



KERN COUNTY  
**Public Health Services**  
 DEPARTMENT

## Community Health Improvement Plan

2017 - 2022

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## **Introduction**

Kern County is the third largest county in California by area and the twentieth largest county in the United States. The geography ranges from mountains to valley floor to arid desert and includes a number of natural and man-made bodies of water. The major metropolitan area of the county is Bakersfield; while relatively centrally located, Bakersfield is still a two-hour drive from parts of the county. The county is inextricably connected to the rest of California by Interstate 5 and Highway 99. Amtrak's San Joaquin Valley passenger train ends in Bakersfield where travelers continuing to southern California must transfer to a bus. Eleven commercial airports and two military installations make Kern County a natural hub of travel. Four state prisons and two federal correctional facilities house thousands of inmates from around the country.

Kern County is the largest producer of petroleum-based energy in California and a top producer nationally. Kern County is also a top producer of agricultural goods, generating 75 percent of all the carrots, 47 percent of all the cherries, and 46 percent of all the potatoes in the state. More than 16 percent of all workers in Kern County are involved in the agriculture industry, a much higher proportion compared to the state and nation.

With an estimated population of 886,507 residents in 2016, Kern County is the eleventh most populous county in the state and has a larger population than each of the states of South Dakota, North Dakota, Alaska, Vermont, and Wyoming. Kern County residents are, in general, younger, less educated, have a lower income, and more likely to be Hispanic compared to the rest of California and the nation.

Unfortunately, Kern County consistently ranks low compared to other California counties in many major health indicators. From birth outcomes, mortality, communicable and chronic disease, to air quality, healthcare coverage, and food security, Kern County is consistently below the state average. The good news, however, is that Kern County continues to make improvements on a number of these indicators, a testament to dedicated stakeholders working tirelessly toward better health in Kern County.

Kern County has a diverse population and a unique set of needs. It will take an integrated, yet flexible, approach to address the needs of different communities throughout the county. The Kern County Community Health Improvement Plan (CHIP) identifies three priority areas where attention and resources continue to be needed. These priority areas were selected due to the severity of their outcome and their prevalence throughout the county. These are by no means the only health issues afflicting Kern County, nor are they isolated from the other health issues faced by residents. However, by concentrating on these priority areas, it is expected that other areas of health will also improve.

Priority areas are briefly defined and include local statistics to illustrate their prevalence, magnitude, and health effects. Included with the description of each priority area is a table of

objectives, goals, and indicators to help measure change over time. In order to make each goal measurable, a five percent improvement benchmark was selected as the target for the five-year timeframe of the CHIP. This standard was chosen to align with other published CHIPs and to provide enough time for changes to be measurable. In particular with chronic diseases, it may take a few years for changes made at the population level to show improvement in the designated indicators. Correspondingly, most of the national Healthy People targets are designated based on a 10 percent improvement from baseline levels over a period of 10 years. A five-year benchmark allows communities to assess their progress part way through the Healthy People period to determine where more attention is needed. A 10 percent improvement target is also included with the objectives table as a reference. While the 10 percent improvement target is not expected to be reached during the five-year timespan of the CHIP, it provides a long term goal and serves as a reminder that some changes take time to manifest.

After each objectives table, a number of strategies are outlined which may help address the issues raised in the priority area, including examples of currently successful local programs. The CHIP cannot include every possible service or provider which contributes to community health but attempts to highlight concepts which have had encouraging results and can be expanded throughout the county. Suggestions for partnerships or collaboration are more than welcome.

## **Priority Area 1: Obesity and Obesity-related Diseases**

Out of 58 California counties, Kern County ranks 58 (worst) in diabetes deaths, 56 in coronary heart disease deaths, 43 in cerebrovascular disease deaths, and 39 in cancer deaths (County Health Status Profiles, 2016). Those four conditions alone caused nearly 10,000 hospitalizations in 2015 and cost more than \$862 million (Hospital Discharge Data, 2015). Obesity has been linked to each of these diseases and many more. In Kern County, 33.2 percent of adults are obese (California Health Interview Survey [CHIS], 2011-2012) ranking the county 49 out of 58 California counties for obesity (County Health Rankings and Roadmaps, 2014). As a contributing factor to the above and many other diseases and conditions, obesity was a primary or underlying cause of 9,941 hospitalizations, costing \$731 million (Hospital Discharge Data, 2015). Clearly, obesity is a huge burden on Kern County residents.

Obesity is defined as a body mass index (BMI) of 30 or above. BMI is used to categorize a person's weight while taking the person's height into account. In and of itself, BMI is not recommended as a diagnostic tool; however, as a simple and inexpensive measurement, it can be used to determine if more in-depth medical assessments should be performed. The calculation for BMI is where 703 is a conversion factor (BMI was originally formulated using metric units). The formula is designed for use in adults 20 years and older. Care must be taken when calculating BMI for children and teens as their bodies are in flux and proportionally different than adults. Often, terms like "overweight for age" or "at risk for obesity" are used when describing children and teens. It should also be noted that popular media may use the term obesity very freely, referring to anyone who is overweight rather than clinically obese.

Increased BMI has been correlated with many health problems including high blood pressure, high cholesterol, Type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea and respiratory problems, and some cancers. While some of these conditions are not fatal, they all have long-term health consequences which may require life-long medical treatment or put patients at risk for other diseases. Many of these health issues are intertwined; obesity may not necessarily cause hypertension and hypertension may not cause obesity but the conditions often occur together. In that same respect, often when high BMI decreases, hypertension also moves towards normal blood pressure range. Thus, in targeting obesity, it is expected there will be improvements in some of these other health conditions.

The underlying causes of obesity 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 to target obesity at a population level.

<b>Goal</b>	<b>Objective</b>	<b>Indicator (source and baseline year)</b>	<b>Baseline</b>	<b>Target 5% Improvement</b>	<b>Target 10% improvement</b>
a. Increase proportion of residents who maintain a healthy weight	Decrease childhood obesity	Proportion of children who are overweight for age (CHIS 2015)	17.6%	16.7%	15.8%
	Decrease youth obesity	Proportion of teens who are overweight or obese (CHIS 2015)	47.2%	44.8%	42.5%
	Decrease adult obesity	Proportion of adults who are overweight or obese (CHIS 2015)	76.4%	72.6%	68.8%
b. Decrease deaths due to obesity-related diseases	Decrease heart disease deaths	Age-adjusted mortality rate due to heart disease per 100,000 residents (VRBIS* 2015)	138.2	131.3	124.4
	Decrease cancer deaths	Age-adjusted mortality rate due to all cancer per 100,000 residents (VRBIS 2015)	156.1	148.3	140.5
	Decrease cerebrovascular (stroke) deaths	Age-adjusted mortality rate due to stroke per 100,000 residents (VRBIS 2015)	35.8	34.0	32.2
	Decrease diabetes deaths	Age-adjusted mortality rate due to diabetes per 100,000 residents (VRBIS 2015)	25.1	23.8	22.6
c. Increase access to fresh, healthy foods and beverages	Increase access to healthy foods in neighborhood	Proportion of adults who can always find fresh fruits and vegetables in their neighborhood (CHIS 2015)	68.0%	71.4%	74.8%
	Increase affordability of healthy foods in neighborhood	Proportion of adults who can always find affordable fresh fruits and vegetables in their neighborhood (CHIS 2015)	48.4%	50.8%	53.2%
d. Increase consumption of healthy foods and beverages	Increase consumption of fruits and vegetables in children	Proportion of children who eat 5 or more servings of fruits and vegetables a day (CHIS 2015)	24.8%	26.0%	27.3%
	Increase consumption of fruits and vegetables in youth	Proportion of teens who eat 5 or more servings of fruits and vegetables a day (CHIS 2015)	5.9%	6.2%	6.5%
	Decrease consumption of soda	Proportion of children and teens who consumed soda yesterday (CHIS 2015)	24.9%	23.7%	22.4%
	Decrease consumption of other sugar-sweetened beverages	Proportion of children and teens who consume sugary drinks (other than soda) yesterday (CHIS 2015)	26.1%	24.8%	23.5%
e. Decrease food insecurity	Decrease overall food insecurity	Proportion of residents who are food insecure (Feeding America 2017)	34.6%	32.9%	31.1%
	Decrease childhood food insecurity	Proportion of children who are food insecure (Feeding America 2017)	25.3%	24.0%	22.8%

<b>Goal</b>	<b>Objective</b>	<b>Indicator (source and baseline year)</b>	<b>Baseline</b>	<b>Target 5% Improvement</b>	<b>Target 10% improvement</b>
f. Increase access to physical activity	Maintain public recreational areas and open spaces	Number of public parks and open spaces (County and cities, 2017)	186	186+ (maintain/increase)	186+ (maintain/increase)
	Increase access to parks and open spaces	Proportion of children and teens who have a park, playground or open space within walking distance (CHIS 2015)	92.5%	97.1%	100% (maximum 100%)
		Proportion of teens who indicate nearby park or playground is safe during the day (CHIS 2015)	84.1%	88.3%	92.5%
g. Increase participation in physical activity	Increase use of parks and open spaces	Proportion of children and teens who visited a park, playground, or open space in the last month (CHIS 2015)	77.4%	81.3%	85.1%
	Increase physical activity	Proportion of children who are physically active five days a week for at least one hour a day (CHIS 2015)	67.3%	70.7%	77.7%
		Proportion of teens who are physically active five days a week for at least one hour a day (CHIS 2015)	30.7%	32.2%	35.5%

\*VRBIS: Vital Records Business Intelligence System, which has replaced the Death Statistical Master File (DSMF)

## Strategies for Combating Obesity and Obesity-related Diseases

Strategy 1: Increase nutrition education and physical activity promotion.

- The ***Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)*** is a federally-sponsored program carried out by local agencies which provides nutritious food, nutrition education, and breastfeeding support to low-income families. Health education has a special emphasis on mothers and children. WIC services can be accessed at numerous locations throughout the county, including sites run by Community Action Partnership (CAPK), Clinica Sierra Vista, and Omni Family Health.
- ***Supplemental Nutrition Assistance Program Education (SNAP-Ed)*** from the Department of Human Services provides educational services to help eligible families make healthier food choices with a limited budget and choose physically active lifestyles.
- The ***Nutrition Education and Obesity Prevention (NEOP)*** program is a federally-funded program designed to increase healthy eating and physical activity among the SNAP-Ed eligible population. Activities include:
  - Contracting with local school districts and government agencies to provide approved nutrition education and promote physical activity to students and their families, Cal-Fresh families, and older adults.
  - Providing community education classes in food resource management such as grocery shopping with a list, comparing prices, and using the Nutrition Facts label.
  - Working with retail locations to help local corner stores carry more fresh produce, particularly in areas where fresh produce may be difficult to find.
- In addition to NEOP partnership, the ***University of California Cooperative Extension of Kern County*** engages in agricultural research to the benefit of the local industry. It provides horticultural classes to the community and cooking classes to youth.
- The ***Kern County Superintendent of Schools (KCSOS) Wellness Policy*** includes 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.

Strategy 2: Engage community in self-sustaining healthy living activities.

- The ***Greenfield Walking Group*** was formed by a group of local mothers who wanted to improve their fitness and connect with neighbors after meeting at a nutrition class. Through grassroots efforts, they spearheaded improvements to their neighborhood park and community. Accomplishments include:
  - Improving walkways and lighting to access the park.
  - Reducing drug and gang-related activity including graffiti.
  - Sustaining a fruitful community garden.
- ***School and Community Gardens*** throughout the county have increased access to fresh produce, improved city landscapes, and increased pride in the neighborhood. Various



partners and sponsors are involved in the gardens, further expanding the community involvement.

- The ***Heritage Park Improvement Plan*** sought input from the surrounding community to choose and prioritize improvements to the park. Additionally, monthly park clean ups by community members have helped reengage neighbors with the park.

Strategy 3: Increase access to obesity-related health screenings and community health education.

- The ***Mercy and Memorial Community Wellness Program*** provides free health screenings at select locations in the community, including blood pressure, cholesterol, and blood sugar assessment. Health education accompanies the screenings, particularly if any of the measurements are outside the healthy range.
- The ***Community Preventive Health Collaborative*** brings similar health screenings to uninsured and under-insured community members, while providing real-world experience for California State University Bakersfield nursing students.
- The ***Bakersfield Homeless Center*** provides free medical care to some of the most vulnerable residents including health screening and applicable health education.
- A number of local hospitals, including ***Ridgecrest Regional Hospital*** and ***Tehachapi Valley Healthcare District*** participate in annual community health fairs, particularly important in remote locations of the county that may not be otherwise reached.

Strategy 4: Increase opportunities to engage in organized activities for sustainable active living.

- All three ***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.
- The ***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 undeserved communities.
- The ***Boys and Girls Club*** oversees a free after-school program at many Bakersfield elementary and junior high/middle schools which include physical activity as part of the curriculum.
- A large component of the ***Greenfield Walking Group*** is walking with friends and neighbors. Children make use of the playground equipment while parents walk or participate in Zumba classes.

Strategy 5: Improve access to healthy foods and increase food security

- The ***Cal Fresh*** program from the Department of Human Services provides assistance in buying health foods.
- The ***Community Action Partnership of Kern (CAPK) Food Bank*** provides millions of pounds of food annually to hungry families as well as churches, charities, community centers, homeless shelters, and other social service agencies.

- Throughout the school year, the *National School Lunch Program and School Breakfast Program* provide free and reduced-priced meals to more than 70 percent of the county's students. Additionally, nearly all schools are open to the community during the summer to provide meals for any children under the age of 18 years, regardless of income.
- Another component of *NEOP* (see Strategy 1) includes renovating retail locations like corner store markets to carry more fresh produce to increase access to healthy foods, particularly in areas where grocery stores are too far away to patron.

## **Priority Area 2: Sexually Transmitted Diseases**

Out of 58 counties, Kern County is ranked 57 for chlamydia incidence, 51 for gonorrhea incidence, and 56 for syphilis incidence (CDPH STD Branch data tables, 2015). Chlamydia is consistently the most commonly reported condition in Kern County; rates have tripled since 1995 and continue to increase. Gonorrhea has risen at a slower pace, but steadily rises. In 2015, primary and secondary syphilis cases were at unprecedented highs with rates nearly four times as high as they were in 2010. (Kern County Monthly Morbidity Reports, 2015). Congenital syphilis, when a mother infects her child during pregnancy, has reemerged in Kern County and across the nation. While the category of sexually transmitted diseases (STD) can include more than 25 infectious agents, chlamydia, gonorrhea, and syphilis are the three conditions that are usually being referenced when the term STD is used, as those are the three conditions which are reportable to the health department. Most often, syphilis refers to primary and secondary stage syphilis, which are the early symptomatic stages of syphilis that indicate a recent infection. Syphilis symptoms go away on their own with or without treatment, so syphilis can also be diagnosed 10-30 years after the infection has occurred. This delay reduces the value of information gleaned about risk so oftentimes data analysis of syphilis is limited to primary and secondary stages. HIV is also reportable, but usually evaluated separately, as there are more specific guidelines regarding HIV reporting. Other STDs such as human papillomavirus (HPV), herpes simplex, and chancroid are not reportable so there is limited surveillance data on those conditions. While there is no local data on the cost of STDs, the national estimated cost is \$16 billion a year (CDC factsheet, 2015). This figure only includes chlamydia, gonorrhea, and syphilis, each which is curable with antibiotic treatment. Other infections, such as HIV or Hepatitis C are chronic conditions that can require life-long treatment at a much higher cost. HPV has been linked to cancer and can incur those related costs. While there has been tremendous improvement in reducing death due to STDs, they can still be fatal. Congenital syphilis is one of the most common causes of late term fetal demise; gonorrhea can become disseminated to other parts of the body and become life-threatening; HIV kills thousands across the nation annually. Even in the absence of mortality, the long-term health consequences of STDs are staggering. Chlamydia and gonorrhea infection are leading causes of infertility; untreated syphilis can cause irreversible organ damage. With consistent and correct barrier protection (i.e. condoms) these infections are largely preventable. Unfortunately, many people infected with an STD might not have symptoms, have transient symptom that go away on their own, or have symptoms they don't associated with an STD. People who do not know they are infected cannot seek treatment and can unknowingly infect their partners. Pregnant women can also expose their infants in utero or during childbirth.

In many cases of chlamydia, gonorrhea, and syphilis, antibiotics will cure the infection. However, increased antibiotic resistance in gonorrhea has raised concern about treatment effectiveness. Also, late stage syphilis requires multiple injections of antibiotics each a week apart. Providers may treat symptomatic patients clinically, even before they receive the positive test results because patients may not return to receive their test results or subsequent treatment. Providers routinely

encourage infected patients to refer sexual partners for testing and treatment, even if the partner shows no symptoms. In the state of California, providers are allowed to provide extra prescriptions or medication to the patient so the patient can give it to his/her sexual partners and reduce the risk of reinfection, something known as patient-delivered partner therapy. Partners can also be notified anonymously so they might seek testing and treatment. However, social media and anonymous sex has made partner notification more difficult in recent years. Patients may have little or no contact information for their sexual partner. STDs have been on the rise in Kern for decades, so this social shift is not the sole cause of the increasing numbers; it nevertheless likely contributes to disease transmission.

Sexual health has direct implications on reproductive health and subsequently birth outcomes. Since the vast majority of women infected with STDs are also in their child-bearing years, it is important not to overlook perinatal transmission. It is recommended that all pregnant women are screened for chlamydia at the first prenatal visit and at-risk women are re-tested in the third trimester. Women who are at risk for gonorrhea should also be screened at the first prenatal visit and retested in the third trimester if risk is ongoing. Transmission can occur during childbirth for both chlamydia and gonorrhea. Chlamydia infection in newborns can cause conjunctivitis and pneumonia; gonorrhea infection can cause blindness and blood poisoning. These are serious consequences that can be avoided with proper, timely treatment. All women are recommended to be screened for syphilis at the first prenatal visit; women living in locations where syphilis morbidity is high should be re-tested at 28 to 32 weeks gestation and again at delivery. In May 2016, the Kern County Health Officer declared Kern County a high morbidity county for syphilis and encouraged providers to implement the recommended additional screenings for syphilis. Women without prenatal care should be tested for syphilis at birth as well as any woman who delivers a stillborn after 20 weeks gestation. Syphilis can be transmitted in utero, prior to delivery, so testing at time of delivery may be too late to avoid transmission. STD infections during pregnancy can result in stillbirth, neonatal death, low birth weight, premature birth, and congenital deformities. Treatment with antibiotics for bacterial STDs like chlamydia, gonorrhea, and syphilis can significantly lower these risks. Thus, timely prenatal care is crucial to protect the infant from maternal-child transmission.

Sexual health can be a politically-charged and delicate topic. It is not a popular subject, but the ever-increasing incidence of STDs in Kern County necessitates a dialogue. Kern County had the worst chlamydia rates in the state from 2000 to 2014. Kern County was ranked second worst in the state in 2015, but since Kern's rates continue to increase, this change in statewide ranking is not a victory. While Kern County has a slightly better ranking for gonorrhea at seventh worst in the state, multiple small counties are subject to large fluctuations in their rates year to year. Typically, Kern County is ranked third worst in the state for gonorrhea. Primary and secondary syphilis is at unprecedented high in Kern County, particularly among females. The rate of syphilis in females in Kern County is more than three times higher than state average. Kern County has

also seen more congenital syphilis cases in the past five years than it has in the preceding twenty years. In 2015, six babies died due to syphilis. Despite any social reservations, the severity of the consequences and the sheer number of cases demand the subject of STDs be broached. Increased awareness and education is essential to helping people make informed decisions; additional access to protective measures, screening, and subsequent treatment is needed to prevent the spread of STDs.

Education is necessary to give a sexually active person the ability to make informed choices. The California Department of Education enacted the California Healthy Youth Act in 2016, which requires schools to provide comprehensive sexual health education and HIV prevention education to students in the seventh through twelfth grade. School districts across the county are working to meet the requirements of that legislation. Previously, sexual health education was not explicitly required by the state. It is hoped that educating students in junior high/middle school and high school can help decrease the rates in young adults. The population with the highest STD rates is adults aged 20 to 24 years. This group of young adults can be particularly difficult to reach. Unlike adolescents who might be reached through school-based health education classes, young adults as a group can be very disjointed: college, workforce, or unemployment may lead them in different directions. High mobility and migration make them difficult to find and track; new residents may be unaware of the prevalence of STDs in Kern County. Being that they are young and generally healthy, this group is also one of the least likely to seek healthcare services and one of the most likely to lack health insurance. While the enactment of the Affordable Care Act may have reduced the number of young people without health insurance, its impending repeal may affect coverage. Since broad education may not reach this demographic, it may be through medical providers that appropriate sexual and reproductive health information may be best channeled.

<b>Goal</b>	<b>Objective</b>	<b>Indicator (source and baseline year)</b>	<b>Baseline</b>	<b>Target 5% Improvement</b>	<b>Target 10% improvement</b>
a. Decrease incidence of chlamydia	Decrease chlamydia in all age groups	Incidence rate per 100,000 population (County Morbidity Report 2015)	691.9	657.3	622.7
	Decrease chlamydia in 15-24 year olds	Incidence rate per 100,000 population (County Morbidity Report 2015)	2591.7	2452.1	2332.
b. Decrease incidence of gonorrhea	Decrease gonorrhea in all age groups	Incidence rate per 100,000 population (County Morbidity Report 2015)	174.8	166.1	157.3
	Decrease gonorrhea in 15-24 year olds	Incidence rate per 100,000 population (County Morbidity Report 2015)	504.2	479.0	453.8
c. Decrease incidence of primary and secondary syphilis	Decrease syphilis in all groups	Incidence rate per 100,000 population (County Morbidity Report 2015)	18.3	17.4	16.5
	Decrease syphilis in men	Incidence rate per 100,000 population (County Morbidity Report 2015)	25.3	24.0	22.8
	Decrease syphilis in women of childbearing age	Incidence rate per 100,000 population (County Morbidity Report 2015)	22.1	21.0	19.9
d. Decrease risk of prenatal STD transmission	Decrease incidence of STDs in pregnant women (Note: pregnancy status is not well documented)	Number of cases (County Morbidity Report 2015)	544	517	490
	Reduce congenital syphilis cases	Number of cases (County Morbidity Report 2015)	28	27	25
	Increase timely prenatal care	Proportion of cases with prenatal care in the 1 <sup>st</sup> trimester (County Health Status Profile 2016)	76.1%	79.9%	83.7%

## Strategies for Combating Sexually Transmitted Diseases (STD)

Strategy 1: Increase STD awareness and education, reduce stigma, and promote harm prevention strategies among the public.

- ***Know Your Risk***, a county-wide education campaign was launched in 2016. It includes billboards, television and radio public service announcements, and community engagement activities. The Kern County Public Health Services Department also has an updated webpage regarding reproductive health.
- ***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.
- The ***Condom Access Project*** provides free condoms throughout California. Kern County is one of the designated “hot spots” where free condoms can be requested anonymously and sent discretely to any address in Kern County. Geared towards youth, it increases access to condoms without the individual needing to visit a clinic. Informational pamphlets are included in each mailing.
- ***Teen Life Choices***, 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.

Strategy 2: Increase provider STD awareness and education.

- ***Health Alerts*** authored by the county health officer are issued to all local providers whenever there are changes in reporting guidelines or treatment strategies. Periodically, alerts are also sent out to reinforce current statewide recommendations, especially if anomalies in reporting are noticed. In 2016, a health alert regarding increases in syphilis and declaring Kern County a high morbidity syphilis county sought to educate providers, many of whom had not traditionally seen patients with syphilis.
- ***Enhanced syphilis surveillance*** performed at the Kern County Public Health Services Department have increased linkages between the health department and local providers. The health department can provide information on a patient’s testing history that providers might not otherwise be able to access, as well as recommendations for treatment or additional testing. Health department staff send delivery alerts to provide guidance to hospitals regarding syphilis-positive pregnant women. The alerts identify those who have been fully treated and do not require additional treatment as well as those who need treatment or whose infant needs additional evaluation.
- The statewide reporting system, ***CalREDIE***, enables participating providers to report disease management to the health department electronically. Real-time, paperless

reporting streamlines the health department's role of ensuring appropriate treatment and contact follow up.

Strategy 3: Increase prenatal care to decrease risk of perinatal STD transmission.

- ***Enhanced syphilis surveillance*** has allocated additional resources for tracking syphilis in Kern County. In particular, syphilis-positive pregnant women are automatically referred to public health nursing for follow up and additional service linkages. Infants identified with congenital syphilis are referred to California Children's Services (CCS) for specialized managed care.
- Pregnant women usually qualify for presumptive eligibility for ***Medi-Cal*** coverage, enabling low-income women to receive prenatal care immediately and bypass the normal waiting period for coverage.
- The ***Comprehensive Perinatal Services Program*** coordinates early and continuous care during pregnancy.
- The ***Perinatal Outreach Program (POP)*** serves pregnant women through home visits and encourages early access to care, including referrals to Medi-Cal and other low-cost insurances.
- The ***Black Infant Health Program (BIH)*** provides culturally-sensitive outreach to Black and African-American women, who tend to have poorer birth outcomes as well as higher rates of STIs. One-on-one case management ensures clients are connected with appropriate services, such as prenatal care.
- ***Nurse Family Partnership (NFP)*** links low-income, first-time mothers to services including health insurance and prenatal care.



### **Priority Area 3: Access to Care**

Out of 57 ranked counties, Kern County is ranked 37 for the proportion of residents who are uninsured (County Rankings and Roadmaps, 2017). Those who lack health insurance often have poorer health outcomes as they delay or completely forgo care, have no continuity of care, and often face other socioeconomic burdens. Other indicators of healthcare access include a medical home. Providers who have a history with a patient are more likely to have comparative test results, an understanding of the whole of the patient's needs, and otherwise notice changes in the patient's health. Patients who see a different provider each time they need healthcare will have more fragmented care. Additionally, patients who do not have a primary care physician are more likely to use urgent care centers and emergency rooms for basic health needs, consuming needed safety net resources.

With the implementation of the Patient Protection and Affordable Care Act and the nationwide requirement of healthcare coverage, the proportion of residents without health insurance declined. However, there continues to be a small population that lacks health insurance, such as undocumented immigrants, and they will continue to face barriers to care. Insurance is often the first step to utilization and will likely reduce the risk of delayed medical care and increase the proportion of residents who have a medical home. New legislation seeking changes to and complete elimination of the Affordable Care Act may affect health insurance coverage in the near future.

In Kern County, 45.3 percent of residents indicated their primary language was something other than English (American Community Survey, 2015). Given that many English-speakers struggle to understand medical terminology, including provider instructions, it is no surprise that non-native English speakers would face a large barrier when communicating with their providers. The majority of non-English speakers indicated Spanish as their primary language. While many healthcare providers advertise that they have Spanish-speaking personnel, not all Spanish-speakers are qualified to translate medical terminology. A receptionist may be able to schedule an appointment in Spanish, but may lack sufficient vocabulary to translate a patient's medical history or explain medication dosing. Additionally, non-English speaking adults may rely on children as everyday interpreters; children may not understand the gravity or magnitude of a conversation regarding health in addition to lacking the vocabulary. There are many well-documented incidents where language misinterpretation resulted in delayed or inappropriate care. The other side of the coin includes providers who are not native English-language speakers. While this is a great service to those who need services in another language, heavy accents while speaking in English or confusion in terminology can pose the same obstacles.

Eleven of the fifteen medical services study areas (MSSA) in Kern County are federally designated as a health provider shortage area, indicating that there are not enough primary care providers to serve the community or those providers are geographically so far away it impedes access care. In

a survey administered by the Kern Council of Governments to public services agencies throughout the counties, 37 percent of surveyed agency representatives identified local, medically-related trips as the most needed transportation service by their clients, followed by regional medically-related transportation. In a different survey conducted by Kern Regional Transit, a county transportation service, 17 percent of bus trips were for medical purposes. Regardless of health insurance or finances, a person who cannot physically attend a medical appointment cannot receive services.

Increasing access to care is fundamental to individual as well as population health. Improving health insurance coverage is only the first step in the continuum of care. Removal of other barriers will need to continue in order for residents and the county as a whole to reach optimal health.

Kern County Community Health Improvement Plan

<b>Goal</b>	<b>Objective</b>	<b>Indicator (source and baseline year)</b>	<b>Baseline</b>	<b>Target 5% Improvement</b>	<b>Target 10% improvement</b>
a. Increase insurance coverage	Decrease proportion of residents who are uninsured	Proportion of residents currently uninsured (CHIS 2015)	8.0%	7.6%	7.2%
b. Increase usual source of care	Increase proportion of residents who have a usual source of care	Proportion of residents who have a usual place to go when sick or need health advice (CHIS 2015)	84.0%	88.2%	92.4%
	Decrease dependency on ER and Urgent Care as usual source of care	Proportion of residents whose usual source of care was an emergency room or urgent care center (CHIS 2015)	0.8%	0.7%	0.7%
c. Increase timely medical care	Decrease proportion of residents who delayed or did not get medical care	Proportion of residents who delayed or did not get other medical care (CHIS 2015)0%	8.0%	7.6%	7.2%
	Decrease proportion of residents who delayed or did not get prescription medicine	Proportion of residents who delayed or did not get prescription medication (CHIS 2015)	9.1%	8.6%	7.8%
d. Increase health literacy	Decrease language barriers	Proportion of residents who had difficulty understanding doctor (CHIS 2015)	6.0%	5.7%	5.4%

## Strategies for Combating Lack of Access to Care

### Strategy 1: Increase proportion of residents who have health insurance

- Implementation of the Patient Protection and Affordable Care Act increased health insurance coverage statewide. *Covered California*, the state health insurance marketplace, performed extensive outreach in Kern County. With potential changes to, or complete elimination of, the Affordable Care Act, it remains important to continue helping residents find affordable healthcare coverage.
- *California Senate Bill 562*, known as the Healthy California Act, proposes healthcare coverage for all Californians, including undocumented residents who were explicitly excluded under the Affordable Care Act. It also proposes to assist residents who are underinsured with high out-of-pocket costs and deductibles. SB 567 includes dental and mental health coverage. Passed by the California state Senate on July 1, 2017, the proposal must be approved by the California state Assembly and signed by the Governor.
- *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,.
- *California Children's Services (CCS)* is 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.

### Strategy 2: Increase resources for specialized case management programs

- *California Children's Services (CCS)* is a statewide program that manages healthcare services for children with certain medical conditions. CCS links children with medical specialists through the age of 21 years. Additionally, CCS provides occupational and physical therapists at specific schools to provide services at school sites, reducing the amount of time spent away from school on equivalent appointments. While CCS only covers a discrete set of medical conditions, long-term goals of the Kern County unit include managing all of the services needed by the patient, not just those covered under CCS.
- *Kern Get Connected* is an innovative program at the Kern County Public Health Services Department designed to reduce ambulance services and emergency room use for non-emergent health issues like a simple cold. A public health nurse helps to identify underlying issues and connects patient who over-utilize emergency medical services with resources like public transportation and low-cost clinics to manage non-urgent healthcare needs.

- **Perinatal Outreach Program (POP)**, also known as **Perinatal Care Guidance**, provides outreach to low-income pregnant women to assist them in obtaining prenatal care. Women receive assistance in applying for Medi-Cal; accessing the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and other services; and support early and continuous prenatal care including education about prenatal and infant care issues. POP provides care coordination and case management for infants born to POP mothers until at least 18 months of age, ensuring these infants receive routine health checkups.
- With a culturally affirming environment and honoring the unique history of African-American women, the **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.
- **Nurse Family Partnership (NFP)** provides evidence-based, comprehensive, coordinated in-home services to support positive parenting and to improve outcomes for families residing in identified at-risk communities. NFP helps first-time mothers develop skills to take better care of themselves and their babies, linking them to medical care, and follows children until two years of age.
- **Child Health and Disability Prevention Program (CHDP)** coordinates care, provides education and other support, to low income children from birth to 18 years of age (or 21 years of age if a Medi-Cal recipient). Through regular health assessments, such as dental care, mental health, vision, and hearing, CDPH seeks to identify and refer children with potential health issues for diagnosis and treatment to avoid long-term disability or poor health.
- **Clinica Sierra Vista** offers mobile health services to serve both the homeless population in Kern County and migrant/seasonal farmworkers and their families. The mobile unit makes routine stops throughout the county to serve populations who may have difficulty accessing typical healthcare services, including dental services.

Strategy 3: Increase cultural sensitivity and reduce language barriers in the healthcare setting.

- All local hospitals have access to medical interpreters through in-house personnel or contract with an **interpreter service** via telephone. Many insurance companies also provide access to translation services and indicate which covered providers can provide services in other languages.
- **Salud con Health Net** is 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.

Strategy 4: Increase access to transportation for healthcare services.

- **Health Net**, a local health insurance plan, provides transportation services to their patients who are unable to get to their medical appointments. While parents of children who needed this services have always been allowed to accompany the minor patient, Health Net recently expanded their policy to include transportation of one caregiver in order to include adult patients who needed assistance in meeting their healthcare needs.
- **Golden Empire Transit (GET)** the 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.
- **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.
- **Consolidated Transportation Service Agency** is a low-cost private transportation service offered to seniors 60 years of age and older as well as those with disabilities. This ride share program can provide transportation to medical appointments as well as other essential activities like grocery shopping.
- **California Children's Services (CCS)**, which provides healthcare coverage for certain medical conditions in children, can also help provide transportation for patients who must travel out of town to see a specialist.

## **Conclusion**

Clearly, the health of Kern County residents has room for improvement. The good news is that many health indicators have been improving, including some to which the CHIP alluded. Heart disease deaths, for example, have decreased dramatically over the past decade, despite increasing rates of obesity. Though Kern County still ranks 54 out of 58 counties in heart disease mortality, just five years ago Kern County was ranked 58 out of 58, a ranking it had notoriously held for more than a decade. Concentrated efforts to curb heart disease deaths have now come to fruition and continue to flourish. The progress made thus far should not be discounted; rather it should be inspiring. Improvements in health indicators are not always so easily seen in statewide rankings; as the health of the state overall continues to improve, county rankings may not see much change. Kern County will likely remain below state average for many years to come. However, any improvement to health indicators means longer life and better quality of life for Kern County residents.

Ultimately, community health is the product of the choices made by individual community members. The Community Health Improvement Plan seeks to create and maintain an environment in which healthy choices are available, accessible, and affordable. Improvements in the three priority areas discussed are likely to have far-reaching effects on the residents of Kern County. Maintaining and building upon current successful strategies will continue the progress that has been made in recent years, such as efforts to lower obesity rates through education and changes to the built environment. In other areas where attempts to curb troubling trends have been more challenging, innovative and perhaps unusual methods may be needed to see an effect. Support from the community, as well as individual commitments, will enable Kern County to continue to make strides towards better health.