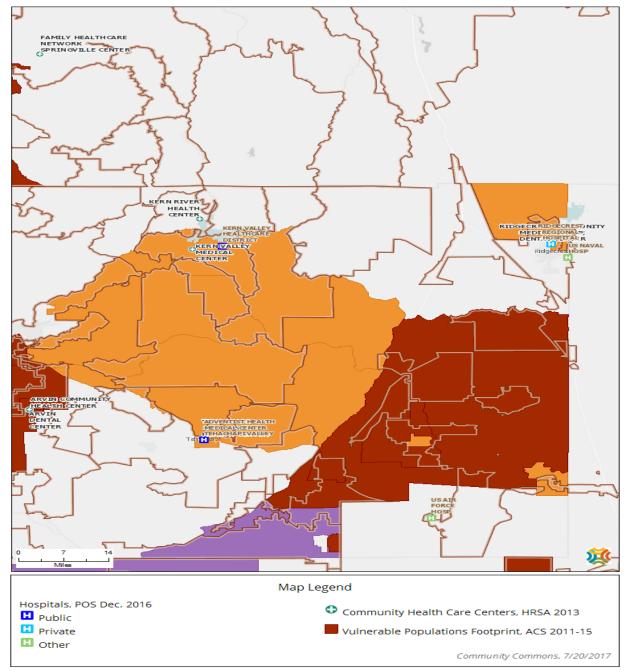
	ZIP Code	Children Under 18 Years Old	Seniors	Female HoH with Children
Boron	93516	50.4%	11.9%	43.0%
Caliente	93518	62.4%	17.6%	31.8%
California City	93505	35.6%	11.2%	41.3%
Edwards AFB	93524	N/A	N/A	N/A
Inyokern	93527	37.0%	3.7%	0.0%
Johannesburg	93528	0.0%	N/A	N/A
Johannesburg	93554	N/A	0.0%	N/A
Johannesburg	93558	N/A	8.5%	0.0%
Keene	93531	59.0%	0.0%	N/A
Mojave	93501	43.0%	15.6%	48.8%
Mojave*	93519	N/A	0.0%	N/A
North Edwards	93523	22.9%	14.3%	52.0%
Rosamond	93560	28.7%	3.3%	34.3%
Tehachapi	93561	19.2%	6.4%	22.9%
AHTV Service Area		28.0%	7.4%	33.1%
Kern County		33.0%	11.1%	43.5%
California		22.5%	10.3%	27.9%

Source: U.S. Census Bureau, American Community Survey, 2011-2015, S1702. <u>http://factfinder.census.gov</u>

 $^{\ast}$  Care should be taken when interpreting rates for a ZIP Code with a small population.

#### Vulnerable Populations

When vulnerable populations in the area are mapped, a picture of poverty emerges. The map below shows the hospital service area and surrounding areas, highlighting the percentage of each subarea that has more than 20% of the population living in poverty and more than 20% of the population with low education levels, defined as less than a high school education. Areas that exceed the vulnerable threshold for low education alone are displayed in lavender. Areas that exceed the threshold for poverty alone are in tan. Areas with high rates of poverty and low education rates are shown in brown. Higher rates of vulnerable populations are found in much of the eastern part of the service area (e.g., Mojave, California City and parts of Johannesburg and North Edwards). Western portions of the service area have higher rates of education but high rates of poverty remain.



**Vulnerable Populations in the Hospital Service Area** 

Source: by Census Tract. Accessed from Community Commons, <u>www.communitycommons.org/</u>. **Households** 

The median household income in the area ranges from \$24,938 in Johannesburg 93558 to \$70,956 in the Keene area. Some rates are not provided for smaller geographies due to low counts and/or high margins of error that make rates unstable.

#### Median Household Income

	ZIP Code	Median Household Income
Boron	93516	\$28,750
Caliente	93518	\$28,661
California City	93505	\$54,328
Edwards AFB	93524	N/A
Inyokern	93527	\$67,675
Johannesburg	93528	N/A
Johannesburg	93554	\$26,842
Johannesburg	93558	\$24,938
Keene	93531	\$70,956
Mojave	93501	\$35,922
Mojave	93519	\$27,674
North Edwards	93523	\$52,892
Rosamond	93560	\$55,618
Tehachapi	93561	\$61,614
AHTV Service Area		\$55,201
Kern County		\$49,026
California		\$61,818

Source: U.S. Census Bureau, American Community Survey, 2011-2015, DP03. http://factfinder.census.gov

In the service area, there are 27,324 households, 40% of which are in Tehachapi. Occupancy rates are lower than county and state averages.

#### Household Size

	AHTV Service Area	Kern County	California
1 person households	23.0%	19.5%	24.1%
2 person households	36.2%	28.3%	30.1%
3 person households	14.8%	16.2%	16.5%
4+ person households	26.1%	35.9%	29.3%

Source: U.S. Census Bureau, American Community Survey, 2011-2015, S2501. http://factfinder.census.gov

In the hospital service area, 7.2% of residents receive SSI benefits, 4.9% receive cash public assistance income and, 12.3% of residents receive food stamp benefits.

#### **Household Supportive Benefits**

	AHTV Service Area	Kern County	California
Total households	27,324	259,700	12,717,801
Supplemental Security Income (SSI)	7.2%	7.9%	6.2%
Public Assistance	4.9%	6.9%	3.9%
Food Stamps/SNAP	12.3%	16.5%	9.2%

Source: U.S. Census Bureau, American Community Survey, 2011-2015, DP03. http://factfinder.census.gov

#### Free and Reduced Price Meals

The number of students eligible for the free and reduced price lunch program is one indicator of the socioeconomic status of a school district's student population. In the Tehachapi Unified School District 39.4% of students are eligible for the program. This is an average among the district's school enrollments. Within the district are a number of schools with higher and lower rates of eligible low-income children.

#### Students Eligible for the Free and Reduced-Price Meals Program

1,666	39.4%
130,071	71.7%
3,665,445	58.9%
	130,071

Source: California Department of Education DataQuest, 2015-2016. http://dq.cde.ca.gov/dataquest/

#### Unemployment

Recent unemployment rates range from a low of 4.8% in Inyokern, to a high of 20.9% in California City and 22.7% in Boron. The unemployment rate for Kern County (10.2%) is above the state rate of 6.2% for 2015.

	Labor Force	Unemployment Rate
Boron	800	22.7%
Caliente*	N/A	N/A
California City	5,900	20.9%
Edwards AFB	400	17.7%
Inyokern	400	4.8%
Johannesburg*	0	N/A
Keene	200	14.8%
Mojave	1,700	18.4%
North Edwards	400	6.2%
Rosamond	9,300	8.5%
Tehachapi	4,000	7.8%
Kern County	393,800	10.2%
California	18,893,200	6.2%

#### Unemployment Rates, 2015 Average

Source: California Employment Development Department, Labor Market Information, 2014. <u>http://www.labormarketinfo.edd.ca.gov</u> \* Unemployment rates were unavailable for Caliente, and Johannesburg showed a labor force of zero.

#### **Educational Attainment**

Among area adults, 29.1% are high school graduates and 24.6% are college graduates (Associate through Graduate level).

	AHTV Service Area	Kern County	California
Population 25 years and older	54,524	513,437	25,257,858
Less than 9 <sup>th</sup> grade	6.1%	14.3%	10.0%
Some High School, no diploma	11.1%	12.2%	8.2%
High School graduate	29.1%	27.3%	20.7%
Some college, no degree	29.1%	23.6%	21.8%
Associate degree	9.8%	7.2%	7.8%
Bachelor degree	9.4%	10.3%	19.8%
Graduate or professional degree	5.4%	5.1%	11.6%

#### Educational Attainment of Adults, 25 Years and Older

Source: U.S. Census Bureau, American Community Survey, 2011-2015, S1501. http://factfinder.census.gov

17.2% of the service area population, age 25 and older, does not have a high school diploma, which is below the county (26.6%) and state (18.2%) averages.

#### Population, 25 Years and Older, with No High School Diploma

AHTV Service Area	Kern County	California
17.2%	26.6%	18.2%

Source: U.S. Census Bureau, American Community Survey, 2011-2015, S1501. <u>http://factfinder.census.gov</u>

High school graduation rates are the percentage of high school graduates that graduate four years after starting ninth grade. In Kern County, the high school graduation rate is 82.5%. The county rate does not meet the Healthy People 2020 Objective for high school graduation of 87%.

#### **High School Graduation Rate**

Kern County	California
82.5%	82.3%

Source: California Department of Education, 2014-2015, accessed from Healthy Kern County, www.healthykern.org

#### Homelessness

The Kern County Homeless Collaborative conducts an annual 'point-in-time' count of homelessness in Rural Kern County. The majority of the homeless (78.6%) are unsheltered. Of the 22 who were sheltered, 19 were in Ridgecrest and 3 were in Taft/Maricopa. Despite a downward trend in homelessness in recent years, there was a spike in homelessness, from 2015 to 2016, in rural Kern County (7.3%), and across the county (12%).

Among children, 1.5% of Tehachapi Unified School District students, and 4.2% of public school enrollees in Kern County, were recorded as being homeless at some point during the 2013-2014 school year, according to the California Department of Education (*Source: kidsdata.org, January 2015*).

#### Homeless Annual Count, Rural Kern County, 2015 and 2016

Year of Count	Total Homeless	Sheltered	Unsheltered
2015	96	N/A	N/A
2016	103	21.4%	78.6%

Source: Kern County Homeless Collaborative, 2016. http://www.kernhomeless.org/

#### **Crime and Violence**

Violent crimes include homicide, rape, robbery and assault, while property crimes include burglary, larceny and motor vehicle theft. Of the service area cities, crime statistics were only provided for California City and Tehachapi.

#### Violent Crimes, per 100,000 Persons, 2015

	Violent Crimes		Property Crimes	
	Number	Rate *	Number	Rate *
California City	121	N/A	516	N/A
Tehachapi	44	N/A	338	N/A
Kern County	4,908	558.8	30,342	3,454.4
California	166,588	426.4	1,023,828	2,620.4

Source: California Department of Justice, Office of the Attorney General, 2015. https://oag.ca.gov/crime

\* Only state rates state were provided by the CA DOJ; rates for the county were calculated based on CA DOJ's 2014 report of county populations (2015 not yet provided), and city populations covered by the data were not reported.

Calls for domestic violence are categorized as with or without a weapon. 30.2% of domestic violence calls in California City involved a weapon, which is higher than found in Tehachapi (21.1%), and the county (14.8%).

#### **Domestic Violence Calls, 2015**

	Total	Without Weapon	With Weapon
California City	126	69.8%	30.2%
Tehachapi	71	78.9%	21.1%
Kern County	4,881	85.2%	14.8%
California	162,302	57.7%	42.3%

Source: California Department of Justice, Office of the Attorney General, 2015. https://oag.ca.gov/crime

In Kern County the rate of children under 18 years of age, who experienced abuse or neglect was 12.9 per 1,000 children. This is higher than the state rate of 7.8 per 1,000 children. These rates are based on children with a substantiated maltreatment allegation.

#### Substantiated Child Abuse Rates, Cases per 1,000 Children

Kern County	California
12.9	7.8

Source: Child Welfare Dynamic Report System, 2016. Accessed from Healthy Kern County at www.healthykern.org.

#### Air, Water and Climate Indicators

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. <u>http://iaspub.epa.gov/triexplorer/tri\_release.geography</u>

#### 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 high rates of Valley Fever. Rates of Valley Fever in Kern County have begun to rise after four years of decreasing rates: from a 15-year high of 300.9 per 100,000 persons in 2011 to 103.8 in 2014, and up to 120.3 for 2015.

#### Valley Fever, Cases and Rates, per 100,000 Persons, 2011 - 2015

	20	11	201	12	20	13	20	14	20	15
	Cases	Rates								
Kern County	2,567	300.9	1,858	216.0	1,656	190.4	912	103.8	1,076	120.3
California	5,219	13.9	4,156	11.0	3,325	8.7	2,293	5.9	3,064	7.9

Source: California Department of Public Health, Center for Infectious Disease, Yearly Summaries of Selected General Communicable Diseases in California, 2011 – 2015.

https://archive.cdph.ca.gov/data/statistics/Documents/YearlySummaryReportsofSelectedGeneralCommDiseasesinCA2011-2015.pdf

### **Health Access**

#### Health Insurance

Health insurance coverage is considered a key component to accessing health care. 92.0% of Kern residents are insured.

#### Insurance Coverage for Adults, Teens and Children

	Insured	Uninsured
Kern County	92.0%	8.0%
California	91.6%	8.4%

Source: California Health Interview Survey, 2015. http://ask.chis.ucla.edu/AskCHIS/

In Kern County, Medi-Cal (Medicaid) is the highest percentage of insurance coverage in the county (38.2%). employment-based insurance is available for 38.1% of the population.

#### Insurance Coverage by Type of Coverage

	Kern County	California
Medi-Cal	38.2%	27.0%
Employment-based	38.1%	43.0%
Medicare + Medi-Cal	5.2%	4.1%
Medicare Only	4.3%	4.8%
Medicare + Others	3.1%	4.3%
Private insurance	2.3%	6.1%
Other public	0.3%	1.4%
No insurance	8.0%	8.4%

Source: California Health Interview Survey, 2015. http://ask.chis.ucla.edu/AskCHIS/. Tally differences across tables due to rounding.

The American Community Survey provides rates of insurance coverage at the ZIP Code level. The rate of insured in the service area is 88.2%. Johannesburg 93558 has the highest percentage of uninsured (27.8%), though the estimated number of uninsured individuals is low in that ZIP Code (79 persons) The number of uninsured persons is estimated to be 3,071 in Rosamond and 2,778 in Tehachapi.

#### ZIP Code Insured Uninsured **Number Uninsured** 93516 Boron 91.9% 8.1% 93518 10.5% Caliente 89.5% California City 93505 87.6% 12.4% Edwards AFB 93524 N/A N/A Inyokern 93527 97.7% 2.3% 93528 0.0% Johannesburg 100.0% 93554 Johannesburg 100.0% 0.0%

#### **Insurance Coverage for Civilian Population**

187

100

44

0

0

1,434 N/A

	ZIP Code	Insured	Uninsured	Number Uninsured
Johannesburg	93558	72.2%	27.8%	79
Keene	93531	85.4%	14.6%	53
Mojave	93501	81.8%	18.2%	935
Mojave*	93519	100.0%	0.0%	0
North Edwards	93523	95.5%	4.5%	137
Rosamond	93560	84.7%	15.3%	3,071
Tehachapi	93561	90.4%	9.6%	2,778
AHTV Service Area		88.2%	11.8%	8,818
Kern County		84.0%	16.0%	133,703
California		85.3%	14.7%	5,573,845

Source: U.S. Census Bureau, American Community Survey, 2011-2015, S2701. <u>http://factfinder.census.gov</u> \* Care should be taken when interpreting rates for a ZIP Code with a small population.

For children, the rate of insurance coverage in the service area is 94.0%. Keene has the lowest rate of insurance coverage (55.4%) in the service area, though the estimated number of children uninsured (37) is low. Rosamond has the highest number of uninsured children (468).

	ZIP Code	Insured	Uninsured	Number Uninsured
Boron	93516	94.8%	5.2%	38
Caliente	93518	100.0%	0.0%	0
California City	93505	97.2%	2.8%	78
Edwards AFB	93524	N/A	N/A	N/A
Inyokern	93527	100.0%	0.0%	0
Johannesburg	93528	100.0%	0.0%	0
Johannesburg	93554	100.0%	0.0%	0
Johannesburg	93558	100.0%	0.0%	0
Keene	93531	55.4%	44.6%	37
Mojave	93501	89.9%	10.1%	125
Mojave	93519	N/A	N/A	N/A
North Edwards	93523	95.0%	5.0%	69
Rosamond	93560	91.9%	8.1%	468
Tehachapi	93561	94.8%	5.2%	376
AHTV Service Area	a	94.0%	6.0%	1,191
Kern County		93.3%	6.7%	17,017
California		93.6%	6.4%	585,022

#### Insurance Coverage for Children, 0-17

Source: U.S. Census Bureau, American Community Survey, 2011-2015, S2701. http://factfinder.census.gov

Among adults in the service area, 83.2% are insured. The lowest rates of insured are for Johannesburg 93558 (60.9%) and Mojave 93501 (74.6%). The highest number of uninsured individuals is seen in Rosamond (2,484).

	ZIP Code	Insured	Uninsured	Number Uninsured
Boron	93516	87.5%	12.5%	149
Caliente	93518	82.3%	17.7%	96
California City	93505	81.6%	18.4%	1,356
Edwards AFB	93524	N/A	N/A	N/A
Inyokern	93527	96.3%	3.7%	44
Johannesburg	93528	100.0%	0.0%	0
Johannesburg	93554	100.0%	0.0%	0
Johannesburg	93558	60.9%	39.1%	79
Keene	93531	92.2%	7.8%	16
Mojave	93501	74.6%	25.4%	810
Mojave	93519	100.0%	0.0%	0
North Edwards	93523	95.5%	4.5%	68
Rosamond	93560	79.8%	20.2%	2,484
Tehachapi	93561	85.7%	14.3%	2,398
AHTV Service Area		83.2%	16.8%	7,500
Kern County		76.9%	23.1%	115,127
California		79.6%	20.4%	4,914,155

#### Insurance Coverage for Adults, 18-64

Source: U.S. Census Bureau, American Community Survey, 2011-2015, S2701. <u>http://factfinder.census.gov</u>

#### 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. In Kern County 84% of residents reported a regular source for medical care, lower than the Healthy People 2020 benchmark of 89.4%. Clinics and community hospitals are the source of care for 25.9% in Kern County.

#### Sources of Care

	Kern County	California
Dr. Office/HMO/Kaiser Permanente	56.7%	58.8%
Community clinic/Government clinic/ Community hospital	25.9%	24.5%
ER/Urgent care	0.8%	1.8%
Other place / No one place	0.6%	0.9%
No usual source of care	16.0%	14.0%

Source: California Health Interview Survey, 2015. http://ask.chis.ucla.edu/AskCHIS/

Accessing health care can be affected by the number of providers in a community. According to the 2017 County Health Rankings, Kern County ranks 52 out of 57 ranked California counties for clinical care, which includes ratios of population-to-care providers and preventive screening practices, among others. The ratio of county population to health care providers shows fewer primary care physicians, dentists, and mental health providers for its population when compared to California.

All regions in the AHTV service area, like most of Kern County, are designated as a Primary Care Shortage Area (PCSA) and a Registered Nurse Shortage Area (RHSA) by the California Healthcare Workforce Policy Commission. The criteria for the PCSA designation are percent of population below 100% poverty level and primary care physician-to-population ratio. The RHSA designation is based on the ratio of patients to nurse availability in facilities where they are employed (not shown). All of Kern County is designated as an RHSA with a ratio of patients to nurses of 59.1 to 1 (Source: OSHPD, 2017 <a href="http://gis.oshpd.ca.gov/atlas/topics/shortage/rnsa">http://gis.oshpd.ca.gov/atlas/topics/shortage/rnsa</a>).

#### **Ratio of Population to Health Care Providers**

	Kern County	California
Primary Care Physicians	2,043:1	1,280:1
Dentists	2,131:1	1,250:1
Mental health providers	651:1	350:1
Source: County Health Pankings, 2017, http://www.countyhealthrankings.co	ra/ann/aalifarnia/2017/maaai	ra/factora/62/data

Source: County Health Rankings, 2017. http://www.countyhealthrankings.org/app/california/2017/measure/factors/62/data

#### Use of the Emergency Room

An examination of ER use can lead to improvements in providing community-based prevention and primary care. 18.4% of Kern County residents visited an ER over the period of a year. In Kern County, seniors visit the ER at the highest rates (34.8%).

#### Use of Emergency Room

	Kern County	California
Visited ER in last 12 months	18.4%	20.2%
0-17 years old	13.6%	19.0%
18-64 years old	17.9%	19.8%
65 and older	34.8%	23.8%
<100% of poverty level	26.5%	24.5%
<200% of poverty level	19.8%	23.3%

Source: California Health Interview Survey, 2014-2015. http://ask.chis.ucla.edu/AskCHIS/

39% of the 82 hospitalization discharges at AHTV in 2016 were for a principal diagnosis of the respiratory system, making this the most common diagnosis.

#### Hospitalization Rates by Principal Diagnosis for AHTV Hospital, 2016

	Discharges	Percentage
Respiratory System	32	39.0%
Genitourinary System	10	12.2%
Digestive System	9	11.0%
Injuries / Poisonings	6	7.3%

	Discharges	Percentage
Skin Disorders	6	7.3%
Endocrine Diseases	5	6.1%
Mental Disorders	5	6.1%
Symptoms	3	3.7%
Circulatory System	2	2.4%
Infections	2	2.4%
Cancer (incl. non-cancerous growths)	1	1.2%
Nervous System	1	1.2%

Source: California Office of Statewide Health Planning & Development, 2016.

http://report.oshpd.ca.gov/?DID=PID&RID=Facility Summary Report Hospital Inpatient

AHTV Hospital reported 13,881 emergency department encounters in 2016, with 1,242 (8.9%) resulting in admission to a hospital bed (Critical Access, psychiatric, or general hospital), but only 74 (0.5%) resulting in admission to AHTV. The most-common principal diagnosis for an ED Encounter was injuries/poisonings (21.6%) followed by respiratory system (17.5%).

#### Emergency Room Rates by Principal Diagnosis for AHTV Hospital, 2016

	ED Encounters	Percentage
Injuries / Poisonings	3,001	21.6%
Respiratory System	2,429	17.5%
Symptoms	1,939	14.0%
Digestive System	992	7.2%
Nervous System (including eye and ear disorders)	965	7.0%
Genitourinary System	831	6.0%
Skin Disorders	619	4.5%
Circulatory System	553	4.0%
Mental Disorders	395	2.9%
Endocrine Diseases	338	2.4%

Source: California Office of Statewide Health Planning & Development, 2016.

http://report.oshpd.ca.gov/?DID=PID&RID=Facility Summary Report Emergency Department

Delayed care may indicate reduced access to care; 8.0% of Kern County residents reported delaying or not seeking medical care in the last 12 months; 9.1% reported delaying or not getting their prescription medication.

#### **Delay of Care**

	Kern County	California
Delayed or didn't get medical care in last 12 months	8.0%	11.5%
Delayed or didn't get prescription medicine in last 12 months	9.1%	9.6%
Source: California Health Interview Survey 2015 http://ask.chis.ucla.edu/AskCl	HIS/	

#### **Dental Care**

Lack of access to dental health care can contribute to poor health status. In Kern County, 75.8% of children, 89.8% of teens, and 79.1% of adults had been to the dentist in the past two years; 19.7% of children had never been to a dentist.

	Kern County	California
Children been to dentist less than 6 months to 2 years*	75.8%	82.1%
Children been to dentist more than 2 years to more than 5 years*	3.1%	1.1%
Children never been to dentist*	19.7%	16.8%
Teens been to dentist less than 6 months to 2 years	89.8%	94.7%
Teens been to dentist more than 2 years to more than 5 years	10.2%	3.5%
Teens never been to the dentist	None	1.8%
Adults been to dentist less than 6 months to 2 years	79.1%	79.7%
Adults been to dentist more than 2 years to more than 5 years	20.4%	18.1%
Adults never been to the dentist	0.5%	2.2%

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

Source: California Health Interview Survey, 2014 and \*2013-2015. http://ask.chis.ucla.edu

# **Birth Characteristics**

## Births

In 2012, there were 1,024 live births in the service area. The majority of births were to mothers who are White (49.4%) or Hispanic (31.0%) (*Source: California Department of Health, 2012*).

## **Teen Birth Rate**

From 2009 through 2013, teen pregnancy in the service area occurred at a rate of 100.7 per 1,000 births (or 10.1% of total births). The rate of teen pregnancy in the service area is lower than in Kern County, but higher than the California rate.

#### Births to Teenage Mothers (Under Age 20), 5-Year Totals

	Births to Teen Mothers	Live Births	Rate per 1,000 Live Births
AHTV Service Area	518	5,142	100.7
Kern County	9,267	72,236	128.3
California	196,898	2,537,798	77.6

Source: California Department of Public Health, 2009-2013 Master Birth Files.

https://www.cdph.ca.gov/data/statistics/Pages/BirthProfilesbyZIPCode.aspx (stored data; no longer available online).

# **Prenatal Care**

From 2009 through 2013, pregnant women in the service area entered prenatal care late - after the first trimester - at a rate of 31.5%. This is higher than state and county rates, and does not meet the Healthy People 2020 benchmark of fewer than 22.1% of women entering prenatal care after the first trimester (77.9% of women entering prenatal care in the first trimester).

#### Late Entry into Prenatal Care (After First Trimester), 5-Year Totals

	Late Entry to Prenatal Care	Live Births	Rate per 1,000 Live Births
AHTV Service Area	1,617	5,142	314.5
Kern County	17,682	72,236	244.8
California	463,386	2,537,798	182.6

Source: California Department of Public Health, 2009-2013 Master Birth Files.

https://www.cdph.ca.gov/data/statistics/Pages/BirthProfilesbyZIPCode.aspx (stored data; no longer available online).

# 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 rate of low birth weight babies of 75.5 per 1,000 live births. The rate of low birth weight in the service area (7.6%) is lower than the Healthy People 2020 objective of 7.8% of low birth weight births.

#### Low Birth Weight (Under 2,500 g), 5-Year Totals

	Low Birth Weight	Live Births	Rate per 1,000 Live Births
AHTV Service Area	388	5,142	75.5
Kern County	5,141	72,236	71.2
California	172,292	2,537,798	67.9

Source: California Department of Public Health, 2009-2013 Master Birth Files.

https://www.cdph.ca.gov/data/statistics/Pages/BirthProfilesbyZIPCode.aspx (stored data; no longer available online).

#### Infant Mortality

The infant (less than one year of age) mortality rate in in the service area is 7.4 deaths per 1,000 live births, which is higher than the county (6.3) and the state rate (4.7 deaths per 1,000 live births), as well as the Healthy People 2020 objective of 6.0 deaths per 1,000 births.

#### Infant Mortality Rate, 2009 through 2013 Combined

	Infant Deaths	Live Births	Death Rate
AHTV Service Area	38	5,142	7.4
Kern County	452	72,236	6.3
California	12,006	2,537,798	4.7

Source: California Department of Public Health, 2009-2013 Master Birth Files.

https://www.cdph.ca.gov/data/statistics/Pages/BirthProfilesbyZIPCode.aspx (stored data; no longer available online).

#### **Breast Feeding**

Breastfeeding has been proven to have considerable benefits to baby and mother. The California Department of Public Health highly recommends babies be fed only breast milk for the first six months of life. Breastfeeding rates in Kern County indicate 89.4% of new mothers use some breastfeeding and 59.4% use breastfeeding exclusively. These rates are lower than statewide levels, but exceed 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	10,168	89.4%	6,756	59.4%
California	401,018	93.9%	293,071	68.6%

Source: California Department of Public Health, In-Hospital Breastfeeding by Hospital of Occurrence, 2015. www.cdph.ca.gov/data/statistics/Pages/BreastfeedingStatistics.aspx

# **Mortality and Morbidity**

# **Mortality Rates**

Mortality is causes of death. The two leading causes of death in Kern County are cancer and heart disease.

Age-adjusted death rates eliminate the bias of age in the makeup of the populations being compared. When comparing across geographic areas, age-adjusting is typically used to control for the influence that different population age distributions might have on health event rates. Death rates are averages for the three-year period, 2013-2015. Kern County has higher rates of death than the state for all of the causes of death listed in the table below. The cause of death due to drug use in Kern County is double the rate of death (23.7 per 100,000 persons) than that found in the state (11.8). Of the 58 counties in California, Kern has the highest rate of death from diabetes, and the second-highest due to heart disease and Alzheimer's.

	Kern C	Kern County		Healthy People 2020
	Rank	Rate	Rate	Objective
All Causes	52	795.8	616.2	No Objective
Cancer	38	153.5	143.8	161.4
Heart Disease	57	133.3	93.2	103.4
Chronic Lower Respiratory Disease	51	55.3	33.3	No Objective
Unintentional Injuries	42	48.7	29.1	36.4
Alzheimer's Disease	57	46.7	32.1	No Objective
Stroke	35	35.7	34.7	34.8
Diabetes	58	34.2	20.6	No Objective
Drug Use	52	23.7	11.8	11.3
Pneumonia and Influenza	36	15.3	15.2	No Objective
Liver Disease	33	14.5	12.1	8.2
Suicide	34	13.9	10.3	10.2

#### Mortality Rates, Age-Adjusted, per 100,000 Persons, 2013-2015

Source: California Department of Public Health, 2017 County Health Status Profiles, 2013-2015. <u>https://archive.cdph.ca.gov/programs/ohir/Documents/OHIRProfiles2017.pdf</u>

The crude death rate is a ratio of the number of deaths to the entire population. The top two causes of death in the service area are heart disease and cancer, followed by chronic lower respiratory disease and unintentional injury; the rates for all four top causes are higher than the county and state rates, as are the rates for diabetes, suicide, and liver disease.

The median age of the service area is 37.8 years, which is higher than the median age of the state (35.8) and county (31.1); this is important to keep in mind when examining crude (rather than age-adjusted) death rates.

	AHTV Servi	AHTV Service Area **		California *
	Annual Average	Rate	Rate	Rate
All Causes	634	773.5	795.8	648.9
Heart Disease	172	210.0	105.8	99.0
Cancer	114	163.2	128.9	151.3
Chronic Lower Respiratory Disease	53	64.3	43.1	34.4
Unintentional Injuries	43	52.1	46.3	30.3
Alzheimer's Disease	27	32.6	32.9	34.1
Diabetes	26	32.1	27.7	21.6
Stroke	24	28.9	28.0	36.5
Suicide	19	22.8	13.2	10.6
Liver Disease	14	17.5	13.7	13.1
Pneumonia and Influenza	10	12.6	12.4	16.1

#### Leading Causes of Death, per 100,000 Persons, 2013-2015

Source: California Department of Public Health, 2013-2015. <u>https://data.chhs.ca.gov/dataset</u>, \* = California Dept. of Public Health, 2017 County Health Status Profiles, 2013-2015. <u>https://archive.cdph.ca.gov/programs/ohir/Documents/OHIRProfiles2017.pdf</u> \*\* Does not include data on the Edwards AFB zip code, which was not available.

Age-adjusted cancer death rates in Kern County exceed state rates for lung cancer, female breast cancer and prostate cancer. The death rate for colorectal cancer is less than the state rate. The rate of mortality from female breast cancer (23.1 deaths per 100,000 persons) is higher than the Healthy People 2020 goal of 20.7. The rate of deaths from prostate cancer (21.9 deaths per 100,000 persons) is slightly higher than the Healthy People 2020 goal of 20.8 deaths per 100,000 persons).

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

	Kern County		California	Healthy People 2020
	Rank	Rate	Rate	Goal
Cancer all sites	38	153.5	143.8	161.4
Lung cancer	38	35.3	30.6	45.5
Female breast cancer	48	23.1	19.8	20.7
Prostate cancer	41	21.9	19.3	21.8
Colorectal cancer	28	12.7	13.2	14.5

California Department of Public Health, 2017 County Health Status Profiles, 2013-2015. https://archive.cdph.ca.gov/programs/ohir/Documents/OHIRProfiles2017.pdf

The five-year average mortality rate for all cancer sites in Kern County was 159.3 per 100,000 persons, which is higher than the California rate. Mortality from lung and bronchus, prostate, and female breast cancers occur at the highest rates in the county, and all three mortality rates are higher than the state, as is the mortality rate for Non-Hodgkin Lymphoma.

	Kern Co	California	
	Annual Average	Rate	Rate
Cancer, all sites	1,088.4	159.3	149.0
Lung and Bronchus	267.8	39.9	33.2
Prostate (male)	60.4	23.4	19.9
Breast (female)	82.4	21.9	20.4
Colon & Rectum	90.6	13.3	13.4
Pancreas	62.2	9.0	10.3
Liver and Intrahepatic Bile Duct	47.8	6.4	7.5
Ovary (female)	23.6	6.4	7.3
Leukemia *	42.8	6.1	6.3
Non-Hodgkin Lymphoma	40.6	6.1	5.5

#### Cancer Mortality Rates, per 100,000 Persons, 2010-2014

Source: California Cancer Registry, California Department of Public Health, 2010-2014. <u>http://www.cancer-rates.info/ca/</u> \* = Myeloid & Monocytic + Lymphocytic + "Other" Leukemias

# **Health Status**

Among adults and children, 18.3% of Kern County residents reported being in fair or poor health, which is higher than the California rate.

#### Health Status, Fair or Poor Health

	Kern County	California
Persons with fair or poor health	18.3%	17.1%
Adults with fair or poor health	24.5%	20.9%

Source: California Health Interview Survey, 2013-2015. http://ask.chis.ucla.edu/AskCHIS/

# Diabetes

Diabetes is a growing health concern in the community: 8.8% of adults in Kern County report having been diagnosed with diabetes, and 10.8% report being diagnosed prediabetic.

#### **Adult Diabetes**

	Kern County	California
Diagnosed pre/borderline diabetic	10.8%	11.4%
Diagnosed with diabetes	8.8%	9.1%
Very confident to control diabetes	53.5%	57.8%
Somewhat confident	34.6%	33.6%
Not confident	11.9%	8.7%

Source: California Health Interview Survey, 2013-2015. http://ask.chis.ucla.edu/AskCHIS/

The federal Agency for Healthcare Research and Quality (AHRQ) 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 (renal, ophthalmic, or neurological manifestations, and peripheral

circulatory disorders); short-term complications (ketoacidosis, hyperosmolarity and coma); amputation; and uncontrolled diabetes. In all cases, hospitalization rates were higher for Kern County than for California, in particular for long-term and short-term complications.

	Kern County	California		
Diabetes long term complications	133.2	103.4		
Diabetes short term complications	86.9	56.5		
Lower-extremity amputation among patients with diabetes	20.2	15.5		
Uncontrolled diabetes	9.4	8.0		

#### **Diabetes Hospitalization Rates\* for Prevention Quality Indicators**

Source: California Office of Statewide Health Planning & Development, 2014. http://www.oshpd.ca.gov

\* Age-adjusted annual rates per 100,000 hospitalizations.

#### **Heart Disease**

For adults, 7.3% of Kern County residents report being diagnosed with heart disease. Among these adults, 64.6% are very confident they can manage their condition. 70.0% of Kern County residents with heart disease report having a management care plan developed by a health care professional.

#### Adult Heart Disease

	Kern County	California
Diagnosed with heart disease	7.3%	6.1%
Very confident to control condition*	64.6%	61.5%
Somewhat confident to control condition*	26.5%	33.7%
Not confident to control condition*	8.9%	4.8%
Has a management care plan	70.0%	71.3%

Source: California Health Interview Survey, 2013-2015 and 2015\*. http://ask.chis.ucla.edu/AskCHIS/

The three PQIs related to heart disease are hypertension, heart failure, and angina without procedure. In 2014, the rate of Hypertension in Kern County (36.6) and the rate of Congestive Heart Failure (378.1) were higher than the state. The rate of angina without a procedure was lower for Kern County (14.5) than California (15.9).

#### Heart Disease Hospitalization Rates\* for Prevention Quality Indicators

	Kern County	California
Hypertension	36.6	32.6
Congestive Heart Failure	378.1	289.9
Angina without procedure	14.5	15.9

Source: California Office of Statewide Health Planning & Development, 2014. <u>http://www.oshpd.ca.gov</u>

\* Age-adjusted annual rates per 100,000 hospitalizations.

# **High Blood Pressure**

A co-morbidity factor for diabetes and heart disease is hypertension (high blood pressure). In Kern County, 32.8% of adults have been diagnosed with high blood pressure, which is higher than the state rate (28.3%). The Healthy People 2020 objective is to reduce the proportion of adults with high blood pressure to 26.9%. Of those in Kern County diagnosed with high blood pressure, 69.4% say they take medication to control their hypertension.

## **High Blood Pressure**

	Kern County	California
Ever diagnosed with hypertension	32.8%	28.3%
Takes medicine for hypertension	69.4%	68.8%
Source: California Health Interview Survey, 2013-2015, http://ask.chis.ucla.edu/AskCHIS/		

Source: California Health Interview Survey, 2013-2015. http://ask.chis.ucla.edu/AskCHIS/

# Asthma

In Kern County 14.8% of the total population and 15.1% of children 0 to 17 have been diagnosed with asthma. ER visits due to asthma are 7.5% of the population in Kern County. The percent of asthmatic children in Kern County, 0 to 17, who take daily medication to control their asthma, is 17.4%. This is lower than the state rate (44.2%), which may indicate a youth population whose asthma is not adequately controlled.

#### Asthma

	Kern County	California
Diagnosed with asthma, total population	14.8%	14.6%
Diagnosed with asthma, 0-17 years old	15.1%	14.7%
ER visit in past year due to asthma, total population	7.5%	11.0%
ER visit in past year due to asthma, 0-17 years old	12.1%	17.0%
Takes daily medication to control asthma, total population	42.6%	44.8%
Takes daily medication to control asthma, 0-17 years old	17.4%	44.2%

Source: California Health Interview Survey, 2013-2015. <u>http://ask.chis.ucla.edu/AskCHIS/</u>

Two Prevention Quality Indicators (PQIs) related to asthma include Chronic Obstructive Pulmonary Disease (COPD) or asthma in older adults, and asthma in younger adults. In 2014, hospitalization rates for COPD and asthma were higher among younger and older adults in Kern County than the state.

#### Asthma Hospitalization Rates\* for Prevention Quality Indicators (PQI)

Kern County	California
505.9	296.0
28.5	25.2
	505.9

Source: California Office of Statewide Health Planning & Development, 2014. http://www.oshpd.ca.gov

\* Age-adjusted annual rates per 100,000 hospitalizations.

# Disability

Among adults in Kern County, 32.6% identify themselves as having a physical, mental or emotional disability, compared to 29.6% at the state level. 8.4% of Kern County adults could not work for at least a year due to physical or mental impairment, which is higher than the state level (6.4%).

## Population with a Disability

	Kern County	California
Adults with a disability	32.6%	29.6%
Couldn't work due to impairment	8.4%	6.4%
Courses California Llashth Internious Summer 2012		

Source: California Health Interview Survey, 2013-2015. http://ask.chis.ucla.edu/AskCHIS/

## Cancer

In Kern County, the five-year, age-adjusted cancer incidence rate is 400.3 per 100,000 persons, lower than the state rate (409.2). Lung and Bronchus cancers (52.7) occurred at higher rates than the state (44.6), as did In Situ Breast (female) cancers (20.4). Kidney and renal pelvis cancers were also higher (17.2) than at the state level. The other listed cancer sites showed lower incidence, age-adjusted, than did the state.

<b>Cancer Incidence</b>	, per 100,000 Persons,	Age-Adjusted, 2010-2014

	Kern County	California
All sites	400.3	409.2
Breast (female)	106.1	120.6
Prostate (males)	104.0	109.2
Lung and Bronchus	52.7	44.6
Colon & Rectum	36.8	37.1
Uterine ** (females)	21.6	24.6
In Situ Breast (female)	20.4	14.8
Urinary Bladder	17.2	17.8
Kidney and Renal Pelvis	17.2	14.1
Non-Hodgkin Lymphoma	16.9	18.6
Melanoma of the Skin	16.6	21.6
Thyroid	12.0	12.7
Leukemia *	11.5	12.6

Source: California Cancer Registry, Cancer Surveillance Section, Cancer Surveillance and Research Branch,

California Department of Public Health, 2010-2014. <u>http://www.cancer-rates.info/ca/</u>\* = Myeloid & Monocytic + Lymphocytic + "Other" Leukemias \*\* = Uterus, NOS + Corpus Uteri

# HIV/AIDS

In 2014 there were a total of 1,615 cases of persons living with HIV/AIDS in Kern County; 111 of those cases were newly diagnosed.

#### **HIV/AIDS**, 2014

	Newly Diagnosed Cases	Living Cases	Percent Deceased
Kern County	111	1,615	1.4%
California	5,002	126,241	1.2%

Source: California Department of Public Health, California HIV Surveillance Report, 2014. <u>https://www.cdph.ca.gov/Programs/CID/DOA/Pages/OAsre.aspx</u>

# **Sexually Transmitted Infections**

Rates of Chlamydia in Kern County are 691.9 per 100,000 persons, which is higher than the state rate; rates are highest among women 20 to 24 years of age, and second-highest among girls 15-19. The Kern County rate of Gonorrhea is 174.8 per 100,000 persons, which is also higher than the state rate of 138.9. In general, gonorrhea rates tend to be highest among men; however, for Kern County for the 15-24 age demographic, women uncharacteristically outnumber the men (533.2 vs 476.8 per 100,000).

The Primary and Secondary Syphilis rate for Kern County (18.3 per 100,000 persons) is above the state rate (12.5). These rates tend to be highest among men, particularly in the 20 to 29 age range. While men in Kern County do have higher rates of syphilis (25.3 vs 22.8 at the state level), it is the women of Kern County that are seeing significantly higher rates (22.1 cases per 100,000 for women ages 15-44 vs. a rate of 4.9 for the state). The rate for Early Latent Syphilis is the only STD among those listed, which is below state rate in Kern County (10.4 vs. 11.4); in general, it is highest among men 30 to 34. However, the rate of early latent syphilis for women in Kern County (9.1) is higher than the state rate (2.1).

	Kern County		California
	Cases	Rate	Rate
Chlamydia	6,119	691.9	486.1
Gonorrhea	1,546	174.8	138.9
Primary & Secondary Syphilis	162	18.3	12.5
Early Latent Syphilis	92	10.4	11.4

#### STI Cases, Rate per 100,000 Persons, 2015

Source: California Department of Public Health, 2015. <u>http://www.cdph.ca.gov/data/statistics/Pages/STDDataTables.aspx</u>

# **Health Behaviors**

# Health Behaviors Ranking

County Health Rankings examine healthy behaviors and ranks counties according to health behavior data. California's 57 evaluated counties (Alpine excluded) are ranked from 1 (healthiest) to 57 (least healthy) based on a number of indicators that include: adult smoking, obesity, physical inactivity, excessive drinking, sexually transmitted infections, and others. At 57, Kern County ranks at the very bottom of California counties for health behaviors.

#### Health Behaviors Ranking

	County Ranking (out of 57)	
Kern County	57	
Source: County Health Rankings, 2017. http://www.countyhealthrankings.org/app/california/2015/rankings/outcomes/overall		

## Immunization of Children

Kern County has a high rate of compliance with childhood immunizations upon entry into kindergarten (95.3%), which is higher than the state average of 92.9%. Tehachapi Unified School District, however, had a lower rate of compliance: only 89.9% of 357 kindergarteners entering in 2015 received all required immunizations.

#### Up-to-Date Immunization Rates of Children Entering Kindergarten, 2015 - 2016

	Percent
Tehachapi Unified School District	89.9%
Kern County	95.3%
California	92.9%

Source: California Department of Public Health, Immunization Branch, 2014-2015. https://chhs.data.ca.gov

#### Influenza

Among Kern County seniors, 70.9% reported having received a flu shot in the previous 12 months. These rates are slightly lower than state rates. The senior flu shot rate meets the Healthy People 2020 objective of 70% of the population to receive a flu shot, while the rate for all adults falls short.

#### Flu Vaccine, past 12 months

	Kern County	California
Received flu vaccine, 65+ years old	70.9%	71.0%
Received flu vaccine, 18+	41.9%	42.3%
Source: California Health Intenview Survey 2014 201	E http://ook.ohio.uolo.odu/AokCHIC/	

Source: California Health Interview Survey, 2014-2015. http://ask.chis.ucla.edu/AskCHIS/

## Mammograms

The Healthy People 2020 objective for mammograms is for 81% of women, 50 to 74 years old, to have a mammogram within the past two years. In Kern County, women have exceeded that objective with 88.1% obtaining mammograms.

#### Women Mammograms

	Kern County	California
Women ages 50 to 74 who reported having a mammogram in the past 2 years	88.1%	82.5%

Source: California Health Interview Survey, 2015. http://ask.chis.ucla.edu/AskCHIS/

# **Overweight and Obesity**

In Kern County, 34.1% of the adult population reported being overweight; 17.8% of teens and 23.4% of children in the county are overweight. The rate of overweight children is higher in Kern County than in California.

#### Overweight

	Kern County	California
Adult (ages 20+ years)	34.1%	36.0%
Teen (ages 12-17 years)	17.8%	17.7%
Child	23.4%	13.5%

Source: California Health Interview Survey, 2013-2015. http://ask.chis.ucla.edu/AskCHIS/

41.2% of the adults in Kern County are obese and 28.3% teens are obese; these rates are higher than state levels. The Healthy People 2020 objective for obesity among adults is 30.5% and 14.5% for teens.

#### Obese

	Kern County	California
Adult (ages 20+ years)	41.2%	27.0%
Teen (ages 12-17 years)	28.3%	15.3%

Source: California Health Interview Survey, 2013-2015. http://ask.chis.ucla.edu/AskCHIS/

When adult obesity levels are tracked over time, Kern County shows an increase in obesity that is larger than the increase reported statewide.

#### Adult Obesity, 2005 - 2014

	2005	2007	2009	2011	2013	2015	Change 2005-2015
Kern County	30.5%	29.8%	33.2%	34.0%	32.1%	38.5%	+8.0
California	21.6%	23.2%	23.0%	25.4%	25.2%	28.0%	+6.4

Source: California Health Interview Survey, 2005, 2007, 2009, 2011-2012, 2013 & 2015. http://ask.chis.ucla.edu/AskCHIS/

Adult overweight and obesity by race and ethnicity indicate high rates among Latinos (84.4%), Whites (70.5%), and African Americans (69.7%) for Kern County.

	Kern County	California
African American	69.7%	75.1%
Asian	37.9%	43.3%
Latino	84.4%	74.1%
White	70.5%	59.2%
Total adult population	75.3%	63.0%

## Adult Overweight and Obesity by Race/Ethnicity, 20+ years old

Source: California Health Interview Survey, 2013-2015. http://ask.chis.ucla.edu/AskCHIS/

The physical fitness test (PFT) for students is the FitnessGram®. One component is measurement of body composition (by skinfold measurement, BMI, or bioelectric impedance). Children who do not meet the "Healthy Fitness Zone" criteria are categorized as needing improvement or at high risk (overweight/obese). In Tehachapi Unified School District, 29.7% of 5<sup>th</sup> graders Need Improvement/Need Improvement at High Risk, for body composition; this drops to 27.8% by 9<sup>th</sup> grade.

## 5<sup>th</sup> and 9<sup>th</sup> Graders, Body Composition, Needs Improvement + High Risk

	Fifth Grade	Ninth Grade
Tehachapi Unified School District	29.7%	27.8%
Kern County	45.9%	42.2%
California	39.7%	36.2%

Source: California Department of Education Fitnessgram, 2015-2016. http://dq.cde.ca.gov/dataquest/

# **Food Insecurity**

The U.S. Department of Agriculture (USDA) defines food insecurity as limited or uncertain availability of nutritionally adequate foods or uncertain ability to acquire these foods in socially acceptable ways. Among the population in Kern County, 13.4% experienced food insecurity at some point in the past year. Among children in Kern County, 25.3% lived in households that experienced food insecurity at some point in the year.

#### **Food Insecurity**

	Kern County	California
Total population experienced food insecurity during the year	13.4%	12.5%
Children experienced food insecurity during the year	25.3%	20.7%

Source: Feeding America, 2015, accessed at Healthy Kern County, www.healthykern.org

# **Fresh Fruits and Vegetables**

29.2% of children and 22.2% of teens in Kern County were reported to consume at least five servings of fruits and vegetables in a day. 78.9% of adults in Kern County reported they could usually or always find fresh fruits and vegetables in the neighborhood.

•	•	
	Kern County	California
Children over 2 years of age who were reported eating 5 or more servings of fruit/vegetables in the past day	29.2%	32.9%
Teens who reported eating 5 or more servings of fruit/vegetables in the past day	22.2%	23.6%
Adults who reported finding fresh produce (fruits and vegetables) in the neighborhood always or usually	78.9%	86.7%
Adults who reported finding fresh produce in the neighborhood seldom or never affordable	22.7%	21.9%

#### Access to and Consumption of Fresh Fruits and Vegetables

Source: California Health Interview Survey, 2013-2015. http://ask.chis.ucla.edu/AskCHIS/

# Soda Consumption

16.0% of children in Kern County consumed at least two glasses of non-diet soda the previous day, and 7.7% consumed at least two glasses of a sugary drink other than soda the previous day. 16.8% of Kern County adults consume non-diet sodas at high rates (7 or more times per week) compared to the state average (10.8% of adults).

#### Soda or Sweetened Drink Consumption

	Kern County	California
Children and teens reported to drink at least two glasses of non-diet soda yesterday	16.0%	5.5%
Children and teens reported to drink at least two glasses sugary drinks other than soda yesterday	7.7%	7.9%
Adults who reported drinking non-diet soda at least 7 times weekly	16.8%	10.8%
Adults who reported drinking no non-diet soda weekly	48.2%	60.2%

Source: California Health Interview Survey, 2013-2015. <u>http://ask.chis.ucla.edu/AskCHIS/</u>

# **Fast Food**

In Kern County, 24.3% of children and teens, and 29.9% of adults, consume fast food three or more times a week. This rate of consumption, particularly among children and youth, is higher than the state rates.

#### Fast Food Consumption, 3 or More Times a Week

	Kern County	California
Children and Youth, 0 to 17 Years of Age	24.3%	18.4%
Adults Aged 18 – 64 Years of Age	29.9%	25.2%
Source: California Health Interview Survey, 2013-2015, http://	//ask chis ucla edu/AskCHIS/	

e: California Health Interview Survey, 2013-2015. http://asi

# **Physical Activity**

31.3% of children and 10.9% of teens in Kern County engaged in physical activity for at least one hour a day, 7 days in the past week, not including PE at school. 79.2% of children and youth visited a park, playground or open space in the last month.

	Kern County	California	
Engaged in physical activity at least one hour per day, 7 days in the past week (ages 5-11)	31.3%	28.2%	
Engaged in physical activity at least one hour per day, 7 days in the past week (ages 12-17)	10.9%	13.2%	
Visited a park, playground or open space in the last month (1-17)	79.2%	85.1%	

## Physical Activity, Children and Teens

Source: California Health Interview Survey, 2013-2015. http://ask.chis.ucla.edu/AskCHIS/

One of the components of the physical fitness test (PFT) for students is measurement of aerobic capacity through run and walk tests. Both fifth and ninth grade students in Tehachapi Unified School District outperform their peers at the county and state level.

#### 5<sup>th</sup> and 9<sup>th</sup> Grade Students, Aerobic Capacity, Healthy Fitness Zone

	Fifth Grade	Ninth Grade
Tehachapi Unified School District	69.6%	82.8%
Kern County	56.7%	65.3%
California	63.2%	63.5%

Source: California Department of Education Fitnessgram Physical Fitness Testing Results, 2015-2016. http://dg.cde.ca.gov/dataguest/

# **Mental Health and Substance Abuse**

#### Mental Health

17.5% of adults in Kern County reported needing help for emotional/mental health problems or use of alcohol or drugs in the past 12 months, a slightly higher rate than the state. Of those reporting this need, 67.4% of adults in Kern County indicated seeking but not receiving treatment, which is also a higher rate than the state. The Healthy People 2020 objective is for 72.3% of adults with a mental disorder to receive treatment (27.7% who do not receive treatment). Fewer Kern County residents than state residents report taking prescription medication for at least two weeks in the past year for an emotional or mental health issue, or seriously thinking about suicide.

#### Mental Health Indicators, Adults

	Kern County	California
Needed help for emotional/mental health problems or use of alcohol/drug	17.5%	16.8%
Needed help but did not receive treatment	67.4%	41.9%
Needed help and received treatment	32.6%	58.1%
Has taken prescription medicine at least 2 weeks for emotional/mental health issue in past year	8.8%	11.0%
Ever seriously thought about committing suicide*	7.6%	8.9%

Source: California Health Interview Survey, 2014-2015 and \*2013-2015. http://ask.chis.ucla.edu/AskCHIS/

16.3% of teens in Kern County needed help for an emotional or mental health problem within the previous year, which is lower than the state rate (19.5%). 10% of all Kern County teens surveyed received counseling in the previous year, which is lower than the state rate (11.9%).

#### Mental Health Indicators, Teens

	Kern County	California
Teens who needed help for emotional / mental health problems in past year	16.3%	19.5%
Teens who received psychological/ emotional counseling in past year	10.0%	11.9%

Source: California Health Interview Survey, 2011-2015. http://ask.chis.ucla.edu

# **Cigarette Smoking**

In Kern County, 15.2% of adults smoke cigarettes, more than the state rate (12.3%) and higher than the Healthy People 2020 objective of 12%.

#### **Cigarette Smoking, Adults**

	Kern County	California
Current smoker	15.2%	12.3%
Former smoker	18.7%	22.0%
Never smoked	66.2%	65.7%

Source: California Health Interview Survey, 2014-2015. http://ask.chis.ucla.edu/AskCHIS/

11.1% of teens in Kern County are current cigarette smokers, which is greater than the state rate of 4.3% teen smokers. 11.2% of teens in Kern County have smoked an e-cigarette.

## Cigarette Smoking, Teens Ages 13-19

	Kern County	California
Current cigarette smoker	11.1%	4.3%
Ever smoked an e-cigarette*	11.2%	9.1%

Source: California Health Interview Survey, 2011-2015 & \*2014-2015. http://ask.chis.ucla.edu/AskCHIS/

# Alcohol and Drug Use

Binge drinking is defined as consuming a certain amount of alcohol within a set period of time. For males, this is five or more drinks per occasion, and for females it is four or more drinks per occasion. Among Kern County adults, 32.9% of adults had engaged in binge drinking in the past year, which is higher than the state rate (32.3%). 5.7% of Kern County teens reported binge drinking in the previous month, which is higher than the state (3.5%).

#### Alcohol Consumption and Binge Drinking, Adult

	Kern County	California
Adults reporting binge drinking in the past year	32.9%	32.3%
Teens reporting binge drinking in the past month	5.7%	3.5%

Source: California Health Interview Survey, 2011-2015. http://ask.chis.ucla.edu/AskCHIS/

# Attachment 1. Survey Community Stakeholders

Community input was obtained from surveys from the business community, public health, representatives from organizations that represent medically underserved, low-income, or minority populations, and community residents.

Name	Title	Organization
Susan Andreas-Bervel	Superintendent	Tehachapi Unified School District
Kevin Caudle	Lead Pastor	Christian Life Assembly
Lydia Chaney	Owner	South Street Digital
Michelle Corson	Public Relations Officer	Kern County Public Health Services
Greg Garrett	City Manager	City of Tehachapi
Jeff Kermode	Police Chief	Bear Valley Police Department
Anne Marie Novinger	Member	Tehachapi Chapter of Kiwanis Int.
Paulette Rush	Community Relations Specialist	BHE Renewables
Zack Scrivner	2 <sup>nd</sup> District Supervisor	Kern County
Tim Trujillo	President	Rotary Club of Tehachapi
Claudia White	Owner/Publisher	The Loop Newspaper
Cheryl Wilson	Community resident	

# **Attachment 2. Survey Responses**

In November and December 2017, 12 community stakeholders completed an online survey. Their responses to the community needs survey follow.

# What are the biggest health issues facing your community?

- Diabetes, Sexually Transmitted Diseases, Obesity, Heart Disease, Cancer, Asthma.
- Obesity and related diseases.
- Elder care and awareness of their needs.
- Lack of a proper facility as well as specialists in the area.
- Transportation when people are ill, need for education on health issues.
- Social Services for patients on release from hospital, immunization clinics, drug use (especially pain medication misuse and methamphetamine).
- Emergency care, confidence in local providers.
- Adequate emergency care and senior citizen-related health care.
- Lack of Urgent Care.
- Good doctors who take different insurances. Having a good local hospital to go to in case of emergency.
- Emergency critical care we're geographically at least an hour away from a major care facility.
- Very few specialists are in our immediate area.
- Obesity, cancer, a place to have babies.
- Prescriptions are too high. Supplemental coverage costs for Medicare too high. ER Care.

# What keeps people in your community from seeking medical

## treatment? (Respondents may have selected more than one response.)

Health services are located too far away/transportation problems	76.9%
Fear (not ready to face the health problem)	46.2%
Lack of health insurance	38.5%
Unable to pay health insurance co-pays/high deductibles	38.5%
Too long of a wait to get an appointment /no appointment available	23.1%
Child care problems	23.1%
Don't understand the need to see a doctor	23.1%
Too long of a wait at the appointment	15.4%
Cultural or religious beliefs	7.7%
Don't know how to find a doctor/clinic	7.7%
Language barrier	7.7%
Not experiencing any barriers to health care	7.7%
Not many insurance plans and local doctors may not accept the insurance	7.7%

# What is needed to improve the health of the community? (Respondents

may have selected more than one response.)

Specialty physicians	84.6%
Access to primary care providers	69.2%
Wellness services	53.9%
Substance abuse rehabilitation services	53.9%
Job opportunities that include health insurance	46.2%
Mental health services	38.5%
Healthier food	30.8%
Transportation	15.4%
Recreation facilities/parks/playgrounds	7.7%
Information sharing seminars	7.7%
Public health education programs at night	7.7%

# Which of the following preventive health care services are readily available in the community? (Respondents may have selected more than one response.)

Flu shots/pneumonia vaccines	100%
Dental exams/routine cleaning	84.6%
Immunizations for children	76.9%
Blood pressure screening	76.9%
Blood sugar/glucose screening	76.9%
Routine physical	69.2%
Eye/vision exams	69.2%
Cholesterol screening	46.2%
Hearing test/screening	38.5%
Pap smear	23.1%
Mammogram	15.4%
Prostate cancer screening	15.4%
Skin cancer screening	7.7%
Colorectal screening	0%
Bone density testing	0%

# What health and social services are needed in the community?

- Wellness/healthy lifestyle awareness.
- Specialists come to Tehachapi one day a week. For some patients/treatments, transportation and time are a deterrent. Tehachapi needs more medical specialists accessible five days a week.
- Specialists and more physicians.
- LCSW at hospital at hospital to assist patients to go home.
- Dementia-related care, quality assisted living facilities for seniors, drug and alcohol rehabilitation, domestic violence shelter.
- Cancer treatment.
- Primary care doctors.
- Wellness training, preventive medicine and emergency acute care.

# **Other Comments**

- My family is definitely looking forward to the new hospital.
- I would suggest a Community Input Meeting every month or two to share needs and ideas with leaders at the hospital.
- Continue to make yourselves known to the public.
- Advocate for all aspects of better mental health and physical well-being.
- Bring medical specialists to Tehachapi.
- Conduct public seminars.

# **Attachment 3. Community Resources**

Adventist Health Tehachapi Valley Hospital solicited community input through key stakeholder surveys to identify resources potentially available to address the significant health needs. These identified resources are listed in the table below. This is not a comprehensive list of all available resources. For additional resources refer to 211 Kern County at www.211kerncounty.org.

Significant Health Needs	Community Resources
Access to care	AHTV hospital and clinics
	• Dial-A-Ride
	Kaiser Permanente Medical Office Building
	Kern County Department of Public Health
	Omni Healthcare
	<ul><li>Primary care physicians</li><li>Public health nursing</li></ul>
Chronic diseases (asthma,	AHTV hospital and clinics
cancer, cardiovascular	American Cancer Society
disease, diabetes, lung	American Heart Association
disease)	Asthma Coalition of Kern County
uisease)	Kaiser Permanente Medical Office Building
	Kern County Aging & Adult Services
	Kern County Call to Action
	Kern County Department of Public Health
	Omni Healthcare
	Primary care physicians
	Public health nursing
	<ul> <li>Visiting doctors from Bakersfield and Antelope Valley</li> </ul>
Dental care	Community Action Partnership of Kern
	<ul> <li>Dental offices in town, but must travel for oral surgery</li> </ul>
	<ul> <li>Kern County Department of Public Health</li> </ul>
	Private dentists
Environmental Health	Kern County Department of Public Health
Maternal and Infant Health	AHTV hospital and clinics
	Family Life Pregnancy Center
	Kaiser Permanente Medical Office Building
	<ul> <li>Kern County Department of Public Health</li> </ul>
	OB/GYNs
	Omni Healthcare
	Pediatricians
	Primary care physicians
	Public health nursing
	WIC of Kern County
Mental Health	College Community Services
	Country Oak Counseling
	Desert Counseling Clinic
	Kern Behavioral Health & Recovery Services
	Kern Child Abuse Prevention Council, Inc.
	National Alliance on Mental Illness (NAMI)     Tabashari Wallassa Cantar
	Tehachapi Wellness Center

Significant Health Needs	Community Resources
Overweight & obesity	Kern County Department of Human Services
	<ul> <li>Kern County Department of Public Health</li> </ul>
STIs	<ul> <li>AHTV hospital and clinics</li> </ul>
	<ul> <li>Family Life Pregnancy Center</li> </ul>
	<ul> <li>Kaiser Permanente Medical Office Building</li> </ul>
	<ul> <li>Kern County Department of Public Health</li> </ul>
	OB/GYNs
	Omni Healthcare
	Primary care physicians
	Public health nursing
Substance abuse	<ul> <li>Addiction support groups and hotlines</li> </ul>
	Kern Behavioral Health & Recovery Services



# 2018 CHNA Approval

This community health needs assessment was adopted on October 4, 2018 by the Adventist Health System/West Board of Directors and the Adventist Health Medical Center Tehachapi Legal Board. The final report will be made widely available on December 31, 2018.

# CHNA/CHIP contact:

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To request a copy, provide comments or view electronic copies of current and previous community health needs assessments, please visit the Community Benefits section under on our website at: https://www.adventisthealth.org/pages/about-us/community-health-needs-assessments.aspx