

Community Health Assessment and Improvement Plan

2018-2019



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Director's Note

The purpose of this Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP) is to identify and prioritize needs of the Kern County community. During the development of the (CHA) and Improvement Plan, we worked collaboratively to review data, provide input, identify priority areas, and strengths of our community to meet our mission. We would like to extend our gratitude to the Public Health Department Staff as well as community partners who have worked diligently on this report. We would like to acknowledge our Board of Supervisors for their continuous support on this endeavor.

To receive accreditation, we must undergo a rigorous process to adhere to the quality standards and measures set by the Public Health Accreditation Board. As a result of this process, our (CHA) and Improvement Plan have been combined, replacing the Community Health Improvement Plan 2017-2022.

As we continue to work towards reducing the needs of our community, we celebrate the progress that is made everyday. Our strategies to address health concerns involve health education and promotion of a healthy lifestyle. We applaud the community for its efforts in hopes it will lead us into a healthier tomorrow.

Matt Constantine
Director of Kern County Public Health Services Department

Executive Summary

The purpose of this Community Health Assessment (CHA) and Improvement Plan is to assess the health and wellness of Kern County and provides a comprehensive look of the county's current health status, needs, and issues. The report was developed through a collaborative process from key stakeholders to discuss the most pressing health topics in our community. Special attention has been given to identify health disparities, the needs of vulnerable populations, and social determinants of health.

The Kern County Community Health Survey was developed and disseminated across the county online and in person. From the survey, we identified three main priority areas: Sexually Transmitted Diseases, Chronic Diseases, and Access to Healthcare. Many organizations and individuals have worked for many years to make a change in these areas. Even as we see improvements being made, it will take dedicated efforts for lasting change.

Kern County continues to have some of the highest rates of Sexually Transmitted Diseases in the state. However, Kern County is also recognized statewide for its innovations in congenital syphilis prevention and case management. The Know Your Risk, sexually transmitted disease education and awareness campaign, has brought together what were once unlikely partners such as schools and faith-based organizations to tackle this multifaceted challenge together.

Kern County continues to have high rates of obesity and obesity related diseases. However, new programs like Know Your Numbers and Certified Healthy have been developed to help bring awareness and encourage action towards living healthier. Other community groups also provide health screenings and free classes. Waste Hunger Not Food has rescued more than 600,000 pounds of fresh, healthy foods to be distributed to our community.

Kern County's 8,000 square miles makes access to healthcare difficult. Most of Kern County is a designated healthcare provider shortage area, and services are especially limited in rural areas. Our Mobile Health Clinic was launched in 2019. Where patients once had to come to us, the Mobile Health Clinic now takes additional health services out to the community, primarily focusing on the underserved population. Health plans also offer transportation services to medical appointments. Some health plans even provide a ride for a companion so that members do not have to go to their appointments alone.

While Kern County continues to face many struggles, it is important to recognize ongoing successes. Kern County is projected to have the largest increase in high school graduates in the State. Air quality has improved over the past decade. Births to adolescents has decreased. The heart disease mortality rate has been cut in half. New programs have been established to meet the needs regarding healthcare access, congenital syphilis, obesity and chronic disease prevention, and food insecurity.

Introduction

The Kern County Public Health Services Department's (KCPHSD) mission is to protect and safeguard the health and safety of the community. Our vision states our county will be a great community in which to live healthy and flourish.

The World Health Organization defines health as "...a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."¹ The health of every individual affects and is affected by a number of factors. Our personal health can influence our decisions as well as determine our options. Good health can be liberating while poor health can be limiting. The state of our health can be shaped by lifestyle choices, genetics, socioeconomic status, occupation, place of residency, and environment. Our personal health can also have profound effects on others as well; healthcare costs can create immense financial burdens on our families as well as society.

The KCPHSD seeks to adapt to and anticipate the ever changing health needs of the community through strong partnerships with community groups as well as individual members and with the guidance of state and federal agencies. To summarize the health of the community and assess any unmet needs, the KCPHSD examined currently published data, unpublished data, and information from various community groups, private enterprises, and government agencies. In addition to evaluating physiological health, social determinants such as economic stability and environmental conditions were analyzed. We selected the MAPP framework to guide us with our CHA and CHIP to actively engage stakeholders and the community to identify and address health priorities. We used qualitative and quantitative data collection methods to help us better understand and address health needs of Kern County. The Kern County Community Health Survey was used to collect community opinions on the greatest health needs in Kern County.

Health indicators are common characteristics used to gauge the health of a population over time and allows comparisons across geographies. Throughout the report, Kern County will be compared to the state and national averages as well as the Healthy People 2020 National Objectives. Healthy People 2020 is a compilation of 1,200 objectives in 42 topic areas aimed at improving the health of all Americans. The objectives may measure anything from specific health condition to environmental influences of health to social factors. The most recently available data is used while still maintaining consistency across jurisdictions. For example, when comparing Kern County data to state or federal data, older data sets may be analyzed even though more recent data is available at the local level.

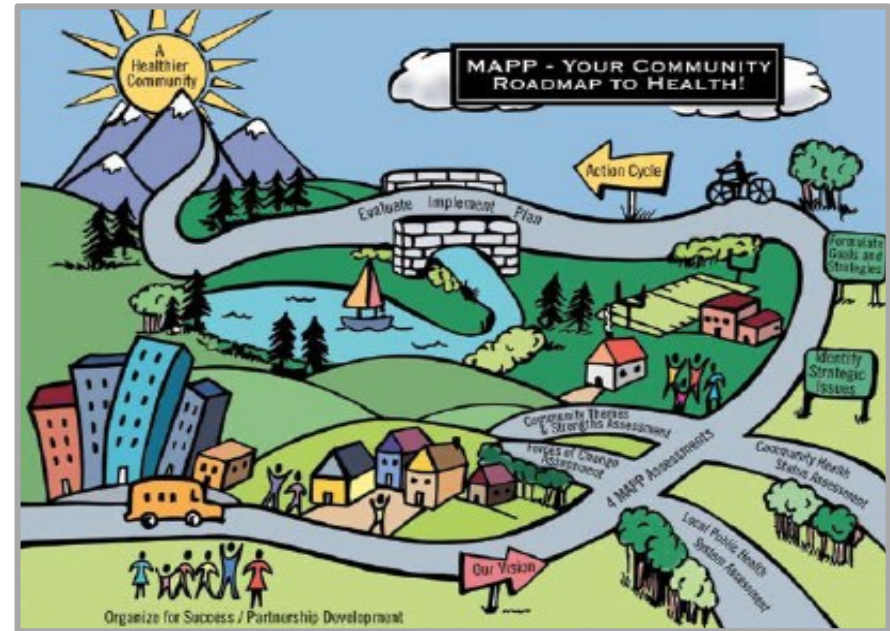
The KCPHSD hopes that this report will be a useful resource for health professionals as well as policy makers, program planners, and community members. If you have questions or would like to make suggestions about health indicators to include in future editions, please contact the KCPHSD by telephone at (661) 321- 3000.

Community Health Assessment

MAPP Process

Mobilizing for Action through Planning and Partnerships (MAPP): the process in which a community wide strategic planning framework is enacted for improving public health. This allows communities to prioritize public health concerns, identify resources for tackling them, and take action to improve conditions that will support healthy living. In the roadmap shown the six main phases are illustrated, as well as listed below.² What is special about the MAPP process, is that it is a community owned process that includes broad representation of the local public health system and uses qualitative and quantitative data from assessments to guide the development, implementation and evaluation of strategic community health improvement plans.²

Kern County Public Health Services Department has established this process and had an official Call to Action meeting with community partners to embark the initial steps to implement the MAPP process. Kern County was able to conduct a dot analysis, health assessment surveys, community stakeholder meetings, and email communications with partners to institute the vision for the MAPP process. Through that process there were three key priority areas that arose: Increasing Awareness for and Prevention of Sexually Transmitted Infections (STIs), Chronic Disease Prevention and Health Living Promotion, and Access to Care. These three priority areas were utilized to create this Community Health Assessment and Community Health Improvement Plan under the framework of the MAPP process.



Six Phases of the MAPP Process

1. Phase One: **Organize for Success/Partnership Development**, community members and agencies form a partnership and learn about the MAPP process.
2. Phase Two: **Visioning**, those involved in the MAPP community create a common understanding of what it would like to achieve. The community decides the vision, which is the focus of the MAPP process.
3. Phase Three: **Four MAPP Assessments**, qualitative and quantitative data are gathered to provide a comprehensive picture of health in the community.
4. Phase Four: **Identify Strategic Issues**, the data is analyzed to uncover underlying themes that need to be addressed in order for a community to achieve its vision.
5. Phase Five: **Formulate Goals and Strategies**, the community identifies goals it wants to achieve and strategies it wants to implement related to strategic issues.
6. Phase Six: **Action Cycle**, the community implements and evaluates action plans to meet goals, address strategic issues, and achieve the community's vision.

Community Health Assessment

Data Sources and Data Collection

Primary Data Collection

Kern County Public Health Services Department designed a Community Health Survey in 2018 for English and Spanish speakers. This survey was available online and in print. Over several months, KCPHSD collected 1,077 surveys from 27 zip codes throughout the county. Respondents identified:

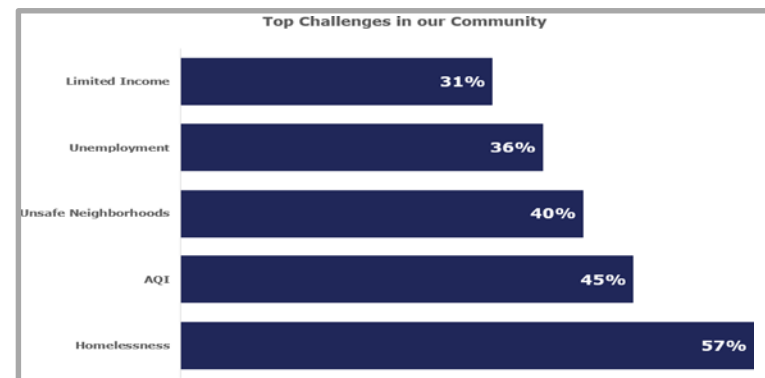
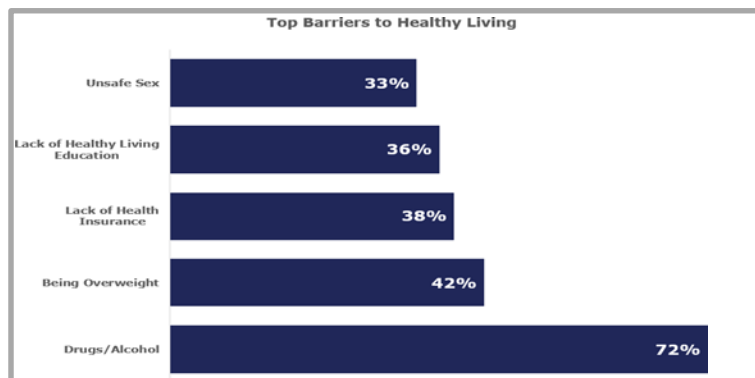
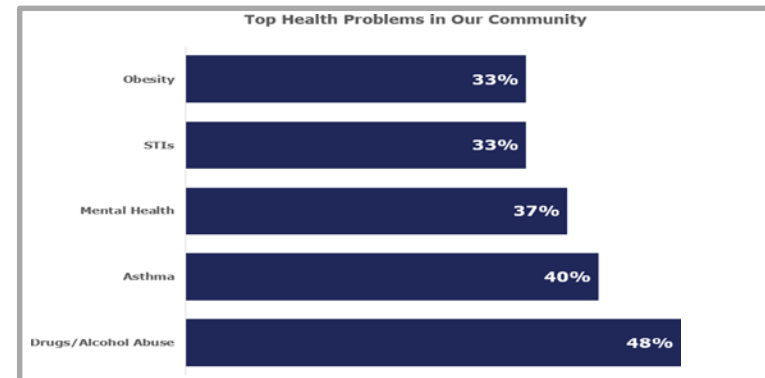
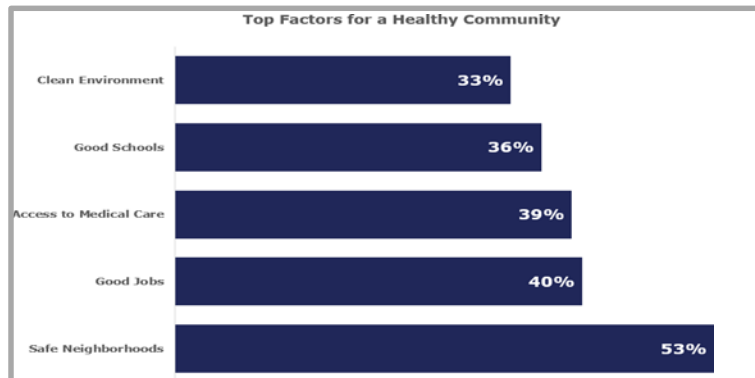
1. Factors needed for a healthy community
2. Common health problems in their community
3. Barriers to healthy living
4. Challenges we face as a community

Secondary Data Collection

Secondary data sources were collected from a variety of sources, such as:

1. California Department of Public Health
2. California Health Interview Survey
3. Feeding America
4. American Community Survey
5. California Office of Statewide Health Planning and Development
6. Healthy People 2020
7. US Environmental Protection Agency
8. County Health Rankings and Roadmaps

2018 Community Health Assessment Results



Kern County: Demographics

Kern County is the eleventh most populous county in California with a 2018 population estimate of 896,764 residents (2.3% of the population of California). Covering 8,161 square miles, it is the third-largest county by area and includes 43 square miles of State parks, reserves, historic parks, and recreation areas. Geography includes mountain ranges to valley floor to arid desert. Kern County is California's largest producer of petroleum-based energy, home to the top five producing oil fields in California and five of the top 25 producing oil fields in the nation. Kern County's agriculture industry produces more than \$5 billion worth of goods annually including milk, almonds, table grapes, vegetables, and pistachios. There are four state prisons and two federal correctional facilities operated within the County's boundaries.³

Age of Residents and Household Demographics

As shown in Table 1, Kern County has a larger proportion of residents under 18 and a smaller proportion of residents older than 65 compared to California and the US. While a younger population may indicate a smaller burden for older adult services like Medicare or Social Security benefits and provides a larger base of workers for the future, it also means that more young people are depending on fewer adults for their current needs. Services for children, like Medi-Cal, public education and after school programs, free and reduced-priced meals, and childcare are likely in greater need in Kern County than other parts of the state.

Not too surprisingly, Kern County has a larger proportion of families with children less than 18 years of age and single-parent families with children less than 18 years of age than California and the nation (Table 2). Strikingly, single fathers with children less than 18 years of age account for 4.2 percent of Kern County households, compared to only 2.7 percent of California households and 2.3 percent U.S. households. Additionally, the average family size in Kern County is slightly larger than California and the nation at 3.2, 3.0, and 2.6 persons respectively. While family settings can offer many benefits, larger families, particularly those with children dependent on a single income, may be at high risk for poverty and associated barriers.

Table 1

	< 18 Years Old	18-64 Years	65+ Years
Kern	29.2%	60.7%	10.1%
California	23.3%	63.4%	13.3%
US	22.9%	62.2%	14.9%

³Data from: U.S. Census Bureau. American Fact Finder. 2017

Table 2

	Family Household	Families with Children < 18	Single Parent Families with
Kern	75.5%	39.7%	14.5%
California	68.7%	31.9%	9.7%
US	66.2%	28.8%	9.4%

³Data from: U.S. Census Bureau. American Fact Finder. 2017

Table 3

Race/Ethnicity	% of Population
Hispanic	51.0%
Non-Hispanic White	36.6%
Non-Hispanic Black	5.3%
Non-Hispanic American Indian/Alaska Native	0.6%
Non-Hispanic Asian	4.4%
Non-Hispanic Native Hawaiian/Pacific Islander	0.1%
Non-Hispanic Other	0.1%
Multiple	1.9%

³. Data from: U.S. Census Bureau. American Fact Finder. 2017

Race/Ethnicity

Kern County is very diverse, with the majority of residents identifying as Hispanic (Table 3). As the racial and ethnic composition of Kern County continues to change, it is important to create culturally sensitive systems, policies, and environments while protecting the health of the public. Spanish-language education, documents, and services will continue to be needed as the Hispanic population continues to grow. Additionally, while the total number of Non-Hispanic Asians in Kern County remains small, the proportion of residents identifying as Non-Hispanic Asian has increased 21 percent since 2009. In comparison, during the same time frame, the Hispanic population in Kern County grew by 11 percent. Given the diversity of Asian languages, it is important to prepare for the needs of this growing community. Kern County may benefit by seeking out other California counties with large Asian populations to determine best practices. It is also important to recognize that residents of certain races or ethnicities may be at higher risk for certain medical conditions. Changes in the racial and ethnic background of Kern County residents may also change the incidence of certain diseases.

Kern County: Education, Employment and Income

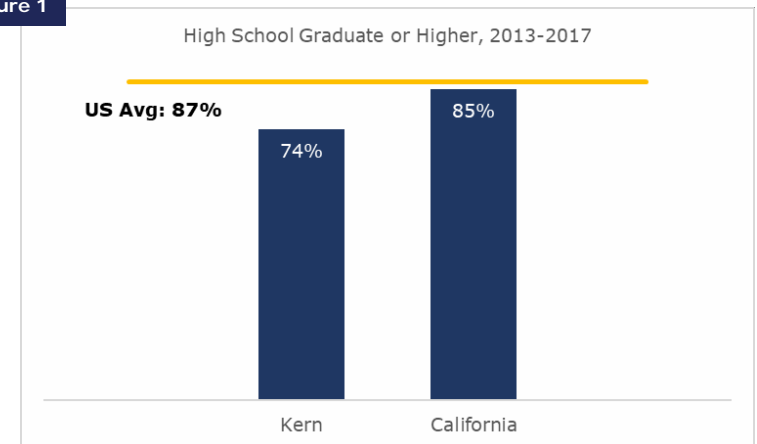
Education often influences employment opportunities and earnings. Nationally, workers with a Bachelor's degree earn more than twice as much as a worker with less than a high school diploma. A high school diploma or equivalent increases earnings by more than 25 percent on average. Similarly, workers without a high school diploma are nearly three times as likely to be unemployed, compared to workers with a Bachelor's degree. This is even more pronounced locally. In Kern County, workers with a Bachelor's degree earn more than three times as much as workers with less than a high school diploma; the unemployment rate among workers with less than a high school diploma is four times as high as workers with a Bachelor's degree or higher. Having a high school diploma or equivalent in Kern County increases earnings by one third and decreases the likelihood of being unemployed by nearly a quarter.⁴

Educational Attainment

Although there are many larger unified school districts in the state (which include elementary and secondary schools), the Kern High School District is the second largest stand-alone high school district in the state, serving over 46,000 students in 2017-2018.⁵ Kern County continues to have a smaller proportion of residents with a high school diploma or equivalency than California's average (Figure 1).¹ However, Kern County is expected to have the largest increase in high school graduates in the State by 2028.⁶

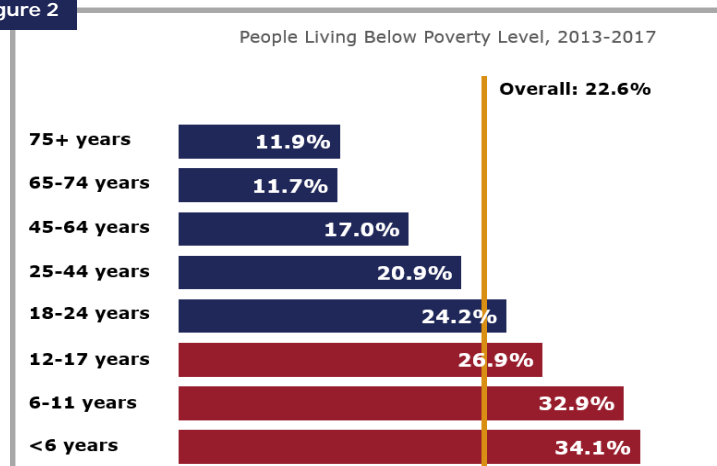
While 33% of Californians have a Bachelor's degree or higher compared to 31% nationwide, Kern County trails far behind with only 16% of residents with a Bachelor's degree or higher. There is one California State University (CSU), and three community colleges located in Kern County, as well as dozens of vocational schools and distance learning campuses. It is interesting to note that two local community colleges are on the national list of two-year public institutions with the lowest tuition, suggesting that Associate's degree or other short-term training are both affordable and accessible in Kern County.⁷ CSU Bakersfield is the 10th most expensive CSU campus (out of 22) for the 2016-2017 school year.⁸ There is no University of California campus within 100 miles of the central Bakersfield area. This suggests that there may be geographical and financial obstacles to higher education for Kern County residents.

Figure 1



³. Data from: U.S. Census Bureau. American Fact Finder. 2017

Figure 2



Unemployment and Income

In 2017, 9.2% of Kern County residents were unemployed; this is much higher than both national and state averages for unemployment (2.9% and 4.8%, respectively).³ While unemployment is often the result of many factors, a smaller proportion of working adults affects both the number who need assistive services and the number who provide the support that maintains those services. Unemployment also affects income for individuals and families. The median household income in Kern County was \$50,826 in 2013-2017.¹ In comparison, the median household income for California residents in this same time frame was \$67,169.³

Income and unemployment do not just affect the working population; these metrics also affect children living in these households. As shown in Figure 2, children 17 and under are at higher risk of living below the poverty level than adults 18 and older. Overall, 31.3% of children live below the poverty level while 22.6% of all Kern County residents live below the poverty level.³ Studies have shown that children in poverty are more likely to have physical and mental health problems than their peers.⁹ This includes lower achievement in test scores, which could limit an individual's ability to make a living wage. Therefore, special attention should be given to children living in poverty in order to increase median income and educational attainment for future generations.

Kern County: Environmental Conditions

A person's physical environment can influence their health in a number of ways. In countries that lack basic sanitation, food and waterborne illnesses continue to run rampant. In areas where access to healthy foods or safe environments for physical activity may be limited, more residents tend to be overweight and obese. Workers exposed to certain chemicals may be more likely to develop certain diseases. Rural areas may have to drive long distances to seek healthcare and may not receive emergency services in time. Even something that seems as innocuous as clutter can cause some people enough stress to raise blood pressure and set off a cascade of related health issues. In the same respect, environments that foster wellness can improve health. There are numerous factors that affect health and while it is impossible to control every environmental condition, it is possible to make adjustments to improve our health despite environmental barriers.

Air Quality

Air quality is a health concern that is caused by the unique geography of Kern County. Although air quality affects all individuals living in the Central Valley, exposure can be more harmful for individuals with pre-existing conditions or living in lower-income communities. Air quality was identified as one of the top challenges facing Kern County Communities in the 2018 Community Health Survey. This is not surprising given that the Bakersfield metropolitan area is consistently ranked in the top 5 for US cities with the most unhealthy air quality days.¹⁰

While Kern County still has a ways to go, and despite the notorious rankings, there has been an overall trend of improving air quality. The progress made in the past decade should be acknowledged (Figures 3 and 4). Systems and policy changes that protect air quality like “no burn” days and promotion of behaviors like carpooling can continue to lower the impact of poor air quality on health.

Climate

Climate can also have a direct impact on health. Due to the diverse geography of Kern County, from arid high desert to the mountains to the valley, climate also varies. In the metropolitan Bakersfield area, average winter lows are 39 degrees Fahrenheit, and summer highs average 97 degrees Fahrenheit.¹¹ In the summer, heat exhaustion, heat stroke, and heat-related deaths are of concerns in Kern County (i.e. dehydration can exacerbate underlying conditions). In the winter, attempting to heat the home with alternate sources like a stove can cause carbon monoxide poisoning and placing heaters too close to furniture or fabrics can ignite fires. Kern County is also subject to extremely dense fog, which can increase the chances of motor vehicle accidents. High winds and dust storms in certain parts of the county can aggravate respiratory disorders and contribute to infectious diseases like Valley Fever (*coccidioidomycosis*).¹² Drought conditions throughout the state of California can have an even greater effect on Kern County residents. Drought adversely affects the agricultural industry; lost crops and lower revenue may result in work layoffs, many of whom already earn lower wages, putting more residents at risk of poverty.

Figure 3

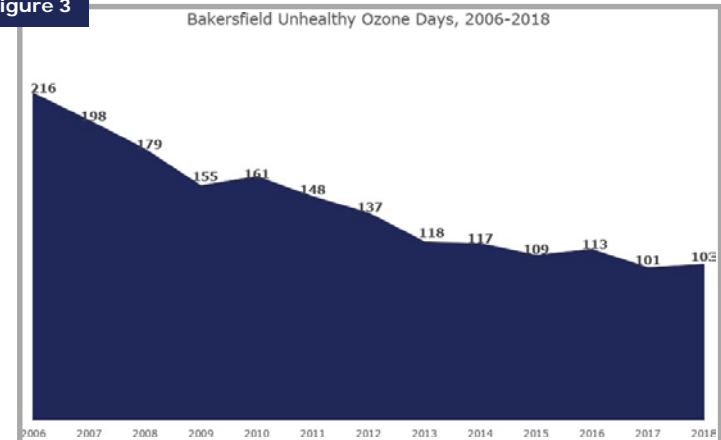
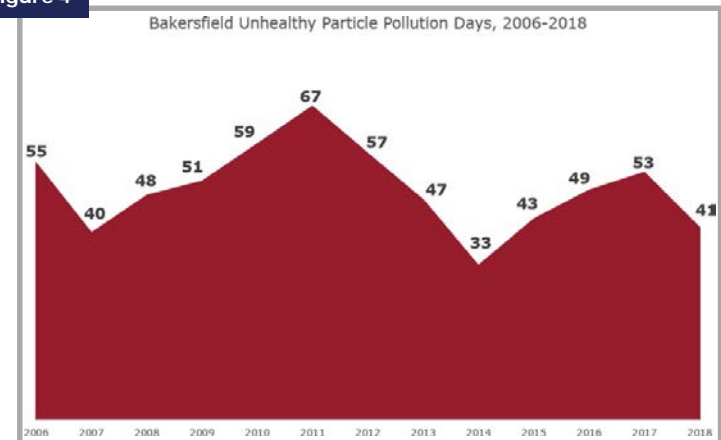


Figure 4



Kern County: Environmental Conditions

SPOTLIGHT: Asthma and Valley Fever

Asthma

Asthma and other respiratory diseases were identified as one of the top 3 health problems facing communities in the 2018 Community Health Survey.

Poor air quality can aggravate asthma symptoms, and since there is a limit to what any individual can do to avoid air quality, controlling asthma is vital to avoiding emergency situations. While there are very few deaths due to asthma, asthma is a chronic condition that can cause a significant reduction in quality of life. Particularly in young children, asthma causes a number of hospitalizations each year.

In Kern County, 13.3% of children and teens have ever been diagnosed with asthma; this is similar to California (14%).¹³ Additionally, age-adjusted hospitalization rates due to pediatric asthma are actually lower than the state (8.5 per 100K and 9.8 per 100K, respectively).^{14,15} Interestingly, age-adjusted ER rate due to pediatric asthma in Kern County is much higher than California average and neither met Healthy People 2020 guidelines (Figure 5).^{14,15} A high rate of emergency room visits are certainly a concern, but a smaller hospital admission rate may mean that the symptoms can be controlled and managed in the outpatient setting.

Although little can be done about outside air quality, campaigns focused on education and how to improve personal indoor air quality may be helpful in reducing asthma-related issues. This could include: provider education, air quality alert flags, and promotion of control inhalers.

Figure 5

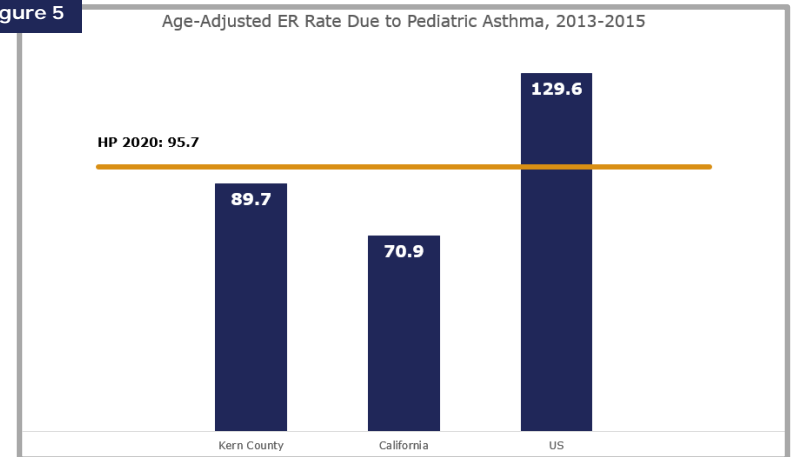
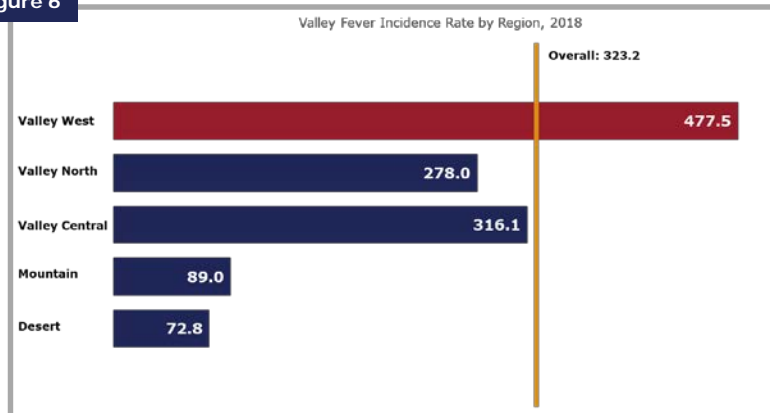


Figure 6



Valley Fever

Coccidioidomycosis, commonly known as valley fever, is a disease of special significance in Kern County. While it is endemic to much of the southwestern United States, nearly half of all reported California cases occur in Kern County residents.

While most people exposed to the fungus that causes valley fever, *Coccidioides immitis*, have mild or no symptoms, a small proportion develop severe disease which may require life-long treatment and can result in death.¹²

Unfortunately, prevention of the disease is difficult because it is hard to predict where and when a person was actually exposed to *C. immitis*. Historically, residents living on the West side of Kern County are at greatest risk for acquiring valley fever (Figure 6), but it is difficult to discern if the individual was exposed in the area of residence, work, or while visiting other areas of the County. Therefore, many prevention efforts are focused on awareness, risk factors, signs and symptoms of the disease, and provider education on treatment, diagnosis, and testing.

To help spread awareness, answer questions about the disease, and provide analytical data, Kern County has developed a website dedicated exclusively to Valley Fever in Kern County (www.KernCountyValleyFever.com). Additionally, the KCPHSD has launched a campaign with our sponsors that involves billboard ads, media coverage, and educational videos about Valley Fever for the public.

Kern County: Births, Infant Mortality, and Prenatal Care

Information about births and related factors are vital to understanding maternal and child health as well as planning and assessing healthcare services. The number of births has a substantial impact on population growth or decline. In recent years, Kern County has seen a decline in the number of births while the overall population continues to grow, lowering the birthrate. While the rate of births in Kern County is higher than California as a whole, a similar declining trend has been seen state and nationwide. A decline in births may be the result of many things, including family planning, economic pressures, and normal fluctuation. Important birth indicators include births to teens, early entrance to prenatal care, preterm births, and infant mortality. In general, while Kern County meets the Healthy People 2020 target for most birth indicators, it trails behind the statewide averages.

Preterm Births

Preterm births are defined as any birth occurring before 37 gestational weeks. All preterm births require additional medical care and some preterm births result in life-long health issues or death. Within the past decade, Kern County has experienced a decrease in pre-term birth rates (Figure 7).¹⁶ However, further reducing the number of preterm births should continue to be a priority. Preterm birth is one of the primary causes of low birth weight and infant mortality for Kern County. Preterm births can also be affected by early induction of labor or cesarean delivery. Unless medically indicated, it is not recommended to schedule these procedures until at least 39 weeks of gestation. Another common cause of preterm birth is multiples (twins, triplets, etc.). While this can be a spontaneous and unpredictable natural occurrence, increased use of fertility treatments likely contribute to the increased number of multiples seen nationwide. Timely and consistent prenatal care can help prolong pregnancy to allow multiples to develop as much as possible before birth and reduce some of the complications related to preterm birth.¹⁷

Figure 7

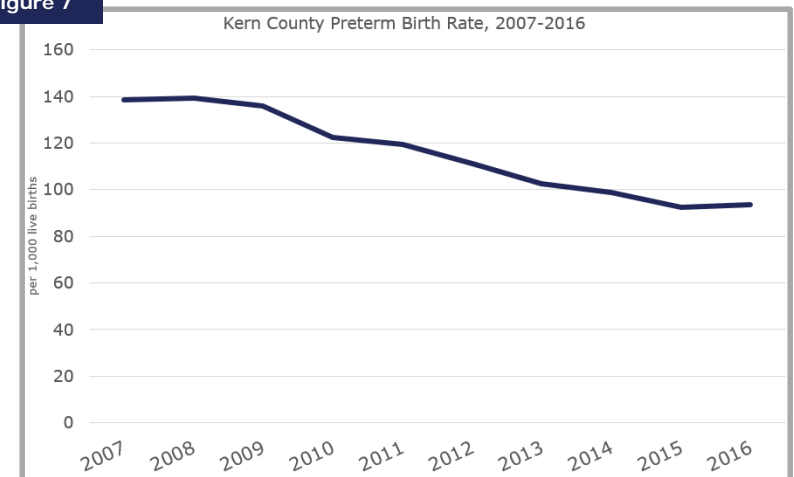
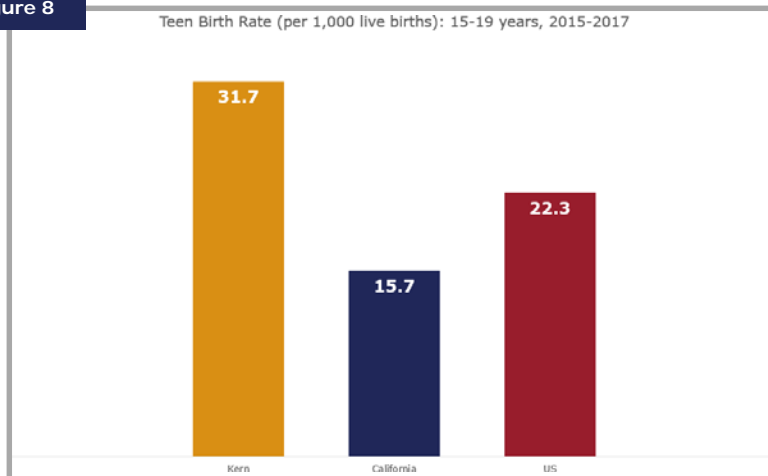


Figure 8



Births to Teens

Childbearing during adolescence increases the likelihood of dropping out of high school, needing public assistance, and living in poverty.¹⁸ While most studies focus on teenage mothers, there are similar effects for teenage fathers who are more likely to drop out of high school and earn less than older fathers. Far fewer resources are available for teen fathers compared to teen mothers. Being born to a teenage mother increases the likelihood of poor health outcomes in the baby, such as preterm birth, low birth weight, or other pregnancy complications. Additionally, having teen parents increases the likelihood a child will grow up in poverty.

In 2014, the teen birth rate reached historic lows nationally.¹⁹ Following this trend, the teen birth rate in Kern County continued to decline; however, the Kern County teen birth rate is still double the rate of births to California teens and above the US average (Figure 8).¹⁶

While education, access to effective contraception, and pregnancy planning may have reduced teen birth rates in recent years, it is important for Kern County to continue developing methods to decrease teen birth rates to reach the much lower California rate.

Kern County: Births, Infant Mortality, and Prenatal Care

Prenatal Care

Prenatal care is the healthcare a woman receives during her pregnancy to help ensure that the pregnancy and delivery are as safe as possible for mother and baby. Women who receive prenatal care early tend to have fewer pregnancy complications and deliver healthier babies. Prenatal care should be received as soon as possible or at least within the first trimester of pregnancy. Unfortunately, Kern County continues to fall short of the Healthy People 2020 target for timely prenatal care; meanwhile, California consistently exceeds the target (Figure 9).¹⁶ This indicates a need for more emphasis on early prenatal care in Kern County.

Early prenatal care promotes better health for both mother and child, allowing early intervention where needed. Women who receive late or no prenatal care may have other barriers to accessing the healthcare system such as substance use, poverty, age, lack of transportation, or cultural and language barriers. Targeting and eliminating these and other barriers to accessing timely and quality care must be a priority to continue improving maternal and child health. Unplanned pregnancies may also contribute to late entry into prenatal care; if unaware of pregnancy, care cannot be sought.²⁰

For most women, lack of health insurance should not be a barrier to care. In addition to a multitude of low-cost options, pregnant women usually qualify for presumptive eligibility for Medi-Cal coverage. This enables low-income women to receive prenatal care and pregnancy-related prescription drug coverage on a temporary basis. Presumptive eligibility does not cover labor and delivery so eligibility requirements for basic Medi-Cal must still be met for continued coverage. However, presumptive eligibility allows women to bypass the Medi-Cal waiting period while eligibility is assessed and facilitates entry into early prenatal care.

Figure 9

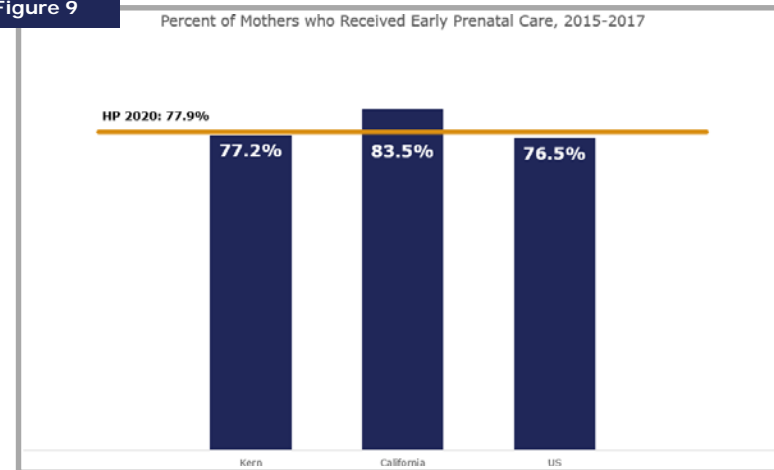
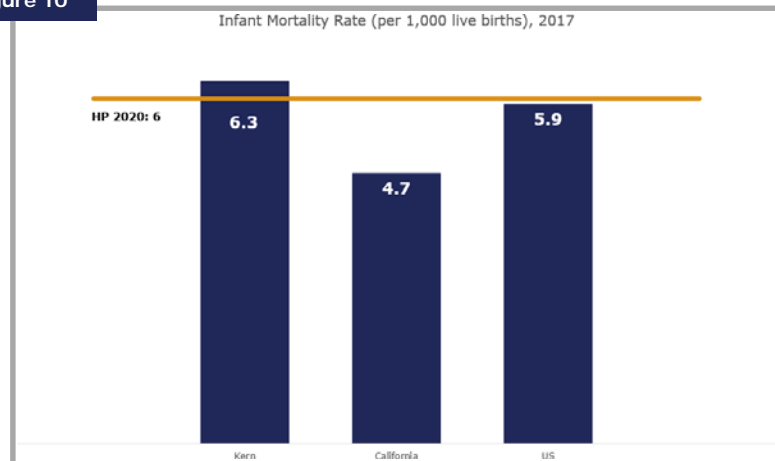


Figure 10



Infant Mortality

Infant mortality is defined as any death in a person less than one year of age. In 2017, Kern County did not meet the Healthy People 2020 target for infant mortality, and fell far short of the statewide average (Figure 10).¹⁶

In 2017, there were 80 deaths of Kern County children under the age of one year. A vast majority of infant deaths in 2017 were due to medical conditions present at birth, while some were due to unforeseeable incidents. Clearly, some infant deaths are unavoidable; however, some are preventable and others might be circumvented with risk reduction measures. Nearly one third of infant deaths (31.3 percent) were related in some way to preterm birth. As such, reducing the rate of preterm birth alone could have a substantial impact on infant mortality. Each infant death, regardless of cause, is a tragedy and can have severe repercussions on the family. Any reduction in infant mortality is an achievement.

Priority 1:

Sexually Transmitted Disease Awareness and Prevention

Sexually Transmitted Diseases (STDs) continue to be the most commonly reported diseases in Kern County. While STIs can infect people of any age, the greatest concern is among those of childbearing age. STDs can affect fertility in both men and women, and can also be passed to newborns during childbirth. While many STDs, including the most common, are curable with antibiotics, medication cannot reverse damage that has already been caused by infection. Scar tissue, infertility, or a host of neurologic symptoms are just some complications that can be caused by chlamydia, gonorrhea, and syphilis. Additionally, if partners are not also treated, reinfection can occur, which increases the risk of complications.

What are STDs?

STDs are very common. They are infections that are passed from one person to another through sexual activity. STDs do not always cause symptoms or may only cause mild symptoms, so it is possible to have an infection and not know.

Chlamydia

Chlamydia is the most commonly reported disease in California and is at the highest level since reporting began in 1990 with a 10% increase in cases from 2016. The highest rates were among young women, who are at risk for serious reproductive health outcomes like pelvic inflammatory disease and infertility. There continues to be disproportionately higher rates among African American adolescents and young adult women. The rates of chlamydia infection in Kern County far exceeds that of the state and the United States (Figure 11). Kern County has been one of the worst counties for chlamydia since 2000, and is currently ranked as 4th out of 58 counties in California, with a rate of 763.1 cases per 100,000 people or 6,859 cases of chlamydia.²¹

Figure 11

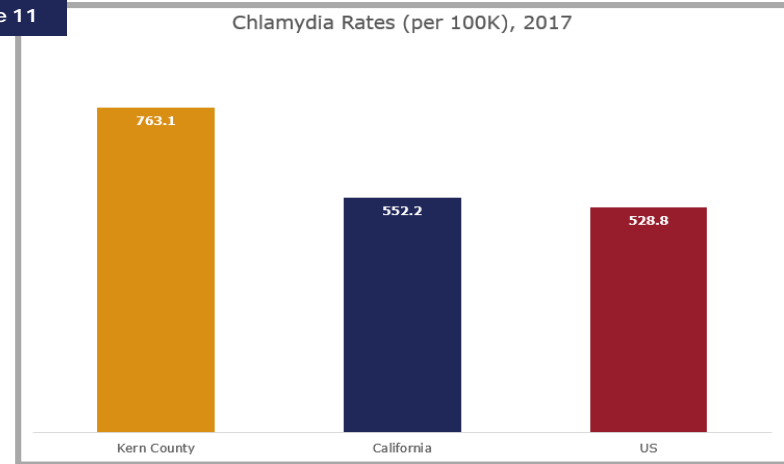
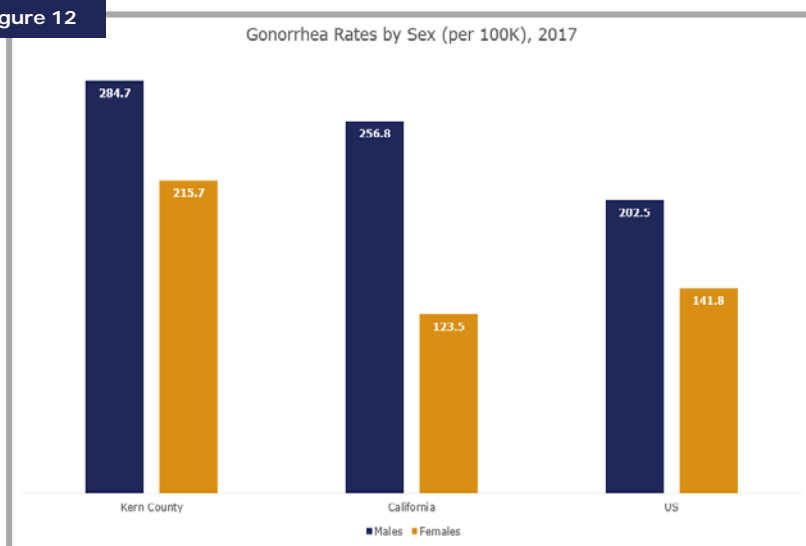


Figure 12



Gonorrhea

Gonorrhea cases have continued to increase across all regions of the state with a 17% overall increase in cases when compared with 2016. The rate of gonorrhea among women aged 15 to 44 years in Kern County is much higher than the state average (Figure 12). The rate of gonorrhea among men aged 15 to 44 years far exceeds the Healthy People 2020 target, as well as the California average. Rates were highest for both genders in California and for both genders aged 30 years or younger. It should be noted, that gonorrhea is more common in men throughout California, which differs from the national categorization. Kern County ranked 6th out of 58 counties for total gonorrhea rates. Like chlamydia, rates of gonorrhea have continued to increase in Kern County, and racial disparities persist as well. Kern county had over 2,260 cases of gonorrhea in 2017 with a rate of 251.6 per 100,000 people.²¹

Priority 1:

Sexually Transmitted Disease Awareness and Prevention

Syphilis

Syphilis is an infection that begins with symptoms, but the symptoms resolve even without treatment. Many persons are diagnosed with syphilis after their symptoms have subsided, so it is difficult to know if the infection occurred one or thirty years ago. While syphilis infections in all stages have more than doubled in the past two decades (Figure 13), it is the increase in early syphilis that provides evidence of ongoing transmission. The rates of early syphilis (primary, secondary and early non-primary, non-secondary) have continued to increase across all regions of California with a 22% overall increase from 2016 when compared to 2017.²² In Kern County, the rates increased 15% during that same one-year period.

The increase in syphilis cases is especially concerning the number of cases among females of reproductive age (15–44 years) continues to rise, after more than a decade of relatively low rates. Rates of early syphilis in Kern County females more than tripled between 2013 and 2017.

Additionally, many syphilis cases are not diagnosed until years after infection. Latent cases are no longer symptomatic themselves and may not present with any additional symptoms until decades later, but cases in the late stage of syphilis may suffer from paralysis, numbness, blindness, dementia, and death.²³ While there are far more cases of chlamydia and gonorrhea than syphilis, the sharp and continual increase in syphilis cases is of great concern.

Figure 13

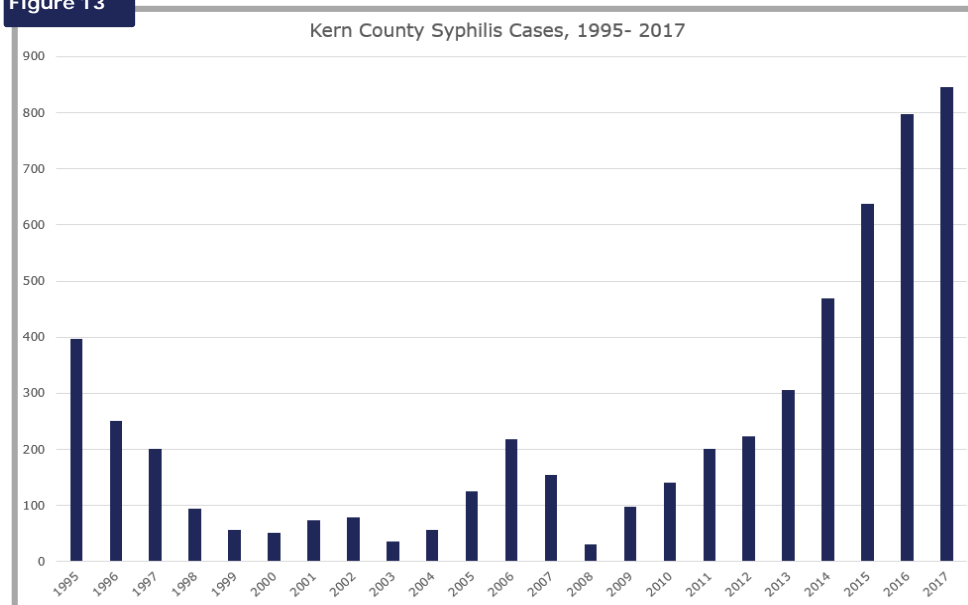
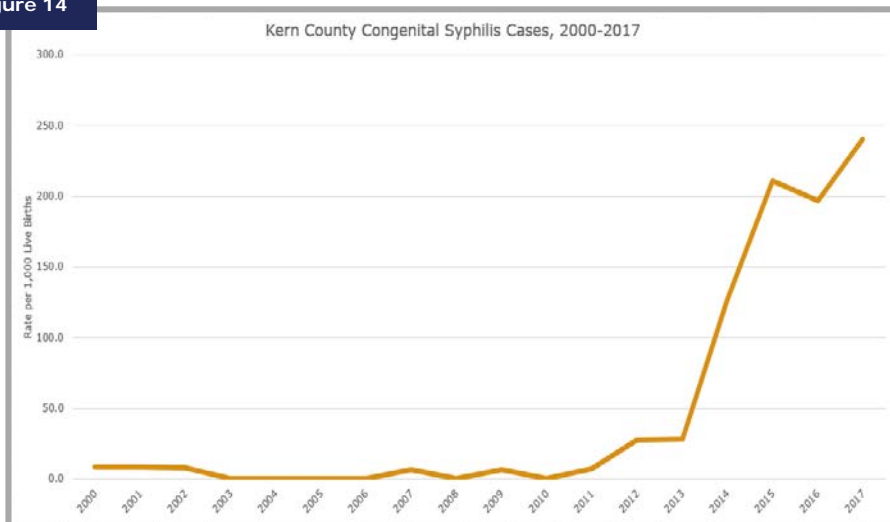


Figure 14



Congenital Syphilis

Congenital syphilis is syphilis passed from a pregnant women to her baby. Up to 40% of babies affected with congenital syphilis will die from their infection.

The number of infants born with congenital syphilis increased for the fifth consecutive year in 2017 and increased by 33% compared 2016 cases for California.²² In 2017 across the state, there were 283 congenital syphilis cases including 30 stillbirths in 2017.²² The burden of congenital syphilis cases has not been seen at this level since 1995-1996. Kern County has continued to have increased cases and rates of congenital syphilis. In 2017, there were 33 congenital syphilis cases reported in Kern County which is a 725% increase over the 4 cases reported in 2013 (Figure 14).²¹ In 2017, Kern County had a congenital syphilis rate of 240.3 cases per 1,000 live births compared to the state rate of 58.2. In 2017, Kern County was ranked 2nd worst out of all 58 counties for congenital syphilis in 2017.

Congenital syphilis is preventable, and through multiple efforts our county is diligently working to reduce the number of cases.

Priority 1:

Sexually Transmitted Disease Awareness and Prevention

HIV/AIDS

While HIV/AIDS is by definition a sexually transmitted disease, it is often placed in its own category. Special safeguarding of HIV/AIDS information is the result of historically poor treatment of HIV/AIDS patients and stigma associated with the infection. Additional measures in case counting and disease management are also afforded HIV/AIDS cases. Whereas most diseases are investigated by individual counties with little inter-jurisdictional communication, great care is taken to follow up with HIV/AIDS patients who move to another county.

While there are more than 135,000 current HIV/AIDS cases in California, fewer than 2 percent of those cases were reported in Kern County. In 2017, there were 152 newly diagnosed HIV infections cases in Kern County.²⁴ This was the highest number of cases reported in Kern County in a single calendar year, even surpassing the epidemic years in the early 1990s. As advancements in treatment have become more available and prolonging life, the prevalence of HIV/AIDS continues to increase while the incidence remains relatively stable. In 2017, Kern County exceeded the Healthy People 2020 HIV mortality rate goal of less than 3.3 deaths per 100,000 people with 3.0 deaths per 100,000 people for the county (Figure 15). The state did not meet this goal with 4.7 deaths per 100,000 population.

Figure 15

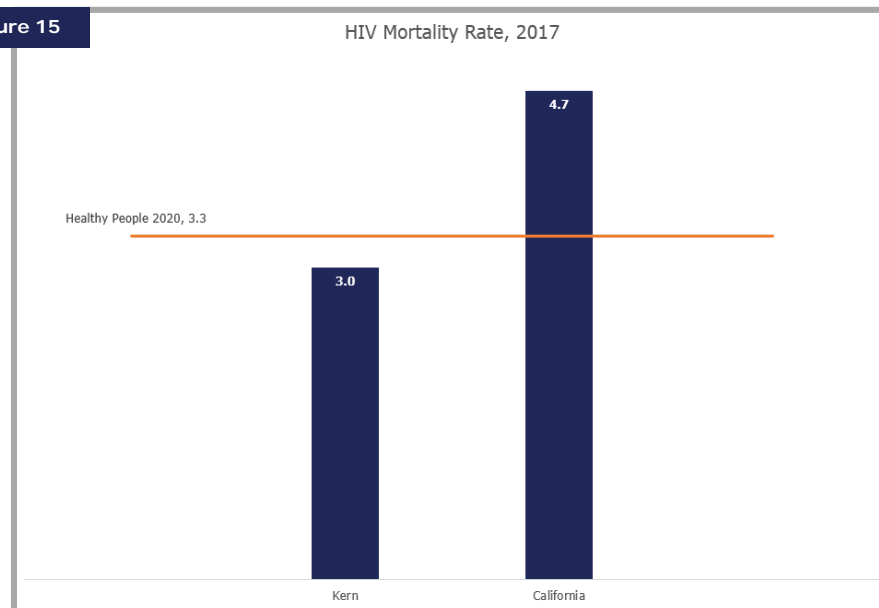


Table 4

Service Category	Needs service	Needs met
Outpatient healthcare	71%	86%
Dental care	56%	78%
Food Services, vouchers, nutrition education	44%	83%
Housing services	36%	84%
Medication payment assistance	32%	61%
Mental health services	29%	86%
Substance use services	20%	79%
Home health care/ professional support in home	16%	75%
Hospice	6%	33%
Alternative healthcare	5%	40%

In a 2011 assessment of the needs of HIV/AIDS cases, of the most commonly needed services, a high proportion of those clients had their needs met.²⁵ For example, 71 percent of patients reported needing outpatient healthcare, and of those, 86 percent indicated that their needs were met (Table 4). Unfortunately, services that were not often as needed were less likely to be provided, meaning clients who needed those services were less likely to have their needs met. For example, only 6 percent of patients reported needing hospice care; of those, only one third actually received the service. While it is commendable that the vast majority of service needs are being met, and since this assessment was performed, a great deal of outreach has been implemented, it is important to continue to provide support for the less common needs of some of our most vulnerable patients as well.

The most commonly reported risk factor among Kern County HIV/AIDS patients is sexual contact with an infected partner, followed by injection drug use. Consistent and correct barrier use can reduce the risk of all sexually transmitted infections.

Priority 1: Sexually Transmitted Diseases Awareness and Prevention

Goals and Strategies to Address Sexually Transmitted Diseases

Goals

1. Decrease the rate of **Chlamydia** infections in Kern County from 763.1 per 100K to 686.79 per 100K by 2022.
2. Decrease the rate of **Gonorrhea** infections in Kern County from 251.6 per 100K to 226.44 per 100k by 2022.
3. Decrease the rate of **Early Syphilis** infections in Kern County from 48.5 per 100K to 43.7 per 100K by 2022.
4. Decrease the rate of **Congenital Syphilis** infections in Kern County from 240.3 per 100K to 216.3 per 100K by 2022.
5. Continue to decrease the mortality rate of **HIV** infected people in Kern County from 3.0 deaths per 100K to 2.7 deaths per 100K by 2022, exceeding Health People 2020 goals.
6. Decrease the number of newly diagnosed **HIV** infections in Kern County from 152 cases per year to 137 cases or less in the year 2022.

Strategies

1. **California Healthy Youth Act** is statewide legislation requiring school districts to ensure students receive comprehensive sexual health education and HIV prevention education. Included in the education are skills necessary to protect sexual and reproductive health from HIV and other STDs. School districts throughout Kern County are making arrangements to comply with this law.
2. **Condom Access Project:** Enables Kern County residents between the ages of 12 and 19 years to request a specified number of free condoms discretely through the mail.
3. **Family Life Education**, a program run by Clinical Sierra Vista, targets eighth grade students and focuses on sexual health. The program addresses sexual activity in teenagers and provides guidance on setting limits and being assertive in relationships. It also educates teens about health laws related to minors.
4. **Family Pact**, Family PACT is California's innovative approach to provide comprehensive family planning services to eligible low income (under 200% federal poverty level) residents. The purpose of family planning is to provide people a means by which they can decide for themselves the number, timing, and spacing of their children. More information can be obtained at: <https://familypact.org/>
5. **Know Your Risk Campaign:** Kern County Public Health Services Department's STD campaign, bring awareness of the high rates of STD in the County. Partnering with community stakeholders to reach every sexually active teen and adult in the County. Strategically placed billboards throughout the County and in outlying areas, encouraging people to seek testing and treatment.
6. **PrEP:** Offers pre-exposure prophylaxis (PrEP) for persons at continuing high risk of HIV infection through PrEP navigators and clinic staff. This is a way for people that are HIV negative, but at substantial risk to contracting the disease, to prevent HIV infection by taking preventative medication.
7. **Rapid HIV Testing:** Provides free, on-site rapid testing with a simple oral swab in 20 minutes. Persons who are preliminary positive are then referred for additional testing.
8. **Congenital Syphilis:** Conducts enhanced surveillance of congenital syphilis, which includes public health nurse follow up of all pregnant women through delivery and infant's negative syphilis test, monthly morbidity and mortality review of all congenital syphilis cases, and provider outreach and education.

Priority 2:

Chronic Disease Prevention and Healthy Living Promotion

Preventing and managing chronic disease is a major focus area for Kern County. In 2018, over half (55%) of all deaths were attributed to chronic disease, such as coronary heart disease, cancer, chronic lower respiratory disease, diabetes, chronic liver disease, and Alzheimer's. Obesity, mental health, and asthma were also identified as some of the top health problems facing our communities in the 2018 Community Health Survey.²⁶

The underlying causes of chronic diseases are complex. Factors range from unmodifiable genetic predisposition to effects of the built environment (e.g. sidewalks and parks to encourage physical activity or availability of healthy foods at local markets) to individual behavior and choices. Thus, a multifaceted approach is necessary for the promotion of healthy living and prevention of chronic disease.

What are Chronic Diseases?

Chronic diseases are defined as a condition that last 1 year or more and require ongoing medical attention. In the US, chronic diseases such as heart disease, cancer, obesity, and diabetes are leading causes of death and disability.

Coronary Heart Disease

Coronary heart disease kills over 1,000 Kern County residents and is responsible for over 4,000 hospitalizations yearly. For decades, heart disease was the leading cause of death in Kern County. Great strides have been taken to reduce heart disease in Kern County, reflected by a continuing decrease in the age-adjusted heart disease mortality rate.²⁶

While Kern County failed to meet the Healthy People 2020 target in 2018, California as a whole did.¹⁵ However, unlike many counties throughout California and the US, Kern County has seen dramatic decreases in age-adjusted mortality rates for heart disease (Figure 16). Indeed, the age-adjusted mortality rate for heart disease among Kern County residents has been cut in half since 1998, thanks to local, regional, and national efforts. It is important not to lose sight of the progress that has been made and to continue the trend of reducing heart disease mortality in Kern County.

Figure 16

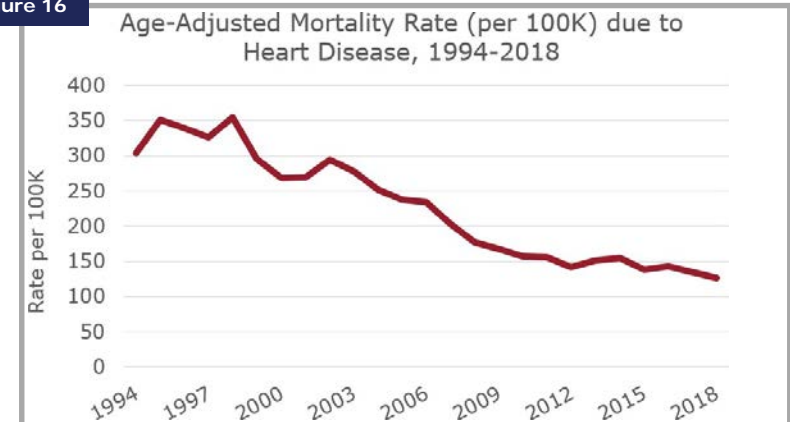
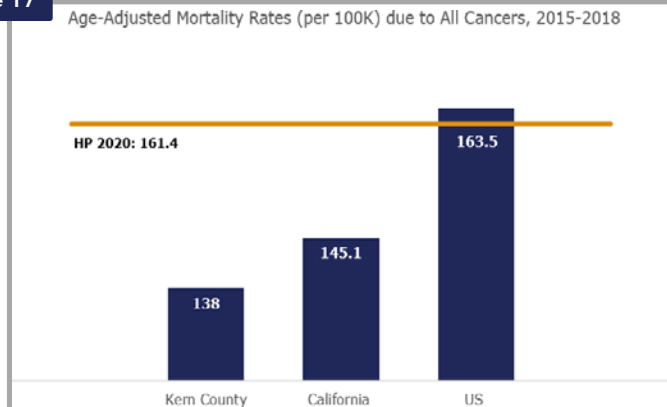


Figure 17



Cancer

Cancer is characterized by abnormal cell growth that can invade other tissues and spread to other parts of the body through the blood and lymph systems. Cancer is not a single disease, but a general term used to describe a collection of diseases each with its own clinical presentation, survival rate, and risk factors.²⁷

Since 2008, cancer has been the most common cause of death in Kern County residents, outnumbering heart disease. The most common types of cancer mortality in Kern County residents are lung and bronchus, female breast, prostate, and colon and rectum. In 2018, the age-adjusted mortality rate for cancer in Kern County met the Healthy People 2020 target, but was still higher than California as a whole (Figure 17). While the overall Healthy People 2020 target for cancer was met, it is important to remember that cancer is still the most common cause of death in Kern County and it remains important to take steps to reduce cancer incidence.²⁶

Like many chronic diseases, cancer risk can be reduced by making healthy choices, such as eating well, increasing physical activity, and reducing exposure to tobacco smoke and excessive sun exposure.²⁸

Priority 2:

Chronic Disease Prevention and Healthy Living Promotion

Obesity

Obesity is a complex disorder defined by an excessive amount of body fat. Although obesity may not be listed as a cause of death or reason for a hospital visit, this condition puts individuals at higher risk for stroke, heart disease, high blood pressure, diabetes, some cancers, and sleep disorders. Therefore, reducing obesity in a population is likely to have far reaching impacts.²⁷

While California as a whole meets the national objectives for reducing obesity in the population, Kern County continues to have a higher proportion of obese residents than the rest of the State and does not meet the Healthy People 2020 target (Figure 18).¹³

In the 2018 Community Health Survey, 41.5% of respondents said that “being overweight/obese” was one of the top 3 barriers to healthy living. Additionally, 44.5% and 39.5% responded that AQI and unsafe neighborhoods, respectively, were top challenges facing their community. Although these might not seem directly related to obesity, they are factors that affect physical activity levels in communities.

Obesity is on the rise throughout the country; unlike communicable disease where interrupting transmission can show an immediate reduction in the spread of diseases, changes to chronic disease are not so easily measured. Reversing a chronic condition often takes a long-term commitment to making healthy choices and sustaining a healthy lifestyle. There is no single solution to this issue and will require collaborative efforts between policy makers, state and local organizations, community leaders, schools, healthcare professionals, and individuals to make a difference in communities here in Kern County and beyond.²⁹

Figure 18

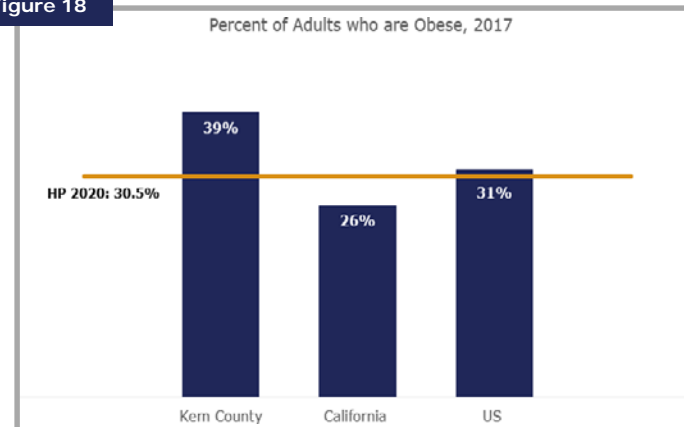
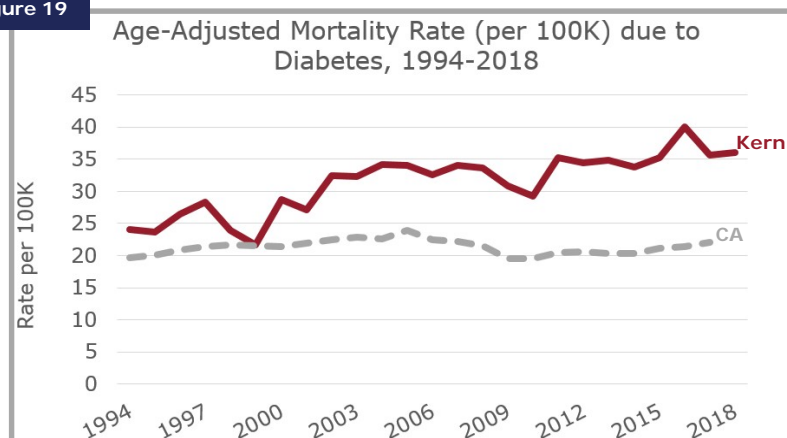


Figure 19



Diabetes

Diabetes is a group of diseases characterized by defects in insulin production or action in the body. This results in high levels of blood sugar, or blood glucose. Unmanaged diabetes can have severe complications, such as blindness, nerve damage, kidney failure, stroke, coma, and death. According to the CDC, more than 25 million people live with this disease and contributes to about \$116 billion in healthcare costs.³⁰

Diabetes kills nearly 300 Kern County residents; this is a 69% increase in age-adjusted mortality rate since 1994. Although diabetes is the 6th leading cause of death in Kern County, the mortality rate is 73% higher than the California average, ranking it the worst in the state for diabetes deaths (Figure 19).²⁶

Additionally, in a 2016-2017 survey, 13.5% of all adults in Kern County reported ever being diagnosed with diabetes and approximately 38% of those individuals reported that they feel “somewhat confident” or “not at all confident” in managing the disease.¹³ Clearly, increasing awareness for diabetes, promoting healthy living, and ensuring access to care are necessary for preventing morbidity and mortality caused by this disease.

Priority 2: Chronic Disease Prevention and Healthy Living Promotion

Goals and Strategies to Address Chronic Diseases

Goals

1. Decrease age-adjusted mortality rate due to **heart disease** from 126.1 per 100K to 113.5 per 100K by 2022.
2. Decrease age-adjusted mortality rate due to **cancer** from 138 per 100K to 124.2 per 100K by 2022.
3. Decrease age-adjusted mortality rate due to **diabetes** from 36.0 per 100K to 32.4 per 100K by 2022.
4. Decrease the percent of adults over 20 who report **no leisure-time physical activity** in the last month from 23% to 20% by 2022.
5. Increase the percent of children who **participate in vigorous physical activity** at least 3 days per week from 83% to 91.3% by 2022.
6. Decrease the percent of children and teens who **spend 5+ hours on sedentary activities** from 32.4% to 29% by 2022.
7. Increase the percent of children and teens who **did not consume soda within the last day** from 61.2% to 67.3% by 2022.

Strategies

1. **#KnowYourNumbers Initiative:** Program encouraging residents to know simple health-related indicators (body mass index, blood glucose, cholesterol) by providing health screenings, nutrition classes, and physical activity classes over multiple weeks to establish habits that continue after completion of the program.
2. **Certified Healthy Program:** Program identifying local food establishments meeting specified nutrition standards to empower residents to choose healthy foods when eating out. Nutrition guidelines emphasize low sodium content, low calorie count, low saturated fat, vegetarian options, and fresh produce options.
3. **Nutrition Education and Obesity Prevention (NEOP) Program:** A federally-funded program designed to increase healthy eating and physical activity among the SNAP-Ed eligible population.
4. **Supplemental Nutrition Assistance Program Education (SNAP-Ed):** Led by the Department of Human Services, this program provides educational services to help eligible families make healthier food choices with a limited budget and choose physically active lifestyles.
5. **Kern County Superintendent of Schools (KCSOS) Wellness Policy:** Provides guidance for local schools to promote healthy eating and active living. School breakfast and lunch items meet all USDA and state nutritional requirements to reduce the sugar intake of children. KCSOS also provides nutrition education for parents, students, and teachers.
6. **Bakersfield Police Activities League and the Kern County Sheriff's Activity League:** Offer free after-school programs for youth which include organized sports. These groups are particularly active in low income and underserved communities.
7. **Dignity Health Hospitals:** Offer yoga and Zumba classes that are free and open to the public. One of the benefits of indoor activities is that climate and outdoor air quality do not limit participation.

Priority 2: Chronic Disease Prevention and Healthy Living Promotion

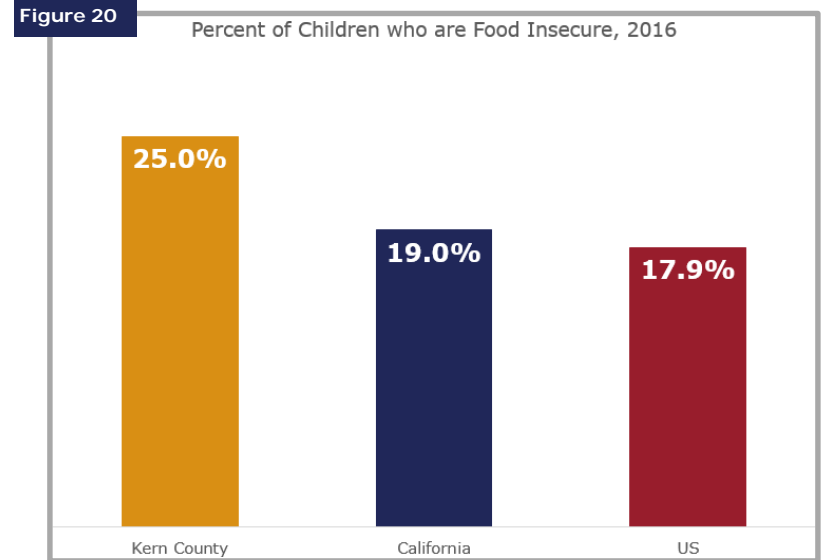
SPOTLIGHT: Food Insecurity, Childhood Poverty, and Chronic Diseases

The United States Department of Agriculture (USDA) defines food insecurity as, “a [consistent] lack of available financial resources for food at the level of the household.”³¹ This may be a long term issue or temporary and is influenced by factors such as: income, neighborhood conditions, transportation options, employment, race/ethnicity, and disability.

Research on adults and children in food insecure households indicate adverse health effects, including higher risk for hypertension, coronary heart disease, stroke, cancer, asthma, diabetes, chronic obstructive pulmonary disease, emotional distress, obesity, and behavioral problems. In short, food insecurity can play a role in the development of chronic diseases.³²

According to Feeding America in 2016, 118,410 (13.6%) of Kern County Residents were considered as food insecure.³³ Interestingly, the rate of food insecurity for children was much higher than the average rate of all Kern County residents; this study indicated that 25% of all children in Kern County were food insecure.³³ This is higher than both California and US averages for food insecure children (Figure 20).

This is concerning, given that health effects of food insecurity and malnutrition can persist beyond childhood into adulthood. Therefore, public health interventions aimed at mitigating food insecurity should have a special consideration for children in low income or food insecure households.



Goals and Strategies to Address Food Insecurity

Goals:

1. Decrease the proportion of Kern County residents who are food insecure from 13.6% to 12.2 % (10% improvement) by 2022.
2. Decrease the proportion of children who are food insecure from 25% to 22.5% (10% improvement) by 2022.
3. Increase the percent of adults who are able to find fresh fruits and vegetables in their neighborhood from 68% to 74.8% by 2022.

Strategies:

1. **Waste Hunger Not Food:** Program rescues surplus, edible food from restaurants, schools, and markets that might otherwise have been thrown in the garbage. Food is transported safely via refrigerated truck to distribution sites daily and is given to those in need.
2. **Cal Fresh:** Federally-funded program from the Department of Human Services provides assistance in buying healthy foods.
3. **Community Action Partnership of Kern (CAPK) Food Bank:** Program provides millions of pounds of food annually to hungry families as well as churches, charities, community centers, homeless shelters, and other social service agencies.
4. **National School Lunch Program and School Breakfast Program:** Program provides free and reduced-price meals to more than 70% of the county's students.
5. **Nutrition Education and Obesity Prevention (NEOP):** Federally-funded program that includes a component that includes renovating retail locations, like corner store markets, to carry more fresh produce to increase access to healthy foods in areas where grocery stores may be far away.

Priority 3:

Access to Healthcare

Access to healthcare is vital to a person's health. At some point in time, every individual needs some interaction with a healthcare provider. The lack of access results in poorer health outcomes; the smallest scratch can develop into an infected wound which could require extensive surgical procedures if not treated. Preventative services, detection and treatment of illness, as well as supportive care all help prolong life and improve quality of life.

A number of components influence access to healthcare. One of the most commonly cited is health insurance coverage which helps cover the cost of services. Those who are unable to pay are more likely to forgo care. Services provided can also vary both in quality and availability. In Kern County, unfortunately, many patients have to travel outside the county to seek specialized care or providers may only provide local services a few days a week. Improving access is vital to safeguarding the health of the public.

Why is Access to Healthcare Important?

Access to healthcare impacts one's overall physical, mental, and social quality of life. Uninsured individuals are more likely to have poor health status, to be diagnosed later, and to die prematurely.

Lack of Health Insurance

While Healthy People 2020 aims for 100% health insurance coverage nationwide, both Kern County and California continue to fall short (Figure 21).¹³ In the 2018 Community Health Survey, access to medical care was identified by 38.5% of respondents as one of the top 3 factors for a healthy community. In the same survey, 38% of respondents identified lack of health insurance as one of the top 3 barriers to healthy living.

Not only does lack of health insurance affect individuals and their communities, but it also puts a strain on an already overworked health system. Those lacking health insurance often seek care at urgent care centers and emergency rooms and utilize emergency medical transport. Those facilities exist mainly to preserve life and resolve serious symptoms; they are not designed to provide long-term services or support to the patient. As more patients become insured, it is hoped that they will also find a medical home with a provider who can help them maintain and improve their overall health preemptively, thereby reducing the need for emergency medical services.

Figure 21

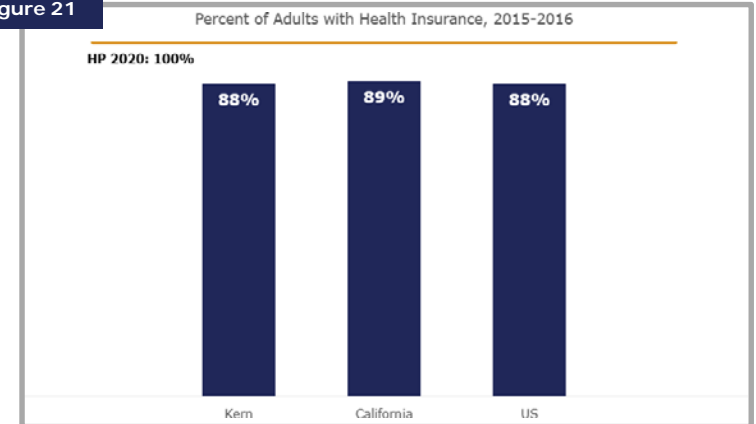
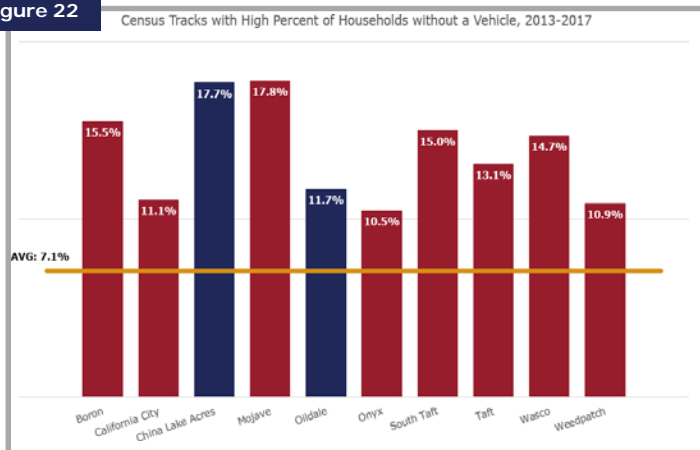


Figure 22



Lack of Transportation

Vehicle ownership gives individuals more freedom and a greater ability to travel. When a household does not own a car, access to supermarkets, hospitals, and doctor's offices are limited. Given the size of Kern County, vehicle ownership is important, particularly when it comes to transport to hospitals. A high percentage of hospitals are located within the Bakersfield Metro, with a few in outlying areas such as Tehachapi, Delano, Ridgecrest, and the Kern River Valley area. Therefore, residents living outside of the Bakersfield Metro area must seek healthcare services outside their community. Unfortunately, these individuals are more likely to live in a household without a vehicle.

In Figure 22, census tracts with a higher than average percent of households without a vehicle were identified.³ Most areas identified also have a shortage of health care providers (designated in red). Those in blue were not identified as having a shortage of health care providers.² This highlights the need for more healthcare providers throughout the county and better access to public or non-emergency medical transport.

Priority 3: Access to Healthcare

Goals and Strategies to Address Access to Healthcare

Goals

1. Increase the proportion of residents who are **insured** from 88% to 95% by 2022.
2. Increase the proportion of residents who have a **usual place to go when sick or need health advice** from 86.5% to 95% by 2022.
3. Decrease the proportion of residents whose **usual source of care was an emergency room or urgent care center** from 2.1% to 1.8% by 2022.
4. Decrease the proportion of residents who **delayed or did not get prescription medication** from 9.4% to 8.5% by 2022.
5. Decrease the proportion of residents who had **difficulty understanding a doctor** from 6.6% to 5.9% by 2022.

Strategies

1. **Medi-Cal Managed Care:** Kern Family Health Care and Health Net are health plans for people who have Medi-Cal in the Kern County area. Both health plans work with the State of California to help people get the health care they need.
2. **Mobile Health Clinic:** Designed and operated by the Kern County Public Health Services Department, this state-of-the-art mobile health clinic provides health services that are most needed within our communities. These include: health screenings, immunizations, TB testing, and reproductive health services. Although the focus areas are those with lower access to care, the mobile clinic serves all of Kern County and a full schedule can be found at <https://kernpublichealth.com/mobile-clinic/>.
3. **2-1-1 Community Action Partnership of Kern (CAPK):** Provides a comprehensive information and referral services that link Kern County residents to community health and human services support, including referrals to insurance.
4. **Salud con Health Net:** An insurance plan available in Kern County that, in addition to traditional low-cost health providers, includes several providers in Mexican border towns such as Tijuana, catering towards patients who travel frequently or are more comfortable receiving services in Mexico.
5. **Transportation:** Kern Regional Transit (KRT) serves many of the outlying areas of the county. In addition to reduced fares for those with disabilities, KRT offers door-to-door service in select areas, ideal for those with limited mobility. Golden Empire Transit (GET) is a bus system serving the greater Bakersfield area offers reduced fares to those with disabilities. The GET-A-Lift program is a special paratransit service for disabled residents unable to use regular fixed route services and includes transportation for medical appointments.
6. **California Children's Services (CCS):** A statewide health plan that manages healthcare services for children with certain medical conditions. CCS is one of the few plans where residency, not citizenship, is required allowing any Kern County resident who meets eligibility requirements to be served. Additionally, while most CCS clients are low income, any family that spends more than 20 percent of their income on medical costs may be eligible.
7. **Nurse-Family Partnership (NFP):** An evidence-based and nationwide program that provides low-income, first-time moms with the care and support they need to have a healthy pregnancy, provide competent care their children, and achieve a better life for themselves and their families.

Priority 3: Access to Healthcare

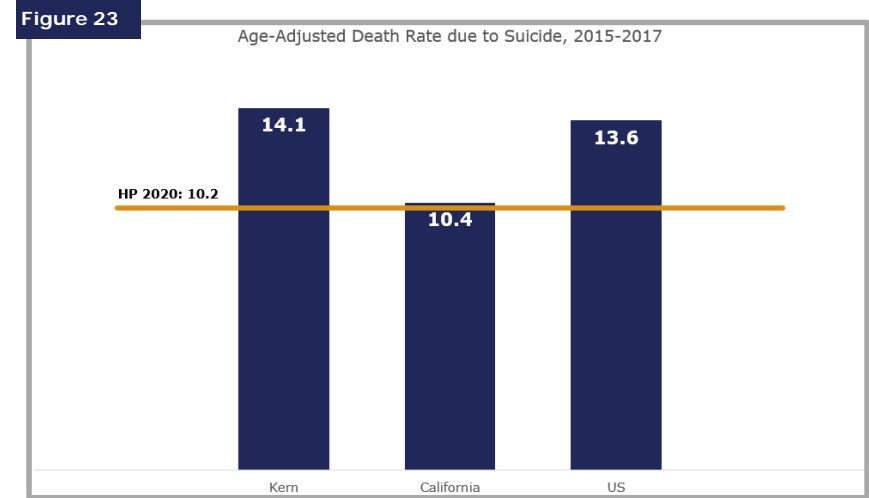
SPOTLIGHT: Access to Mental Health Care

Mental health and drugs and alcohol use were identified as some of the top health problems facing Kern County Communities in the 2018 Community Health Survey. Although these two health issues do not always coincide, it is important to recognize that access to mental health services and preventative interventions are the best ways to address these issues and protect the health and safety of communities.

Behavioral health issues are common causes of disability in the US. When left untreated, mental health can affect a person's physical wellbeing, decreasing an individual's ability to maintain good physical health or participate in health-promoting behaviors. Therefore, in order to promote healthy living, communities must also be provided good access to mental health practitioners and services.²¹

The age-adjusted mortality rate due to suicide is 14.1 per 100K, which is higher than California and US averages and exceeds the Healthy People 2020 target (Figure 23).²⁶ Although this cause of death was ranked 11th for overall deaths in Kern County for 2017, suicide is preventable. One factor that could be contributing to this is the number of mental health practitioners in Kern County. Currently, the ratio of patients to mental health care providers in Kern County is 580:1. Although this is not the highest ratio in California, it is well above California as a whole (380:1).⁶

Ensuring that residents are connected with the proper resources and are getting the help they need may address more than just mental health; it may also address some of the chronic disease issues facing Kern County and promote better, safer, and healthier communities.



Goals and Strategies to Access to Mental Health Care

Goals:

1. Increase the percent of teens who received emotional/psychological counseling in the past year from 11.6% to 13.2% by 2022.
2. Decrease the proportion of residents whose usual source of care was an emergency room or urgent care center from 2.1% to 1.8% by 2022.
3. Decrease the age-adjusted mortality rate due to suicide from 14.1 to 12.7 per 100K by 2022.

Strategies:

1. **Black Infant Health Program (BIH):** Uses a group-based approach with complementary client-centered case management to help pregnant and post-natal women develop life skills, learn strategies for reducing stress, and build social support. One-on-one case management ensures that clients are connected to the appropriate community and social services (i.e. health insurance, prenatal and postnatal care) to meet their needs.
2. **Behavioral Health and Recovery Services:** Provides comprehensive mental health services to Kern County residents, including transportation for mental health services, counseling, rehabilitation, testing, medication management, and much more.
3. **Emergency Medical Services Abuse Policy:** Partnering with Public Health Nursing, Behavioral Health and Recovery Services, Human Services, and Primary Care Providers, this new policy allows the Kern County EMS Program to identify individuals habitually requesting EMS services for non-emergency situations and offer counseling, refer them to appropriate care providers, and ensure their needs are met.
4. **Nurse-Family Partnership (NFP):** An evidence-based and nationwide program that provides low-income, first-time moms with the care and support they need to have a healthy pregnancy, provide competent care their children, and achieve a better life for themselves and their families.

Conclusion

In summary, the health of Kern County is dependent on many factors, only some of which are named in this report. While great strides have been achieved in some avenues (e.g. reduction of the heart disease deaths, better air quality) there are still some areas in need of improvement (e.g. birth outcomes, sexually transmitted infection rates). As some needs are met, others will arise; identifying and adapting to those needs will remain the goal of Kern County Public Health Services Department. Even though Kern County does meet a number of the Healthy People 2020 national objectives, it often falls short of the average rate for California. In other cases, Kern County may exceed the state average, but still may not reach the national target. Therefore, before declaring a need met, it will be important to measure against several metrics. Even when Kern County succeeds in meeting and surpassing set targets, continued efforts should be put forth to improve health and maintain good health. If at all possible, met needs should not be sacrificed while pursuing other unmet needs.

In assessing the needs of Kern County, selected areas have been noted which merit focused attention. Hopefully in meeting those needs, Kern County will see an improvement in overall health. Our Department will continue to use evidence-based and promising practice models to ensure the effectiveness of processes, programs, and interventions. We will also continue to update the Call to Action stakeholders and community to keep communication open about ways that they can contribute to this effort. We look forward to creating linkages between the many partnerships in Kern County and recognizing the contributions they bring to help us protect and safeguard the health and safety of our community.

References

1. "Preamble to the Constitution of the World Health Organization." *Official Records of the World Health Organization*. New York: s.n., 19-22 June, 1946. Vol. 22, P.100. As adopted by the International Health Conference, signed on 22 July 1946 by the representatives of 61 States and entered into force on 7 April 1948.
2. "Mobilizing for Action through Planning and Partnerships (MAPP)" User's Handbook, www.naccho.org/programs/public-health-infrastructure/performance-improvement/community-health-assessment/mapp.
3. U.S. Census Bureau. *American Fact Finder*. 2018.
4. U.S. Department of Labor, U.S. Bureau of Labor Statistics. *Current Population Survey - Employment Projections*. 2017.
5. "Kern." Ed, www.ed-data.org/county/Kern.
6. California Department of Finance. *California Public K-12 Graded Enrollement and High School Graduate Projections by County –2018 Series*.
7. U.S. Department of Education. College Affordability and Transparency Center. 2017-2018.
8. California State University. 2016-17 California State University Tuition and Fee Rates. 2016.
9. University of Alberta. "Long-term Poverty Affects Mental Health Of Children." ScienceDaily. ScienceDaily, 9 February 2006. <www.sciencedaily.com/releases/2006/02/060206171449.htm> American Lung Association. *State of the Air*. Washington, DC : s.n., 2018.
10. American Lung Association. *State of the Air*. Washington, DC : s.n., 2018.
11. Monthly Averages. The Weather Channel. [Online]
12. "Valley Fever | Coccidioidomycosis | Types of Fungal Diseases | Fungal | CDC." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, www.cdc.gov/fungal/diseases/coccidioidomycosis/risk-prevention.html.
13. UCLA Center for Health Policy Research. California Health Interview Survey (CHIS). [Online] <http://ask.chis.ucla.edu/main/DQ3/topic.asp?page=first>.
14. Office of Statewide Health Planning & Development. *Public Patient Discharge Data*. 2016.
15. "Healthy People 2020." Healthy People 2020 |, www.healthypeople.gov/.
16. California Department of Public Health, Center for Health Statistics and Informatics. *Birth Statistical Master File*. 2014-2017.
17. "Preterm Birth." *World Health Organization*, World Health Organization, www.who.int/news-room/fact-sheets/detail/preterm-birth.
18. Hoffmann, S.D. & Maynard, R.A. *Kids having kids: the economic costs and social consequences of teen pregnancy*. Washington, DC : Urban Institute Press, 2008.
19. Hamilton, Brady, et. al. *Births: Final Data for 2014*. s.l. : National Vital Statistics Reports, 2015. Volume 64, Number 12.
20. Heaman, Maureen I, et al. "Barriers and Facilitators Related to Use of Prenatal Care by Inner-City Women: Perceptions of Health Care Providers." *BMC Pregnancy and Childbirth*, BioMed Central, 16 Jan. 2015, www.ncbi.nlm.nih.gov/pmc/articles/PMC4302607/.
21. California Department of Public Health. Sexually Transmitted Disease Control Branch. Sexually Transmitted Disease Data. [Online] 2019.
22. "Sexually Transmitted Diseases in California 2017 Executive Summary." California Department of Public Health. Sexually Transmitted Disease Control Branch. Sexually Transmitted Disease Data. [Online] 2019.
23. "Syphilis." *Centers for Disease Control and Prevention*, www.cdc.gov/std/syphilis/stdfac-syphilis.htm.
24. California Department of Public Health, Office of HIV/AIDS Surveillance in California. [Online] 2017.
25. Kern County Public Services Department. *HIV/AIDS Delivery Service Plan*. Bakersfield, CA. 2016.
26. California Department of Public Health. Vital Records Business Intelligence System . [Online] 2018.
27. "Strategies to Prevent Obesity | Overweight & Obesity | CDC." Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, www.cdc.gov/obesity/strategies/index.html.
28. "How to Prevent Cancer or Find It Early | CDC." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, www.cdc.gov/cancer/dcpc/prevention/index.htm.
29. "Overweight and Obesity." National Heart Lung and Blood Institute, U.S. Department of Health and Human Services, www.nhlbi.nih.gov/health-topics/overweight-and-obesity.
30. "Division of Diabetes Translation | CDC." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, www.cdc.gov/diabetes/.
31. "Definitions of Food Security." *USDA ERS - Definitions of Food Security*, www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx.
32. Pediatrics, Council On Community, and Committee On Nutrition. "Promoting Food Security for All Children." *Pediatrics*, American Academy of Pediatrics, 1 Nov. 2015, pediatrics.aappublications.org/content/136/5/e1431.
33. "Map the Meal Gap." *Feeding America*, map.feedingamerica.org/county/2016/child/california/county/kern.

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Kern Medical

Kern Regional Center

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