2016 Community Health Needs Assessment

Kaiser Foundation Hospital Riverside

License #250000327

Approved by KFH Board of Directors

September 21, 2016

To provide feedback about this Community Health Needs Assessment, email CHNA-communications@kp.org

KAISER PERMANENTE®

Authors

Special Service for Groups (SSG)
Research & Evaluation Team (R&E)

Incorporated in 1952, Special Service for Groups (SSG) is a nonprofit multi-service agency that serves some of the hardest-to-reach populations across Los Angeles County. Our Research and Evaluation Team works with other nonprofit organizations and community members to collect and analyze information they need for planning and action. We believe that information is power, and we invest in developing these research skills within our communities.

The Community Health Needs Assessment Team

Eric C. Wat, R&E Director
Angela Beltrán, Research Analyst (Lead)
Jesse Damon, Research Analyst (Co-Lead)
Mireya Vela, Research Analyst
Chris Wells, Research Associate
Marylou Adriatico, Research Associate

We would like to thank Cecilia Arias, Community Benefit Health Manager at Kaiser Foundation Hospital (KFH) Riverside and Moreno Valley, for coordinating primary data collection, recruiting and inviting assessment stakeholders, and giving feedback throughout the Community Health Needs Assessment (CHNA) process. We were also fortunate to receive guidance and support in this effort by a dedicated team of technical assistance providers, including the following individuals:

- Karen Roberts, Senior Director, Public Affairs and Brand Communications, KFH-Riverside and Moreno Valley
- Jacqueline Rangel, Community Benefit, Kaiser Permanente, Southern California Region
- Lynda Lee, Program Manager, Community Benefit, Kaiser Permanente, Southern California Region
- Patrick Burkhardt, Manager, Community Benefit Programs, Kaiser Permanente, Southern California Region
- Mehrnaz Davoudi, Senior Program Evaluation Manager, Community Benefit, Kaiser Permanente, Southern California Region
- Caroline Rivas, Research Action Design
- Chris Schweidler, Research Action Design

We would also like to acknowledge Center for Applied Research and Environmental System (CARES) at the University of Missouri and Community Commons for developing the Kaiser Permanente CHNA Data Platform, which made compiling much of the secondary data a more efficient process.

Finally, we would like to express our appreciation for Kaiser Permanente of Southern California for developing the format for this report.

Acknowledgements

The Kaiser Permanente Community Health Needs Assessment (CHNA) was a significant undertaking with many individuals and organizations contributing their time, ideas, perspectives and talents to the information-gathering process. SSG and KFH-Riverside would like to thank the following community organizations, partners, and CHNA stakeholders for contributing to the report by sharing their perspectives and input through focus groups, interviews, surveys, and community forums:

100 Mile Club
Alvord Unified School District
Borrego Community Health Foundation
Carolyn E Wylie Center
City of Jurupa Valley
City of Murrieta
City of Riverside
Clinton Health Matters Initiative
Coachella Valley Volunteers in Medicine
Community Action Partnership
Community Health Systems
Riverside County Health Coalition
Cutting Edge Capital
Desert AIDS Project
Desert Sands Unified School District
El Sol Neighborhood Education Center
Feeding America
First 5 Riverside
Fox Farms
Health Assessment Resource Center
Inland Caregiver Resources Center
Jurupa Unified School District
Lowe and Associates
Moreno Valley Chamber of Commerce
Murrieta Valley Unified School District
Neighborhood Healthcare
Nutrition News
Partners for Better Health
Promenade Mall
Project KIND
Quinn Community Outreach Corp.
Regional Access Project Foundation
Riverside Community Health Foundation
Riverside University Health System
  Department of Mental Health
  Department of Public Health
Riverside Food Co-op
Riverside Food Systems Alliance
Riverside Free Clinic
Safe Alternatives for Everyone
Southern California Permanente Medical Group (SCPMG)
The California Endowment
TruEvolution
United States Veterans Initiative
University of California, Riverside School of Medicine
Whiteside Manor

Table of Contents

Authors **1**

Acknowledgements **2**

Table of Contents **3**

I. Executive Summary **6**

A. Community Health Needs Assessment (CHNA) Background 6

B. Summary of Prioritized Needs 7

C. Summary of Needs Assessment Methodology and Process 8

D. Implementation Strategy Evaluation of Impact 9

II. Introduction/Background **9**

A. About Kaiser Permanente 9

B. About Kaiser Permanente Community Benefit 10

C. Purpose of the CHNA Report 10

i. To Advance Community Health 10

ii. To Implement ACA Regulations 10

D. Kaiser Permanente Approach to CHNA 11

III. Community Served **12**

A. Kaiser Permanente's Definition of Community Served 12

B. Map and Description of Community Served 12

i. Map 12

ii. Geographic description of community served (towns, county, and/or zip codes) 13

iii. profile of community served 13

IV. Who Was Involved in the Assessment **20**

A. Identity of Hospitals that collaborated on the assessment 20

B. Other partner organizations that collaborated on the assessment 20

C. Identity and qualification of consultants used to conduct the assessment 20

V. Process and Methods Used to Conduct the CHNA **20**

A. Secondary Data 20

i. Sources and dates of secondary data used in the assessment 20

ii. Methodology for collection, interpretation and analysis of secondary data 22

B. Community Input 23

i. Description of the community input process……………………………….................23
ii. Methodology for interpretation and analysis of primary data.....................................24
C. Written Comments…………………………………………………………………...……..25
D. Data limitations and information gaps……………………………………………….……25

VI. Identification and Prioritization of Community's Health Needs: Process and Key Findings..……..……………………………………………………………………...……25

A. Identifying Community Health Needs…………….……………………………...…………25
i. Definition of Health Need…..25
ii. Criteria and analytical methods used to identify the community health needs…...…...25

B. Process and criteria used for prioritization of the health needs…….……………………26

C. Prioritized description of all the community health needs identified through the CHNA ……………….……………………………………………………...…………...28

i. Community Health Landscape and Trends…………………………….…...….…........28
a. Significant Morbidity and Mortality (Health Outcomes)…….………………...…........28
b. Significant Health Drivers.......……………………………………………...…….33
i. Access to Care…………………………………………………………........…33
ii. Health Behaviors………………..……………………….………………….……….34
iii. Physical Environment………………………………………………………….....35
iv. Socioeconomic Factors…………...……………………………………….……….36
v. Prioritized list of health needs…………………….....………………….….…....37

D. Community assets, capacities and resources potentially available to respond to the identified health needs…………………...……………………………….…………...38

VII. KFH-Riverside 2013 Implementation Strategy Evaluation of Impact …...….…..…….....….40

VIII. Appendix……………………………………………………………………………….....…57

A. Secondary Data Sources and Dates…………………………………….......................57

B. Community Input Tracking Form………………………………………………………..…60

C. Health Need Profiles……………………………………………….………………...……62

Access to Care
Asthma
Cancers
Cardiovascular Disease (CVD)

Climate and Health
Diabetes
Economic Security
Human Immunodeficiency Virus (HIV) and Sexually Transmitted Infections (STIs)
Mental Health
Obesity
Substance Abuse and Tobacco
Transportation

D. Glossary of Terms……………………………………………………………………………104

I. Executive Summary

Kaiser Permanente is an integrated health care delivery system comprised of Kaiser Foundation Hospitals (KFH), Kaiser Foundation Health Plan (KFHP), and physicians in the Permanente Medical Groups. KFH-Riverside Medical Service Area (MCA) serves diverse and vibrant communities in one of the largest counties in California. KFH-Riverside is located in the city of Riverside in western Riverside County and serves a number of communities, including Corona, Hemet, Jurupa Valley, Lake Elsinore, Murrieta, and Temecula.

This report documents the community health needs assessment conducted for KFH-Riverside and hereafter all language referring to Riverside is for the MCA, unless otherwise specified as city or county. The results of the CHNA will inform KFH-Riverside's development of implementation strategies designed to address the health needs of the community. This executive summary is intended to provide a high level snapshot of the CHNA regulations governing hospitals, the list of prioritized health needs found in the report, the methodology used to identify those health needs, and a summary of the overall assessment.

This CHNA included extensive secondary data review in conjunction with primary data collection through focus groups, key informant interviews, and community forums. Primary data validated and enriched the available secondary data, as well as provided information on existing assets and capacities to address the health needs identified. While programs and policies exist within the Medical Service Area (MCA) that target a range of health needs, sustaining, tailoring, and enhancing this work requires an ongoing commitment of resources.

A. Community Health Needs Assessment (CHNA Background)

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

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

B. Summary of Prioritized Needs

The CHNA process identified the 12 health needs below through primary and secondary data analysis. Then, the CHNA used three community forums to prioritize these health needs for KFH-Riverside MCA. The following statements summarize each of the prioritized health needs and are based on data and information gathered through the CHNA. More detail about the health needs, including the data and their sources, are provided in their respective health need profile in Appendix C. The prioritization process resulted in a ranking of the following health needs (from the highest priority to the lowest):

1. Access to Care

There are fewer primary care providers in Riverside (40.2 per 100,000 people) than there are in the state (77.2 per 100,000 in California). The figure for mental health providers is even worse: the state average is 157 providers per 100,000, compared to 68.4 in Riverside. The proportion of the population that is uninsured in Riverside is (17.62%) and is higher than the state average (16.69%).

2. Obesity

Obesity and overweight are risk factors for a number of chronic diseases, including diabetes, cardiovascular disease, and cancer. The prevalence of adult obesity in the Riverside MCA (36.4%) exceeds the state average (35.8%). The youth obesity rate in Riverside MCA (18.99%) is identical to that of California (18.99%).

3. Transportation

Transportation impacts health in multiple ways; for example, lack of transportation hinders access to providers, while long commutes increase sedentary time. The percent of the population that walks or bikes to work in Riverside (1.87%) is lower than the state average (3.84%). Perhaps more significantly, 20.95% of Riverside MCA residents have commutes of over an hour, compared to 10.44% of California residents.

4. Economic Security

Economic security facilitates access to health services, healthy food, and other necessities that contribute to good health status. Economic insecurity is associated with poverty, low educational attainment, health care access, and unemployment. The poverty rate (less than 200% FPL) in the Riverside MCA (34.76%) is marginally lower than that of California (36.37%).

5. Diabetes

Diabetes can lead to serious health complications such as blindness, kidney failure, and lower extremity amputations, particularly if left untreated or improperly managed. The diabetes prevalence rate for adults is higher in the Riverside MCA (8.9%) than in California (8.05%).

6. Climate and Health

Higher temperatures contribute to heat-related emergency room visit rates that are roughly twice as high in the Riverside MCA (22 per 100,000) as in the state (11.1 per 100,000). In addition, the percentage of days with ozone readings that exceed the National Ambient Air Quality Standard is much higher in Riverside (7.28%) than in the state as a whole (2.65%).

7. Cancer

Incidence of all cancers in Riverside County slightly decreased during 2008-2011, then rose slightly in 2012 (California Cancer Registry, 2016). Cancer mortality rates are higher in Riverside MCA (168.37 per 100,000) than in California (157.1 per 100,000).

8. Mental Health

Adults in the Riverside MCA self-reported more poor mental health days than the state (4.1 per month compared to 3.6 in California). The suicide rate in the Riverside MCA is (9.68), which is marginally lower than California (9.8 per 100,000).

9. Cardiovascular Disease

Cardiovascular disease includes heart disease and stroke, which are leading causes of death in the U.S. The prevalence for heart disease in the Riverside MCA (7.7%) is higher than the state (6.3%). The heart disease mortality rate is higher in the Riverside MCA (199.72 deaths per 100,000 population) than in the state (163.18). Stroke mortality is also high in Riverside MCA (42.1 deaths per 100,000) compared to 37.38 in the state.

10. Substance Use and Tobacco

Tobacco use (measured as the percentage of the population that smokes) is higher in Riverside MCA (14.60%) than in the state (12.8%). While reliable estimates for the Riverside MCA are not available, CHNA stakeholders also identified prescription drug abuse and addiction as a significant health issue in Riverside County.

11. Asthma

The Riverside MCA fares better than the state for asthma prevalence. In addition, the Riverside MCA also fares better in age-adjusted hospitalizations due to asthma and related complications (6.72 per 100,000) than the state (8.9 per 100,000). Stakeholders identified asthma as a health need that disproportionately impacts low-income populations.

12. HIV and STIs

HIV is a life-threatening communicable disease that disproportionately affects racial and sexual minority populations and may also indicate the prevalence of unsafe sex practices. According to the CDC, HIV prevalence in Riverside MCA (268.7 per 100,000) is lower than the overall prevalence in California (363 per 100,000). The number of new diagnosed chlamydia cases per 100,000 population, between 2010 (171.17) and 2014 (384.16), more than doubled in the Riverside MCA.

C. Summary of Needs Assessment Methodology and Process

The CHNA included a collection and analysis of secondary and primary data. The assessment began with a review of a list of close to 150 common indicators identified by Kaiser Permanente to be used by all of its regions. The national common indicators included demographic data, social and economic factors, health behaviors, physical environment, clinical care, and health outcomes. This list of indicators was complemented by an additional literature review of research data conducted in Riverside. Based on the review of the secondary data, the SSG consultant team developed a primary data collection guide used in focus groups and key stakeholder interviews. Between September 15, 2015 and October 14, 2015, the CHNA team conducted five focus groups, 15 key informant interviews and one innovative, interactive model of community engagement called community café. Overall, the community input process engaged and solicited input from 79 providers and community leaders who represented broad geographic, public health, and population interests, in compliance with ACA requirements. The stakeholders who participated in the CHNA focus groups, interviews and community café either work and/or live in Riverside County; they represent Riverside MCA, Moreno Valley MCA and/or Coachella Valley.

The CHNA team used a modified content analysis to determine general themes that emerged from the review of secondary data and community input. Based on severity, trends, and relationships among health outcomes and drivers, 12 health needs were identified. For the purpose of the CHNA process, to be considered a health need, a health outcome or driver has to meet at least two of three conditions: (1) existing or secondary data had to demonstrate that the medical center area (MCA) fared worse than a comparison benchmark; (2) the health outcome or driver had to be mentioned meaningfully in at least two separate data sources from primary data collection; and (3) disparities existed such that the burden of the health outcome or driver was inequitably distributed in the population.

Following the identification of the health needs, the SSG consultant team conducted three community forums to validate the CHNA assessment findings and prioritize the health needs. A broad range of stakeholders participated in the community forums, including public health officials, clinicians, representatives of community based organizations and local governments, health researchers, and community members. After a group discussion about the CHNA assessment findings, each stakeholder was given an opportunity to rate each health need in a written survey. The prioritization criteria used to assess each health need included:

- Community Concern—or how concerned community members were about the health need;
- Disparities—the extent to which the need disproportionately impacted vulnerable groups;
- Severity—how the health need impacted quality of life; and
- Assets—the existence or lack of assets in the community to address the need.

The fourth criterion—assets—was not used in the ranking but rather to understand existing resources in anticipation of the Implementation Strategy (IS).

This report documents the KFH-Riverside CHNA process and identifies the Health Need findings to help inform ongoing health care services and improve the wellbeing of the communities it serves. It will help inform the ongoing work of Community Benefit planning and support the Implementation Strategy for KHF-Riverside.

D. Implementation Strategy Evaluation of Impact

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

II. Introduction/Background

A. About Kaiser Permanente

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

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

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

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

B. About Kaiser Permanente Community Benefit

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

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

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

C. Purpose of the CHNA Report

i. To Advance Community Health

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

ii. To Implement ACA Regulations

The Patient Protection and Affordable Care Act (ACA), enacted on March 23, 2010, included new requirements for nonprofit hospitals in order to maintain their tax exempt status. The provision was the subject of final regulations providing guidance on the requirements of section 501(r) of the Internal

Revenue Code. Included in the new regulations is a requirement that all nonprofit hospitals must conduct a community health needs assessment (CHNA) and develop an implementation strategy (IS) every three years (http://www.gpo.gov/fdsys/pkg/FR-2014-12-31/pdf/2014-30525.pdf). The required written IS plan is set forth in a separate written document. Both the CHNA Report and the IS for each Kaiser Foundation Hospital facility are available publicly at kp.org/chna.

D. Kaiser Permanente Approach to CHNA

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

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

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

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

In conjunction with this report, KFH-Riverside will develop an Implementation Strategy for the priority health needs the hospital will address. These strategies will build on Kaiser Permanente's assets and resources, as well as evidence-based strategies, wherever possible. The Implementation Strategy will be filed with the Internal Revenue Service using Form 990 Schedule H. Both the CHNA and the Implementation Strategy, once they are finalized, will be posted publicly on our website, www.kp.org/chna.

III. Community Served

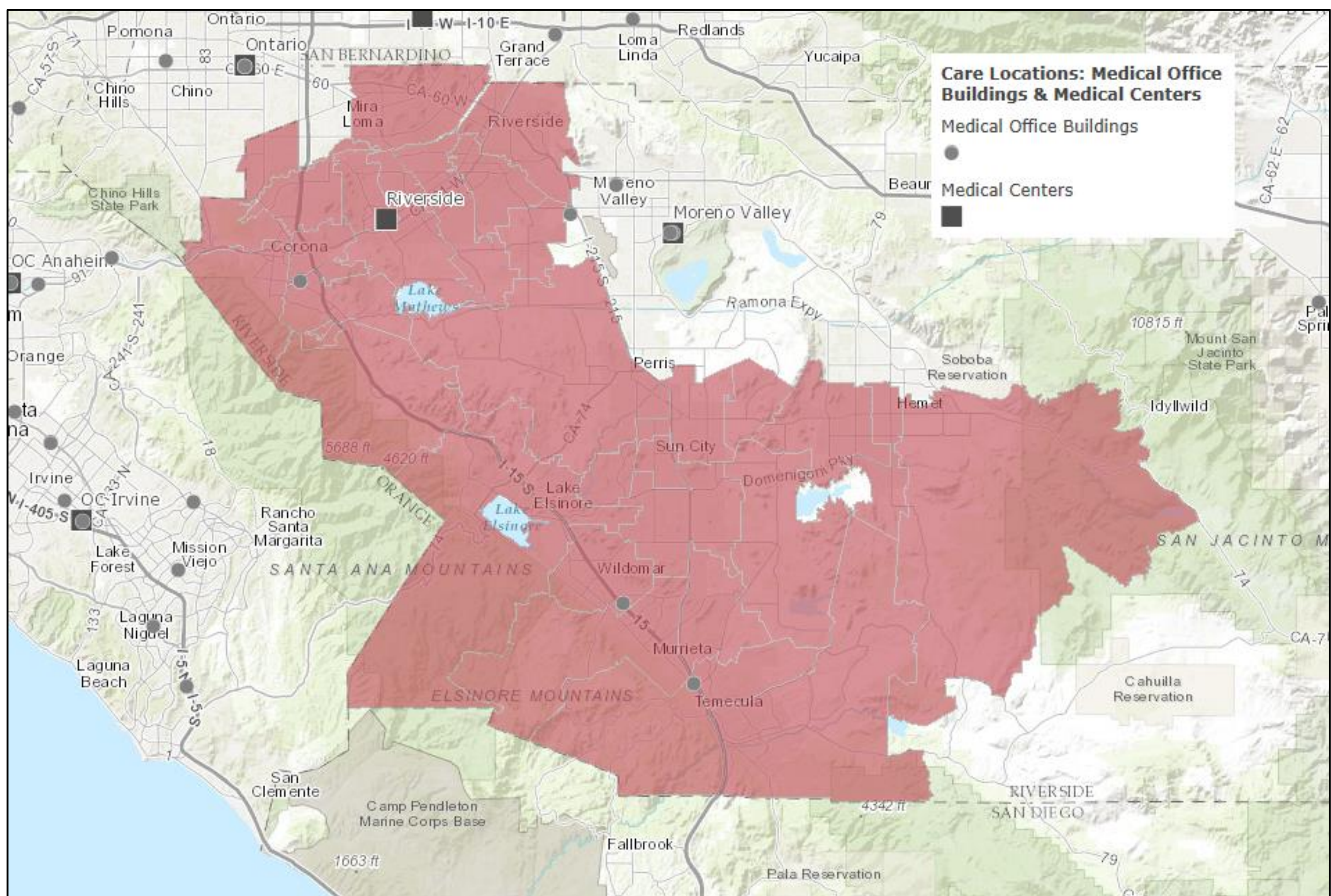
A. Kaiser Permanente's Definition of Community Served

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

B. Map and Description of Community Served

i. Map

Riverside MCA



ii. Geographic description of community served (towns, county, and/or zip codes)

The map above describes the geographic area covered by the KFH-Riverside Medical Center Area (MCA). Although many residents of Riverside seek hospital services from closer community hospitals, KFH-Riverside MCA is part of an integrated delivery system that serves broader service areas. KFH-Riverside is located at 10800 Magnolia Ave, Riverside, CA 92505.

The following cities and zip codes are assessed in the CHNA and reflected the communities of the KFH-Riverside MCA.

City	Zip Codes
Cabazon	92230, 92282
Corona	91718, 91719, 91720, 92877, 92878, 92879, 92880, 92881, 92882, 92883
Eastvale	92880, 91752
Hemet	92343, 92545
Homeland	92348, 92548
Jurupa Valley	92509
Lake Elsinore	92330, 92530, 92531, 92532
Landers	92285
Menifee	92355, 92584
Murrieta	92362, 92562, 92564, 92563
Norco	91760, 92860
North Palm Springs	92258
Perris	92570, 92571, 92572, 92599
Pioneertown, Rimrock	92268
Quail Valley	92587
Riverside	92506, 92513, 92514, 92515, 92516, 92503, 92504, 92509, 92505, 92519
Rubidoux	92509, 92519
Romoland	92380, 92585
Sun City	92381, 92586, 92587, 92585, 92584
Temecula	92390, 92589, 92590, 92591, 92592, 92593
Thousand Palms	92276
White Water	92282
Wildomar	92595
Winchester	92396, 92596

iii. Demographic profile of community served

This section describes the demographic profile of the communities served by this medical center area and includes the following:

Demographic and Socio-Economic Factors
Total Population and Population Change
Age
Gender
Race and Ethnicity
Language
Poverty
Unemployment
Lack of Insurance
Educational Attainment

Demographic data for Riverside MCA shows a distinct profile and trends. Between 2000 and 2010, the population of the MCA grew much more rapidly than that of the state (43% compared to 10%). As a whole, the Riverside MCA population is younger and slightly more racially diverse than the state.

Hispanics/Latinos comprise over 42% of the Riverside MCA population, which is comparable to the region but slightly higher than California. Current population demographics and changes in demographic composition over time play a determining role in the types of health and social services needed by communities.

Figure III.1 Total Population Change, 2000-2010

Report Area	Total Population, 2000 Census	Total Population, 2010 Census	Total Population Change, 2000-2010	Percent Population Change, 2000-2010
Riverside MCA	912,318	1,309,053	396,735	43.49%
California	33,871,651	37,253,956	3,382,305	9.99%

Data Source: US Census Bureau, Decennial Census. 2000 - 2010.

This indicator reports the percent difference in population counts from the 2000 Census population estimate to the 2010 Census population estimate. Riverside County saw a robust increase in population compared to California from 2000-2010. The rapid population growth is largely attributable to migration to the region from California and other parts of the US. This migration is connected to jobs in the economic centers of Los Angeles and San Diego and the lower cost of living, including housing, in Riverside County.

Figure III.2 Population by Age Group

Report Area	Age 0-4	Age 5-17	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65+
Riverside MCA	7.09%	20.44%	11.13%	13.45%	13.47%	13.71%	9.98%	10.72%
California	6.62%	17.58%	10.48%	14.48%	13.60%	13.79%	11.32%	12.13%

Data Source: US Census Bureau, American Community Survey. 2010-14.

This indicator reports the percentage of population within specific age groups in the Riverside MCA. The data indicate that the population distribution of Riverside MCA skews younger than the state. This younger population results from the higher birth rates in Riverside County, compared to California. The median age in Riverside County is 33.4 years, compared to 35.6 for California and 37.4 for the U.S.

Figure III.3 Population by Gender

Report Area	Male	Female	Percent Male	Percent Female
Riverside MCA	676,716	686,655	49.64%	50.36%
California	18,911,520	19,155,400	49.68%	50.32%

Data Source: U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates.

This indicator reports the percentage of males and females in the Riverside MCA and in the state; the gender division is comparable.

Figure III.4 Total Population, by Race (Non-Hispanic)

Report Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Riverside MCA	918,305 (67.36%)	74,994 (5.50%)	100,549 (7.38%)	13,679 (1.00%)	4,952 (0.36%)	184,050 (13.50%)	66,842 (4.90%)
California	23,650,912 (62.13%)	2,262,323 (5.94%)	5,130,536 (13.48%)	287,360 (0.75%)	147,286 (0.39%)	4,890,329 (12.85%)	1,698,173 (4.46%)

Data Source: U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates.

This indicator reports the percentage of Non-Hispanic residents who identify as White, Black, Asian, Native American/Alaska Native, Native Hawaiian/Pacific Islander, Some Other Race or Multiple Races in the Riverside MCA and two comparison areas.

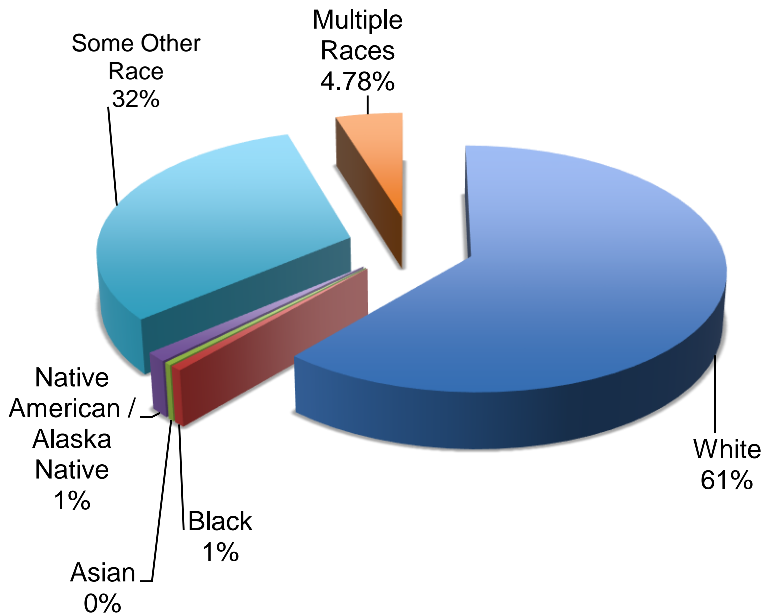
Figure III.5 Population by Ethnicity

Report Area	Hispanic or Latino Population	Non-Hispanic Population
Riverside MCA	577,406 (42.35%)	785,964 (57.65%)
California	14,534,449 (38.18%)	23,532,472 (61.82%)

Data Source: US Census Bureau, American Community Survey. 2010-14.

The proportion of the population in Riverside MCA and Riverside County that identifies as Hispanic/ Latino is slightly higher than that of the state, though comparable to the region.

Figure III.6 Identity of Race by Hispanic/Latino Population



Data Source: US Census Bureau, American Community Survey. 2010-14.

This indicator reports the percentage of Hispanic/Latino residents who identify as White, Black, Asian, Native American/American Indian, Some Other Race or Multiple Races in the Riverside MCA. The majority of the Hispanic residents in the MCA consider their race to be White (61%) or Some Other Race (32%).

Figure III.7 Population with Limited English Proficiency

Report Area	Population Age 5+	Population Age 5+ with Limited English Proficiency	Percent Population Age 5+ with Limited English Proficiency
Riverside MCA	1,266,682	165,350	13.05%
California	35,545,621	6,789,522	19.10%

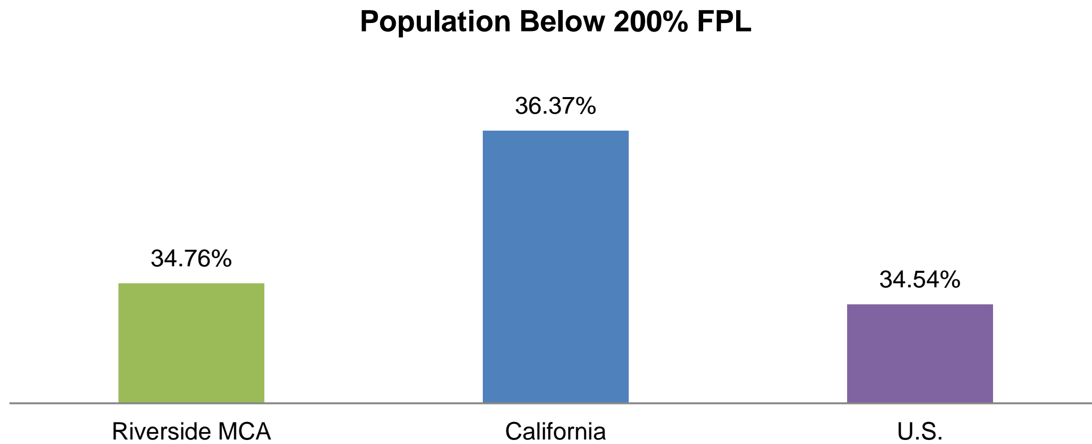
Data Source: US Census Bureau, American Community Survey. 2010-14.

This indicator reports the percentage of the population age 5 and older who speak a language other than English at home and speak English less than "very well." The Riverside MCA (13.05%) has a lower percentage of residents who have limited English proficiency compared to the state (19.10%).

Social & Economic Factors

Economic and social insecurity often are associated with poor health. Factors such as, poverty, unemployment, and lack of educational achievement affect access to care and a community's ability to engage in healthy behaviors. Without a network of support and a safe community, families cannot thrive. Ensuring access to social and economic resources provides a foundation for a healthy community.

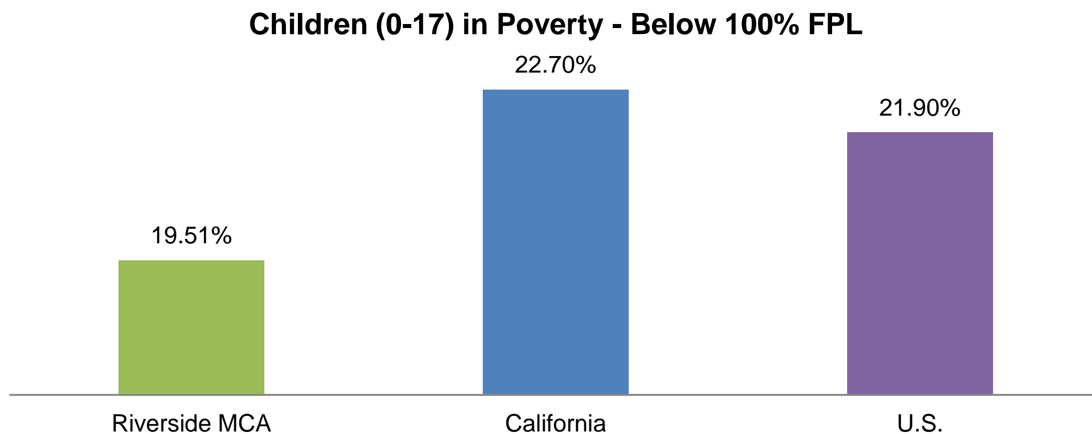
Figure III.8 Population in Poverty
Poverty is considered a *key driver* of health status. This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.



Data Source: US Census Bureau, American Community Survey. 2010-14.

This indicator reports the percentage of the population living below 200% of the Federal Poverty Level (FPL). The Riverside MCA (34.76%) has a lower percentage of residents living below 200% FPL compared to the state (36.37%), and slightly higher than the U.S. (34.54%).

Figure III.9 Children in Poverty
Poverty experienced in childhood can have long-lasting impacts on health.



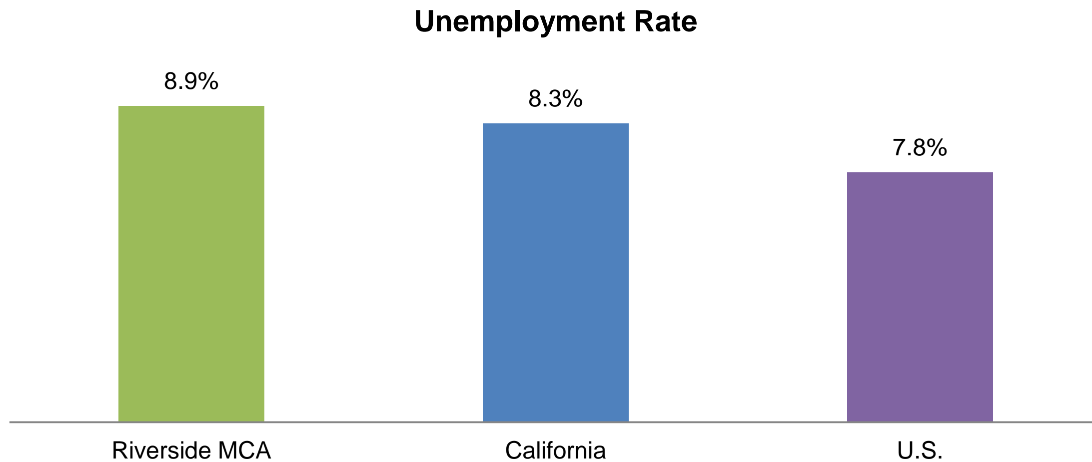
Data Source: US Census Bureau, American Community Survey. 2010-14.

In the Riverside MCA, a smaller proportion of children between the ages of 0 to 17 are living under 100% of the FPL compared to the state and nation. Among racial and ethnic groups, childhood poverty rates are highest among Native Hawaiian/Pacific Islanders (38.64%), Hispanics/Latinos (27.38%), and African Americans (22.83%).

Economic Security - Unemployment Rate

Unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

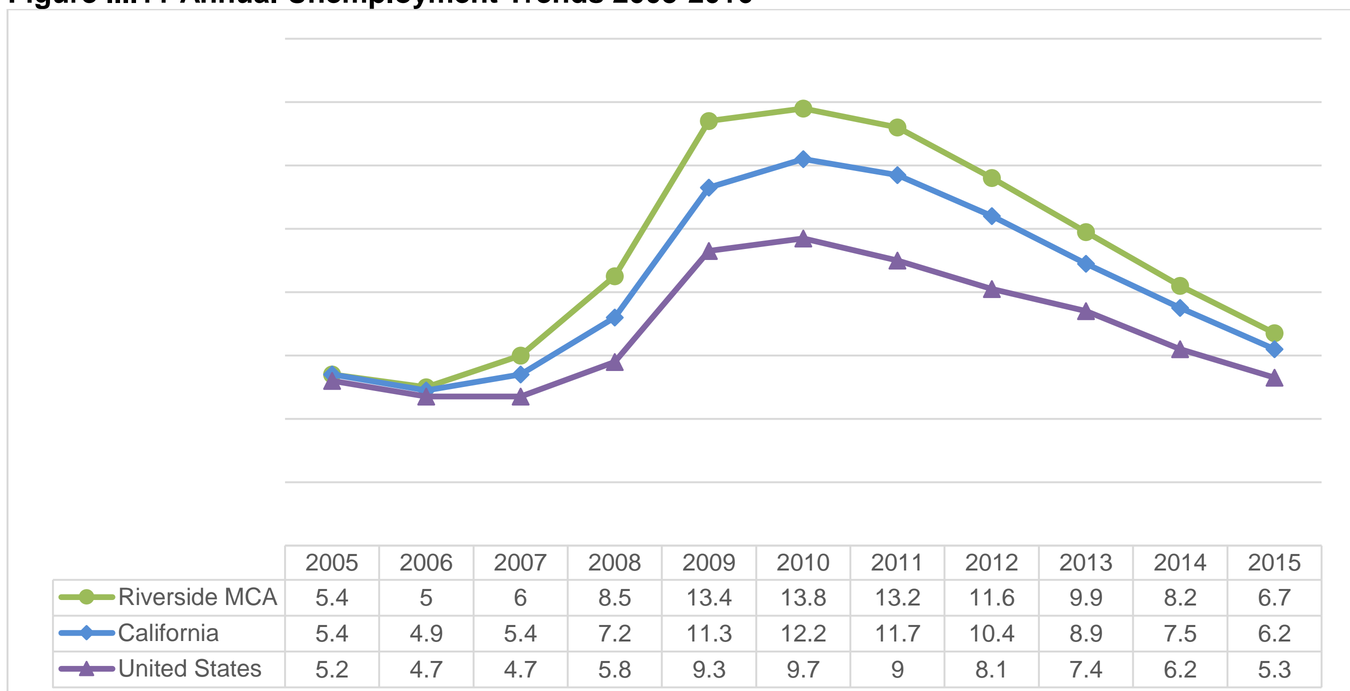
Figure III.10 Unemployment



Data Source: US Department of Labor, Bureau of Labor Statistics. 2016 - March.

This indicator reports the percentage of the civilian non-institutionalized population age 16 and older that is unemployed (non-seasonally adjusted).

Figure III.11 Annual Unemployment Trends 2005-2016



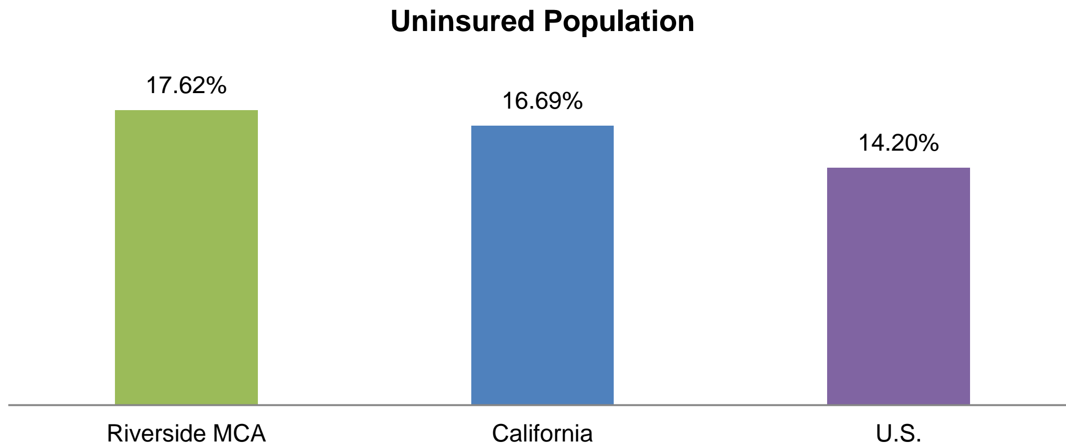
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Riverside MCA	5.4	5	6	8.5	13.4	13.8	13.2	11.6	9.9	8.2	6.7
California	5.4	4.9	5.4	7.2	11.3	12.2	11.7	10.4	8.9	7.5	6.2
United States	5.2	4.7	4.7	5.8	9.3	9.7	9	8.1	7.4	6.2	5.3

Data Source: U.S. Department of Labor, Bureau of Labor Statistics. 2016 - March.

Unemployment trends in the Riverside MCA have mirrored those in California and the nation, but Riverside MCA unemployment rates remained consistently higher than either comparison area.

Insurance - Uninsured Population
This indicator reports the percentage of the total civilian non-institutionalized population without health insurance coverage. Lack of insurance is a primary barrier to health care access including regular primary care, specialty care, and other health services that contribute to poor health status.

Figure III.12 Uninsured Population



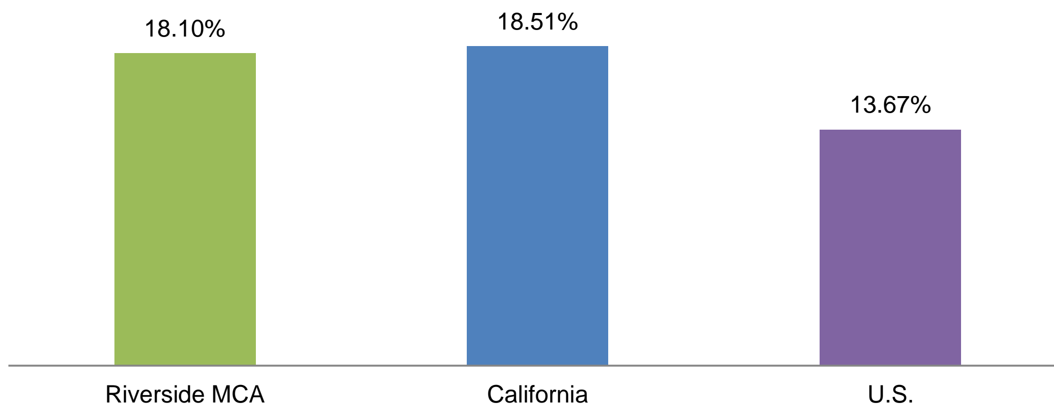
Data Source: US Census Bureau, American Community Survey. 2010-14.

The Riverside MCA has a higher percentage of the population without insurance than the state and the nation. There is wide variation among racial and ethnic groups, with Hispanic/Latino (24.69%), Native American/Alaska Native (22.66%), and Native Hawaiian/Pacific Islander (18.81%) groups experiencing the highest rates of uninsured.

Education - Less than High School Diploma (or Equivalent)

This indicator reports the percentage of the population age 25 and older without a high school diploma (or equivalency) or higher. Undereducated people have been found to be most at risk for poor health status.

Figure III.13 Percent Population with No High School Diploma



Data Source: US Census Bureau, American Community Survey. 2010-14.

The proportion of the population aged 25 and older with less than a high school diploma (or equivalent) in the Riverside MCA (18.10%) is comparable to that of the state (18.51%).

IV. Who was Involved in the Assessment

A. Identity of Hospitals that collaborated on the assessment

KFH-Riverside and KFH-Moreno Valley collaborated with consultants in conducting the KFH-Riverside CHNA for the purpose of this report.

B. Other partner organizations that collaborated on the assessment

There were no partner organizations that collaborated with consultants in conducting the KFH-Riverside CHNA assessments for the purpose of this report.

C. Identity and qualification of consultants used to conduct the assessment

Special Service for Groups (SSG) is the consultant (hereafter referred to as "the consulting team") who conducted this Community Health Needs Assessment. Incorporated as a nonprofit organization in 1952, SSG specializes in helping grassroots communities develop solutions to problems they identify as the most pressing. SSG operates 20 programs and also supports several affiliated organizations in Southern California. These programs and affiliated organizations range in staff and budget size and address issues as diverse as child and youth development, mental health, hunger and homelessness, substance use, reentry integration, health care access and disparities, HIV/AIDS, and dental health.

SSG was involved in the Community Health Needs Assessments for two hospital collaboratives in 2010. During that year, SSG collaborated with Healthy City/Advancement Project to conduct the CHNAs for five Kaiser Foundation Hospitals, including Downey, Fontana, Riverside, South Bay, and West L.A. At the same time, SSG also partnered with the Center for Nonprofit Management to conduct CHNA for a collaborative of five hospitals in Metro Los Angeles that included KFH-Los Angeles. In 2012, in addition to KFH-Riverside, the SSG R&E Team also conducted the CHNAs for Kaiser Foundation Hospitals in Anaheim, Fontana, Irvine, Ontario, and Moreno Valley. In 2015, SSG conducted the CHNAs for KFH-Riverside, as well as KHF-Moreno Valley.

V. Process and Methods Used to Conduct the CHNA

A. Secondary Data

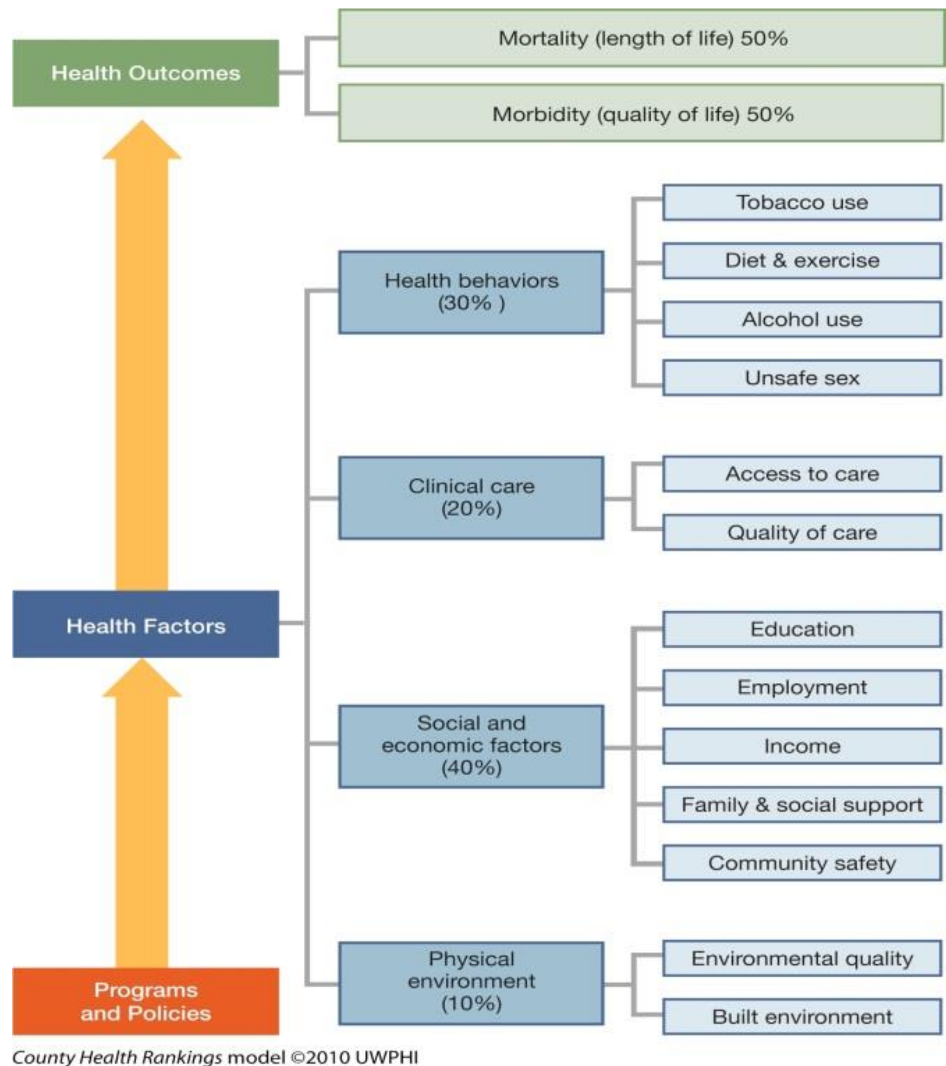
i. Data Sources and dates of secondary data used in the assessment

KFH-Riverside used the Kaiser Permanente CHNA Data Platform (www.chna.org/kp) to review over 150 indicators from publically available data sources. Data on gender and race/ethnicity breakdowns were analyzed when available. For details on specific data sources and dates of the data used, please see Appendix A.

These indicators are closely aligned with the Mobilizing Action Toward Community Health (MATCH) model (see adjacent graphic). The following six data categories were developed to describe the

indicators for the purpose of the CHNA:

- Demographics describe the population of interest by measuring its characteristics (e.g. total population, age breakdowns, limited English proficiency, etc.). Unlike other categories, demographic indicators are purely descriptive and not generally compared to benchmarks or viewed as positive or negative;



County Health Rankings model ©2010 UWPHI

- Social and Economic Factors include measures of social status, educational attainment and income, all of which have a significant impact on an individual's health. These interrelated indicators provide measures of the resources people have to pursue and ensure their own health and are among the strongest predictors of poor health outcomes;
- Health Behavior refers to the personal behaviors that influence an individual's health – either positively or negatively (e.g. breastfeeding, physical activity, eating fruits and vegetables, etc.);
- Physical Environment measures characteristics of the built environment of a community that can impact the health of that community either positively or negatively (e.g. parks, grocery stores, walkability, etc.);
- Clinical Care includes: (1) delivery, which measures clinical care being delivered to the community (e.g. rate of preventive screenings, ambulatory care sensitive discharges, etc.) and (2) access, which refers to factors that impact people's access to timely, affordable clinical care (e.g. primary care physicians, number of federally qualified health centers, etc.); and
- Health Outcomes include: (1) morbidity, which refers to how healthy people are by measuring disease burden and quality of life (e.g. obesity rates, asthma incidence, and low birth weight babies, etc.); and (2) mortality, which measures causes of death by density rates (e.g. cancer mortality, motor vehicle deaths, etc.).

To support and facilitate the CHNA process and access to data, Kaiser Permanente partnered with the Center for Applied Research and Environmental Systems (CARES) at the University of Missouri to develop a web-based data mapping platform. The Kaiser Permanente CHNA data platform has been pre-loaded with the Kaiser Permanente common indicators. It allows users to view, map, and analyze the common indicators according to a specific hospital service area. Users are able to review the indicators and compare them against pre-defined benchmarks to determine how the hospital service area is performing on the respective indicator.

The secondary data for this report was obtained from the CHNA data platform in September 2015. The data platform undergoes continual enhancements and certain data indicators may have been updated since the data was obtained for this report. As such, the most up-to-date data may not be reflected in the tables, graphs, and/or maps provided in this report. For the most recent data and/or additional health data indicators, please visit: http://www.chna.org/kp. The platform is available to the public and can be accessed using a username and password. For details on specific data sources and dates of the data used, please see Appendix A.

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

The CHNA team analyzed all secondary data from the Kaiser Permanente CHNA Data Platform. In addition, the CHNA team used the secondary data to inform and guide primary data collection. Findings from secondary quantitative data and literature reviews were assessed with the KFH-Riverside Community Benefit (CB) Manager to address specific needs of the community.

The SSG consultant team queried data on the common indicators through the Kaiser Permanente CHNA Data Platform and obtained the data rates unique for the KFH-Riverside MCA. The Kaiser Permanente common indicator data is calculated to obtain unique service area rates. In most cases, the service area values represent the aggregate of all data for geographies (ZIP Codes, counties, tracts, etc.) which fall within the service area boundary. When one or more geographic boundaries are not entirely encompassed by a service area, the measure is aggregated proportionally using a total-population-based estimate. For example, if 100 live in a tract and 30% of the tract lies within the service area but we know that the region of the tract is more population dense, then the Kaiser Permanente CHNA Data Platform might calculate that 50 people live within the service area. More detailed methodology for how service area rates are calculated for each indicator can be found on the Kaiser Permanente CHNA Data Platform.

The CHNA team identified the indicators where the medical center area performed poorly against the following benchmarks: state (California) averages and/or Healthy People 2020 objectives. The indicators that did not meet one of these two benchmarks represented potential health needs in the community. For example, a key indicator for diabetes is diabetes prevalence. In California the prevalence of diabetes is 8.05% while the prevalence in the KFH-Riverside MCA is 8.9%. The first rate of 8.05% represents the state benchmark for this indicator. Since the prevalence of diabetes in the KFH-Riverside MCA is higher, this indicator does not meet the state benchmark, and thus met the first criterion for identifying health needs.

The preliminary list of needs flagged by the secondary review included:

- Access to Care
- Asthma
- Cancers
- Climate and Health
- Cardiovascular Disease (CVD)/Stroke
- Diabetes
- Economic Security
- Maternal and Infant Health
- Mental Health
- Obesity
- Oral Health
- Overall Health
- Substance Abuse and Tobacco
- Violence/Injury Prevention

The CHNA team assessed racial-ethnic health disparities, when available, in the Kaiser Permanente CHNA platform data to understand variation between different groups in the hospital service area.

Subsequently, the SSG consultant team collected and analyzed additional secondary data sources, such as recent reports published by the Riverside University Health Systems - Public Health and the California Department of Health and Human Services as well as health assessments conducted by community-based organizations like the Health Assessment Resource Center (HARC) and the Riverside Community Health Foundation. These reports were identified by a general search conducted by the SSG consultant team and served to complement the common indicators and provide a more comprehensive picture of community health needs found in KFH-Riverside.

For a complete list of Kaiser Permanente CHNA platform data sources and additional publications consulted, please refer to Appendix A.

B. Community Input

i. Description of the community input process

Community input was provided by a broad range of stakeholders through the use of key informant interviews, focus groups, and community café. Key informant interviews allow for in-depth exploration of complex issues and provide rich qualitative data. The CHNA team used key informant interviews primarily with executive level members of government, education, or non-profit agencies. Focus groups allow for the collection of similar types of information from multiple stakeholders at one time; focus groups also provide rich data by facilitating deep discussion between stakeholders. The CHNA team used focus groups for the entire range of stakeholders described below. A community café is a data collection activity in which stakeholders discuss and answer key questions at multiple discussion stations. Its interactive approach is beneficial when engaging a large and diverse group of community members. The community café was intended to obtain input from community residents, particularly parents, who would not otherwise have participated in the CHNA process.

The KFH-Riverside Community Benefit staff identified and outreached to local stakeholders to solicit community input about the health needs and assets found in the community. Community input was solicited from stakeholders that represented broad interests in the community, including, the health care sector (e.g. hospitals, clinics and providers), mental health, nonprofit and community-based organizations (e.g. grassroots, food pantries, coalitions), county and city agencies and programs (e.g. public health department, city planners, school districts), public health experts and professionals, social

service providers (e.g. family assistance, children services, domestic violence) and academic institutions (e.g. colleges and universities). Local stakeholders participated in focus groups or key informant interviews to discuss health needs, health barriers, and health assets in their respective community.

Stakeholders with the knowledge, information, and expertise relevant to the health needs of the community were consulted. These individuals included representatives from state, local, tribal, or other regional governmental public health departments (or equivalent department or agency) as well as leaders, representatives, or members of medically underserved, low-income, and minority populations. Additionally, where applicable, other stakeholders with expertise of local health needs were consulted. For a complete list of stakeholders who provided input, see Appendix B.

ii. Methodology for interpretation and analysis of primary data

Primary data collection consisted of five focus groups and 15 key informant interviews. The domains explored in all focus groups and interviews included the following:

- Health Needs
  Major health issues in your community, including health trends and contributing factors (both positive and negative). This may include, but is not limited to: obesity and related diseases, such as diabetes, older adults' health, mental health, substance abuse, HIV/STIs, and domestic/family violence.
- Health Barriers (both individual and community levels)
  Challenges that impact an individual's ability to engage in healthy behaviors and/or seek help, including accessibility and affordability of services, environmental or structural factors, social norms, service infrastructure, economic trends, regional disparities, public safety, etc.
- Health Assets (both individual and community levels)
  Resources and factors that positively impact health, including cultural or community values, effective program models, existing institutions, collaboratives and networks, etc.

The CHNA team audio recorded and transcribed each focus group and interview. At least two members of the CHNA team read and coded each transcript for key themes. Thematic analysis is a standard practice in qualitative research, and involves close reading and identification of themes, or recurring concepts and issues mentioned by stakeholders. Key themes included specific health needs (e.g., diabetes) as well as assets for (e.g., parks, health education programs) and barriers (e.g., long commutes, food deserts) to health within the community. Each transcript was coded, with quotes or summaries categorized by theme and placed within a database.

Initially, the SSG consulting team conducted five focus groups with stakeholders that represent the KFH-Riverside MCA and populations that overlap throughout Riverside County. After the KFH-Riverside Community Benefit staff and the consulting team reviewed the composition of the community stakeholders in these focus groups as well as the focus group transcripts, they decided that these focus groups did not provide enough opportunity for issues important to community residents with historically high health disparities to surface, especially given the increasing economic instability in Riverside County and California. To increase the diversity of community input, the consulting team subsequently conducted one community café discussion with the hopes to engage community residents ranging from diverse ethnic and economic backgrounds. However, the target population the consulting team attempted to engage did not result and instead the majority of the stakeholders who participated in the community café were Riverside County employees. Key data collected during the community café

included a sticker survey in which stakeholders placed a sticker on a wall chart next to the top five health needs they saw in their community. The CHNA team collected the wall chart and calculated scores for each need. These aligned with the health needs identified in the focus groups and interviews.

C. Written Comments

Kaiser Permanente provided the public an opportunity to submit written comments on the facility's previous CHNA Report through CHNA-communications@kp.org. This website will continue to allow for written community input on the facility's most recently conducted CHNA Report.

As of the time of this CHNA report development, KFH-Riverside had not received written comments about previous CHNA Reports. Kaiser Permanente will continue to track any submitted written comments and ensure that relevant submissions will be considered and addressed by the appropriate facility staff.

D. Data Limitations and Information Gaps

The Kaiser Permanente CHNA Data Platform includes approximately 150 secondary indicators that provide timely, comprehensive data to identify the broad health needs faced by a community. However, there are some limitations with regard to these data, as is true with any secondary data. Some data were only available at a county level, making an assessment of health needs at a neighborhood level challenging. Furthermore, disaggregated data around age, ethnicity, race, and gender are not available for all data indicators, which limited the ability to examine disparities of health within the community. Lastly, data are not always collected on a yearly basis, meaning that some data are several years old. When necessary, the CHNA team searched for and included additional or updated data—for example, from the California Cancer Registry.

For primary data collection, the SSG consultant team primarily relied on service providers, community leaders, community residents, and public agency officials for community input. While these CHNA stakeholders are knowledgeable about the communities they serve and work with, engagement with additional community residents throughout the CHNA process would provide richer data.

VI. Identification and Prioritization of Community Health Needs: Process and Key Findings

A. Identifying Community Health Needs

i. Definition of Health Need

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

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

The CHNA utilized a mixed-methods approach that included the collection of secondary or quantitative data from existing data sources and community input or qualitative data from focus groups and interviews with community stakeholders. The process was iterative (non-linear) as both the secondary and primary data were used to help inform each other. The advantage of using this approach is that it validates data by cross-verifying from a multitude of data sources. Secondary data and community input were inter-related and informed each other during the process of identifying the health needs. The CHNA team used secondary data collection and analysis to structure primary data collection of community input. For example, the health issues identified through secondary data where the medical

center area performs more poorly against a benchmark informed “probing questions” in focus group and key informant interview guides and to identify the list of key community stakeholders with knowledge of those health issues.

Stakeholder input informed secondary data collection and analysis in two ways. During focus groups and interviews, the SSG consultant team collected information about additional data and reports referred to by stakeholders. The SSG consultant team searched for additional secondary data to validate health needs that were brought up by only a few key stakeholders during stakeholder input and which were not initially identified by the analysis of KP common indicators, such as prescription drug abuse.

To be considered a health need, a health outcome or a health driver had to meet specific criteria applied during the secondary and primary data analysis. Health outcomes or health drivers had to meet at least two of the three key criteria in order to be considered a health need. First, existing or secondary data had to demonstrate that the medical center area data fares worse than the Healthy People 2020 objectives and/or state (California) averages. Second, the health outcome or driver had to be mentioned in a substantive way in at least two data sources from primary data collection (either focus groups or key community stakeholder interviews), such as a description of its severity and trend, a description of populations that are most impacted, challenges in addressing this issue, and/or possible links to other health needs. Third, the issue had to show inequitable distribution within the population in the MCA; in other words, vulnerable populations bear a disproportionate burden of the health outcome or driver.

Based on these criteria, the following 12 health needs were identified, in alphabetical order. More details about these health needs are described in the issue statements in the following section and in the health need profiles in Appendix C.

Access to Care
Asthma
Cancer
Cardiovascular Disease (CVD)
Climate and Health
Diabetes
Economic Security
Human Immunodeficiency Virus (HIV) and Sexually Transmitted Infections (STIs)
Mental Health
Obesity
Substance Abuse and Tobacco
Transportation

B. Process and criteria used for prioritization of the health needs

The prioritization process relied on two key prioritization methods: nominal group planning process for a community-wide discussion about identified health needs and matrix method (implemented as a paper survey) for the voting process to prioritize health needs. The nominal group planning process consisted of a facilitated discussion around the identified health needs, along with presentation of data. It enhanced the prioritization process by developing a shared understanding of the identified health needs among diverse community stakeholders and by explaining clearly the criteria by which community stakeholders would apply to each health need during the matrix method. Community stakeholders were convened in a community forum to review and discuss CHNA findings, leading to a final prioritization through a voting process. The matrix method was a strategy for quantitatively gathering individual input by having stakeholders rank each health need against defined criteria. The matrix method consisted of a paper survey in which stakeholders scored each health need on a scale of 1-4 across four criteria:

community concern, health disparities, severity, and assets. Each criterion is described below. The scores for each need on the matrix were averaged in order to produce a prioritized list of needs.

KFH-Riverside Community Benefit staff and the consulting team decided to implement both the nominal group planning process and matrix voting method through a community forum. Three community forums were held on January 20, February 2, and February 3, 2016. A total of 57 stakeholders participated in the prioritization process. The stakeholders who participated in the CHNA prioritization of health needs either work and/or live in Riverside County; they represent Riverside MCA, Moreno Valley MCA and/or Coachella Valley. Stakeholders in the community forums represented the health care sector (e.g. hospitals, clinics and providers), mental health, nonprofit and community-based organizations (e.g. churches, grassroots, food pantries, coalitions), county and city agencies and programs (e.g. police, public health department, criminal justice, school districts), public health experts and professionals, social service providers (e.g. family assistance, children services, domestic violence) and academic institutions (e.g. colleges and universities). In order to broaden stakeholder, input into the prioritization process, each CHNA stakeholder also had the option to invite a community partner (from another agency) to attend the forum.

The nominal group planning process was applied at the onset of the community forum. The nominal process was selected because many focus group and interview CHNA stakeholders expressed appreciation for the opportunity to have community conversations about health needs and solutions and were interested in learning the results of the assessment as soon as possible. The facilitated discussion allowed a democratic process where CHNA stakeholders had an opportunity to share their reflections, reactions, ideas, experiences, and resources with each other. The discussion was also intended to reduce bias in the next phase of the prioritization process using the matrix method.

The matrix method began immediately after the discussion, towards the end of the community forum. Each agency present was given a final prioritization matrix to rate each health need according to the following criteria on a 1-4 scale, with 1=lowest and 4=highest

1. Community Concern – describes the extent to which community members were concerned about the health need.
2. Health Disparities – describes the extent to which the health need disproportionately affected vulnerable populations.
3. Severity – describes the extent to which the health need impacts the quality of life of those affected directly or indirectly (e.g. caregivers, other household members, etc.)
4. Assets describes the extent to which health needs do or do not have adequate attention, such as programs, policies, and initiatives.

CHNA stakeholders filled out the matrix surveys anonymously, and had the opportunity to provide comments or clarifications on the survey. Completed surveys were collected before CHNA stakeholders left the forum.

After the forum, the consultant team coded the completed surveys and entered responses into a database for analysis. Each health need received a composite score that is the sum of the averages of the first three criteria (community concern, health disparities, and severity). The higher the composite score, the higher the health need ranked on the prioritized list. The fourth criterion (assets) was not used in this calculation. It may not make sense for KFH-Riverside to devote more resources to a health need that already has a lot of community assets addressing it. On the other end of the spectrum, a health need that has no community assets may not be a wise investment either. Therefore, this criterion should not be analyzed as a scale. Instead, the consultant team treated this criterion with a categorical analysis, looking at frequencies (e.g. how many people rated this health need a “1” in terms of asset, a “2,” and so forth), rather than calculating an average. This information will be useful during the “Implementation Strategy” process and strategic decisions about resource allocation.

C. Prioritized description of all the community health needs identified through the CHNA

i. Community Health Landscape and Trends

This section describes the health outcomes and important determinants (drivers) of health in the community. The list of significant health outcomes and drivers listed in this section reflects application of the health need criteria to primary and secondary data (as described in Section VI.A.ii).

a. Significant Morbidity and Mortality (Health Outcomes)

CHNA stakeholders identified a number of health outcomes that cause significant morbidity and mortality in the Riverside MCA; secondary data validated these health needs and provided additional information about the range of the needs and disparities within health outcomes. Using the MATCH framework, the CHNA team identified seven of the health needs as *health outcomes*.

Asthma
Asthma is a chronic respiratory health issue that causes episodes of wheezing, chest tightness, coughing, and shortness of breath. Low income and minority populations, especially children, women, African Americans, people living below the Federal Poverty Level (FPL), and employees with certain exposures in the workplace, have the highest rates. According to CDC and state data, Riverside MCA (13.4%) fares better than the state (14.2%) for asthma prevalence[1]; Riverside (6.72 per 100,000) also fares better in age-adjusted hospitalizations due to asthma and related complications than the state (8.9 per 100,000).[2] CHNA stakeholders identified poor air quality and specifically described high levels of pollutant particulate matter in Riverside and surrounding geographic areas that are caused by environmental and man-made factors. In addition, CHNA stakeholders discussed asthma as being associated with built environment due to suburban designs. CHNA stakeholders stated that without an optimal public transportation system, communities are forced to drive from one location to the next due to the long distances between locations, as well as the long commutes for residents working outside of Riverside County. In addition, the proximity of schools near highways with dense traffic increases the risk for asthma in children.

Cancer
Cancer incidence is higher in Riverside MCA than the state for all cancers except breast and prostate cancer. Smoking, poor diet, and obesity are key risk factors for cancer as well as other diseases, such as heart disease, cerebrovascular disease, chronic lung disease, and diabetes. According to state data, the cancer incidence in Riverside County slightly decreased from 2008-2011, then rose in 2012.[3] The mortality rate for all cancers is higher in the Riverside MCA (168.37 per 100,000) than in California (157.1 per 100,000) and does not meet the Healthy People 2020 target.[4] Nutrition and diet are factors contributing to helping cancer patients regain their physical health, especially after chemotherapy. According to CHNA stakeholders, poverty creates barriers to affordable insurance and access to care and leads to poor cancer outcomes. Stakeholders also connected cancer to mental health conditions, such as depression, stress, and anxiety. Screening programs improve early detection and intervention, and many cancers respond to treatment.

---

[1] Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12.
[2] California Office of Statewide Health Planning and Development, OSHPD Patient Discharge Data. Additional data analysis by CARES. 2011.
[3] California Cancer Registry, 2016
[4] California Department of Public Health, CDPH - Death Public Use Data. 2010-12.

Figure VI.1 Cancers

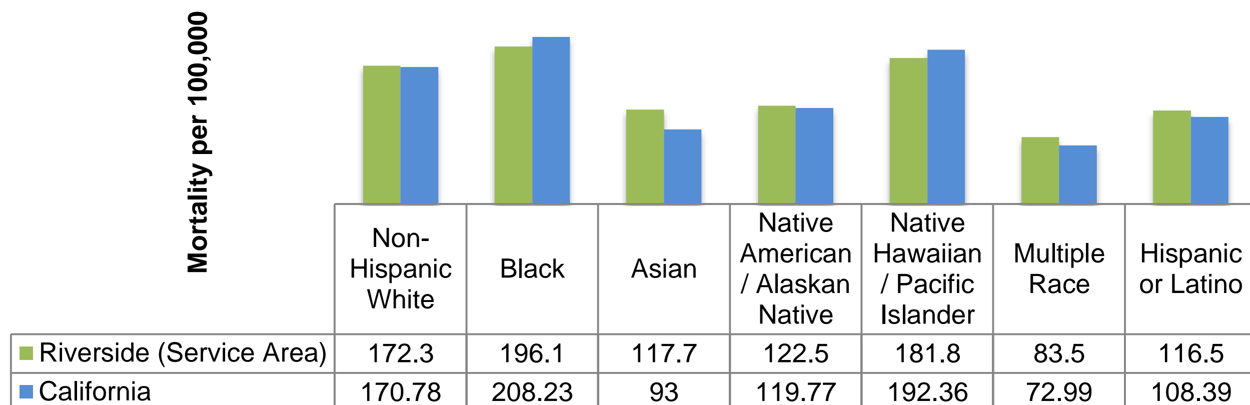
	Riverside MCA	California
Annual Breast Cancer Incidence Rate[a]	117	122.1
Annual Cervical Cancer Incidence Rate[a]	8.4	7.7
Annual Colon and Rectum Cancer Incidence Rate[a]	40.9	40
Annual Lung Cancer Incidence Rate[a]	48.6	48
Annual Prostate Cancer Incidence Rate[a]	125.1	126.9
Cancer, Age-Adjusted Mortality Rate[b]	168.37	157.1

Note: All rates are per 100,000 populations. Data Source: [a] National Institutes of Health, National Cancer Institute. 2008-12. [b] California Department of Public Health, Death Public Use Data. 2010-12.

Figure VI.2 Cancer Mortality Disparities

Death due to cancer disproportionately impacts certain groups, particularly Black/African Americans Native Hawaiian/Pacific Islanders, and Non-Hispanic Whites.

Cancer Mortality Disparities By Race/Ethnicity



	Non-Hispanic White	Black	Asian	Native American / Alaskan Native	Native Hawaiian / Pacific Islander	Multiple Race	Hispanic or Latino
Riverside (Service Area)	172.3	196.1	117.7	122.5	181.8	83.5	116.5
California	170.78	208.23	93	119.77	192.36	72.99	108.39

Data Source: University of Missouri, Center for Applied Research and Environmental Systems. California Department of Public Health, CDPH - Death Public Use Data. 2010-12. Source geography: ZIP Code

Cardiovascular Disease

Cardiovascular disease includes heart disease and stroke, which are leading causes of death in the U.S. According to state data, the prevalence for heart disease in the Riverside MCA (7.7%) is higher than the state (6.3%).[5] The heart disease mortality rate is high in the Riverside MCA (199.72 deaths per 100,000 population) than in the state (163.18).[6] Stroke mortality is also high in Riverside MCA (42.1 deaths per 100,000) compared to 37.38 in the state.[7] Cardiovascular disease is associated with economic insecurity, physical inactivity, substance use, and access to care as long wait times force individuals into emergency room visits. CHNA stakeholders stated that it was a major health need within the communities that often became a long term outcome of obesity and diabetes. Food insecurity

[5] University of California Center for Health Policy Research, California Health Interview Survey. 2012.
[6] California Department of Public Health CDPH - Death Public Use Data. 2010-12.
[7] California Department of Public Health CDPH - Death Public Use Data. 2010-12.

was mentioned as an associated factor for cardiovascular disease, particularly among the homeless who have limited healthy food choices.

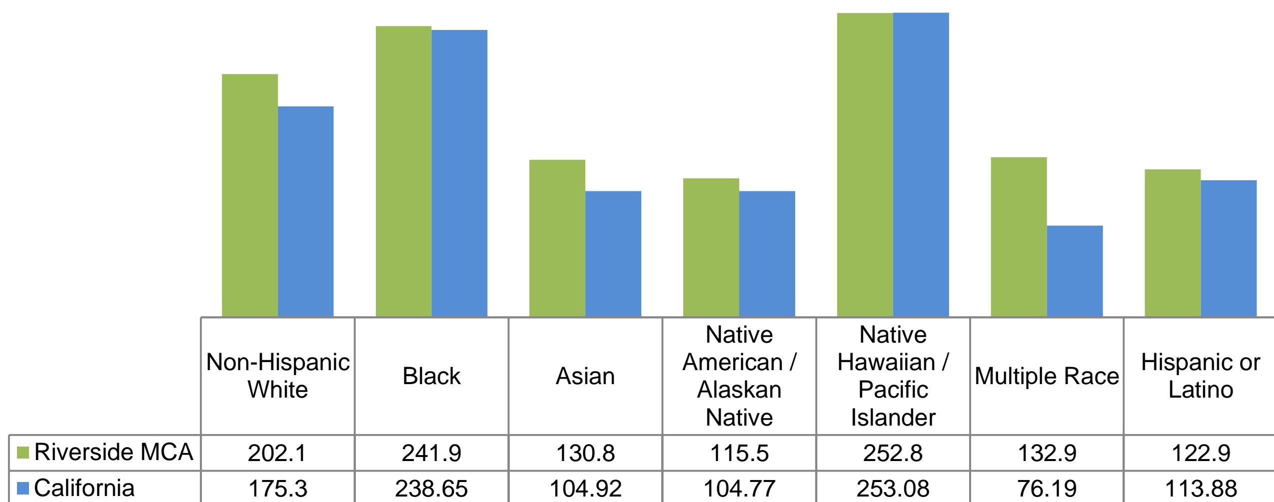
Figure VI.3 Adults Ever Diagnosed with Heart Disease

	Riverside MCA	California
Heart Disease Prevalence in Adults	7.7%	6.3%
Percentage of Females diagnosed with Heart Disease	6.1%	5.86%
Percentage of Males diagnosed with Heart Disease	10.49%	6.93%

Data Source: [a] University of California Center for Health Policy Research, California Health Interview Survey. 2011-12. Source geography: County

This indicator reports the percentage of adults age 18 and older who have ever been told by a doctor that they have coronary heart disease or angina.

Figure VI.4 Heart Disease Mortality by Race/Ethnicity per 100,000 Population



Data Source: California Department of Public Health, CDPH - Death Public Use Data. 2010-12.

Cardiovascular disease mortality is highest among Black/African Americans and Native Hawaiians/Pacific Islanders.

Diabetes

Diabetes can lead to serious health complications such as blindness, kidney failure, and lower extremity amputations, particularly if left untreated or improperly managed. According to the California Department of Public Health, the age-adjusted death rate due to diabetes increased in Riverside County from 2002 to 2007 (17.5 in 2002-2004 to 22.7 in 2005-2007) and then dropped slightly to 20.7 per 100,000 people in 2008-2010.[8] The diabetes prevalence rate for adults is higher in the Riverside MCA (8.9%) than in California (8.05%).[9] According to CHNA stakeholders, diabetes is increasing among young adults and the homeless population. Lack of nutrition and physical activity contributes to

[8] California Office of Statewide Health Planning and Development, OSHPD Patient Discharge Data. Additional data analysis by CARES. 2011.
[9] Centers for Disease Control and Prevention National Center for Chronic Disease Prevention and Health Promotion. 2012.

the rise of diabetes. CHNA stakeholders reported that economic insecurity is associated with diabetes, because it impacts the ability of families to access insurance, health care, and affordable healthy food. The built environment also impacts diabetes, to the extent that it creates long commutes and neighborhoods without easy access to parks or grocery stores.

Figure VI.5 Diabetes

Report Area	Population with Diagnosed Diabetes, Age-Adjusted Rate	Percent of Females with Diabetes	Percent of Males with Diabetes
Riverside MCA	8.90%	8.20%	10.10%
California	8.05%	7.13%	8.41%

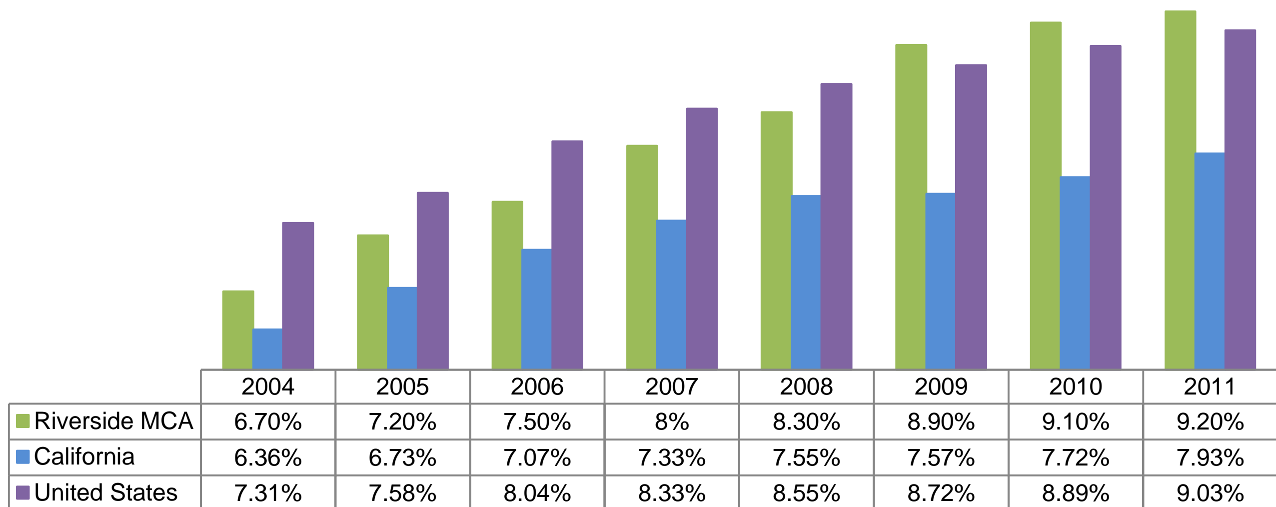
Data Source: [a] Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012.
[b] California Office of Statewide Health Planning and Development, OSHPD Patient Discharge Data. Additional data analysis by CARES. 2011.

This indicator reports the percentage of adults age 20 and older who have ever been told by a doctor that they have diabetes.

Diabetes prevalence has been on the rise across the country, but trend data suggests that the increase has been faster in the Riverside MCA than in the state. The rise in diabetes in the Riverside MCA may be related to rising obesity rates, which in turn are driven by poor diet and inadequate physical activity.

Figure VI.6 Diabetes Trends

Percent Adults with Diagnosed Diabetes by Year, 2004 through 2012



	2004	2005	2006	2007	2008	2009	2010	2011
Riverside MCA	6.70%	7.20%	7.50%	8%	8.30%	8.90%	9.10%	9.20%
California	6.36%	6.73%	7.07%	7.33%	7.55%	7.57%	7.72%	7.93%
United States	7.31%	7.58%	8.04%	8.33%	8.55%	8.72%	8.89%	9.03%

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012.

HIV and STIs

HIV is a life-threatening communicable disease that disproportionately affects racial and sexual minority populations and may also indicate the prevalence of unsafe sex practices. According to the CDC, HIV prevalence in Riverside MCA (268.72 per 100,000) is lower than the overall prevalence in California

(363 per 100,000).[10] Non-Hispanic Black and White populations in Riverside have significantly higher prevalence of HIV than the Hispanic/Latino populations. HIV/AIDS and STIs are associated with health care access, economic insecurity, and substance abuse. According to CHNA stakeholders, higher rates of STIs and HIV are due to inadequate public education and awareness around HIV/AIDS and STIs. Stakeholders also observed a higher risk of contracting HIV among older adults and African American youth related to lack of education and awareness of risk.

Mental Health

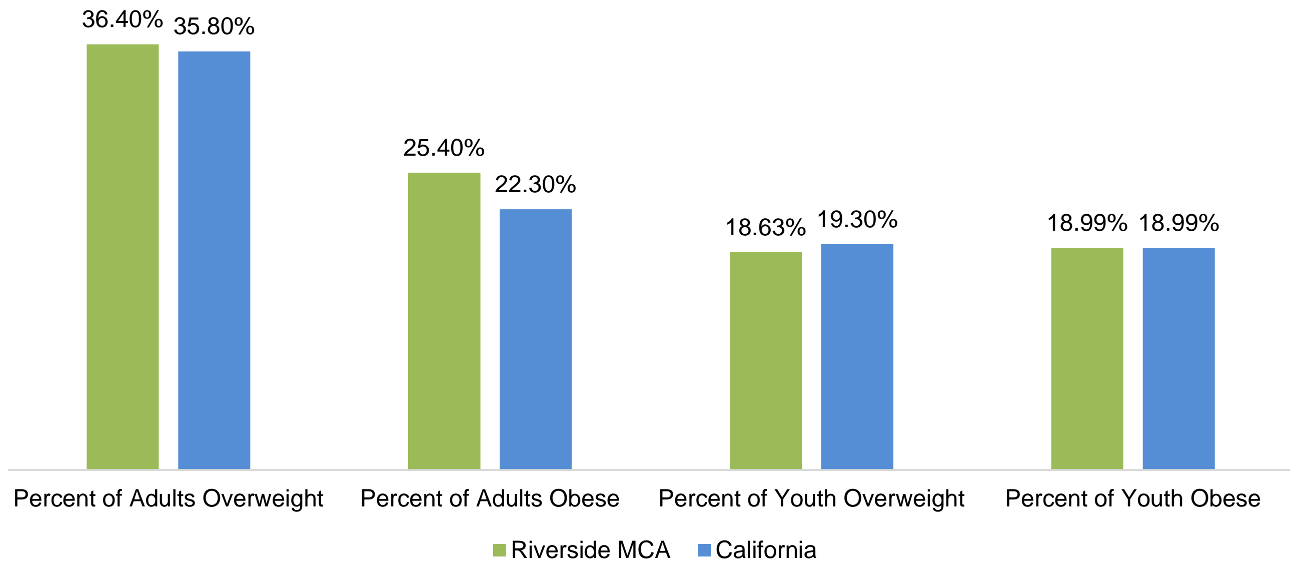
Mental health is the state of well-being in which every individual realizes his or her own potential, can cope with normal stresses of life and is able to contribute to his or her community. One's mental health can be affected by environmental, genetic, social, and physiological factors. Mental health includes anxiety, mood disorders, and substance abuse. According to state data, adults in the Riverside MCA self-reported more poor mental health days than the state (4.1 per month compared to 3.6 in California).[11] The suicide rate in the Riverside MCA is 9.68 per 100,000, which is marginally lower than California (9.8 per 100,000).[12] The suicide rate is higher in the White and Asian populations than other racial-ethnic groups. According to CHNA stakeholders, economic insecurity and poverty are linked to mental illness. CHNA stakeholders also connected mental health conditions to chronic illnesses such as obesity, cardiovascular disease, cancer and infectious diseases. CHNA stakeholders reported that various populations are disproportionately impacted by mental health conditions, including older adults (e.g. depression and dementia), veterans (e.g. post-traumatic stress disorder) and the homeless (e.g. depression and anxiety).

Obesity and Overweight

Excess weight is a prevalent problem in the U.S that generally indicates an unhealthy lifestyle and puts individuals at risk for further health issues. According to the CDC, the rate of adult obesity in the Riverside MCA (25.80%) is above the state average (22.32%).[13] Obesity and overweight are associated with economic instability, poor nutrition, physical inactivity, and health care access. According to CHNA stakeholders, factors such as built environment (as related to access to physical activity), poverty, food insecurity, lack of school physical activity programming, and long commutes were identified as contributing to higher rates of obesity because they are factors that deter healthy eating and active lifestyles. Various collaborations are focusing attention on this issue, and the Healthy Communities Element of the Riverside County General Plan includes specific policies that are intended to address this need.

[10] Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2010.
[11] Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. 2006-12.
[12] California Department of Public Health, CDPH - Death Public Use Data. 2010-12.
[13] Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012.

Figure VI.7 Obesity and Overweight



[a] Data Source for Adults: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County. [b] Data Source for Youth: California Department of Education, FITNESSGRAM® Physical Fitness Testing. 2013-14. Source geography: School District

While youth in the Riverside MCA show rates of obesity and overweight that are better than or equal to those of the state, adult obesity and overweight are higher in Riverside MCA than in the state. It should be noted that over 60% of adults in the Riverside MCA are overweight or obese.

b. Significant Health Drivers

i. Access to Care

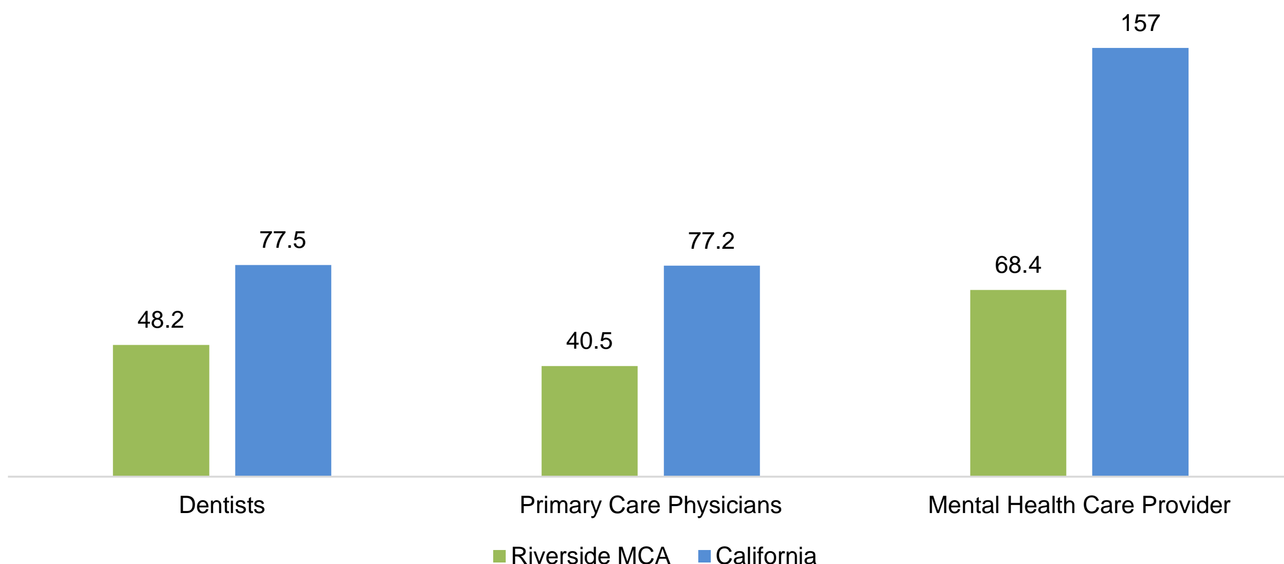
Access to Care emerged as a significant health need in both the primary and secondary data. The ability to access health care is critical to improving health outcomes. In the Riverside MCA, there are a number of challenges to ensuring access, the most critical of which is a shortage of health care providers. While the proportion of the population with health insurance has increased in recent years, a lack of providers in Riverside County as a whole continues to limit access to care. Proportionally, there are fewer primary care providers in Riverside (40.5 per 100,000) than there are in the state (77.2 per 100,000 in California).[14] The data for mental health providers is even worse: the state average is 157 providers per 100,000, compared to 68.4 in Riverside.[15] The proportion of the population that is uninsured in Riverside is (19.2%) and is higher than the state average (14.2%).[16] Hispanic/Latino, “Some Other Race” and Native American/Alaska Native populations have the highest rates of being uninsured.

A number of stakeholders explained that the provider shortage contributes to long waits to get appointments. While the Patient Protection and Affordable Care Act succeeded in increasing insurance enrollment, the higher number of insured has exacerbated long wait times. CHNA stakeholders attributed ongoing emergency room use for primary care is in part, a result of the long wait times to see a provider. Navigating the health care plans and understanding health care benefits is a challenge for

[14] US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2012.
[15] University of Wisconsin Population Health Institute, County Health Rankings. 2014.
[16] Data Source: US Census Bureau, American Community Survey. 2010-14.

many who are insured. In addition, stakeholders shared that for some of the newly insured, the cost of premiums has exceeded expectations and created financial strain. An additional barrier to access to care identified by stakeholders was transportation; particularly in rural parts of the MCA, limited public transportation hinders both emergency and routine health care utilization. Many CHNA stakeholders shared that veterans, seniors, and homeless in the community have difficulty accessing health care. CHNA stakeholders also shared there is still a lack of insurance amongst young adults and immigrants, especially the undocumented, who are not eligible for most public programs.

Figure VI.8 Access to Providers per 100,000 Population



[a] Data Source for Dentists: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2013. [b] Data Source for Primary Care Physicians: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2012. [c] Data Source for Mental Health Care Providers: University of Wisconsin Population Health Institute, County Health Rankings. 2014. Source geography: County

ii. Health Behaviors

Health behaviors, including diet, physical activity, smoking, and alcohol use, have a significant impact on health status and increase risk for a variety of chronic conditions. One of the health needs identified through the CHNA was categorized as a health behavior.

Diet and physical activity were specifically mentioned as important determinants of health needs like diabetes and obesity and overweight. Stakeholders in the CHNA attributed increasing rates of these outcomes to physical inactivity, low consumption of fruits and vegetables, drinking sugar-sweetened beverages, and long commutes. In the Riverside MCA, 74.7% of adults and 52.3% of youth age 2-13 consume less than five servings of fruits and vegetables each day.[17] Among youth, African American children are most likely and non-Hispanic other and Hispanics/Latinos are least likely to eat five or more servings a day. Stakeholders shared that physical education programs have been scaled back in public schools, and that outdoor sports and exercise programs can be challenging because of the hot climate. While 18.2% of adults in the Riverside MCA report low physical activity,[18] inadequate physical activity among youth is almost twice that (35.58%).[19] Long commutes reported by stakeholders both increase sedentary time among and reduce free time after work in which to exercise.

[17] University of California Center for Health Policy Research, California Health Interview Survey. 2012.
[18] Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012.
[19] California Department of Education, FITNESSGRAM® Physical Fitness Testing. 2013-14.

Substance Use and Tobacco
Substance use refers to use, abuse, or dependence on one or more controlled or illegal substances. Environmental, genetic, and social factors strongly influence patterns of substance abuse, which is very frequently comorbid with mental illness. Tobacco use (measured as the percentage of the population that smokes) is higher in the Riverside MCA (14.60%) than in the state (12.8%).[20] Rates of heavy alcohol consumption were higher in Riverside MCA (17.5%) than in the state (17.2%).[21] While reliable estimates for the MCA are not available, CHNA stakeholders also identified prescription drug abuse and addiction as a significant health issue in Riverside County. Prescription drug abuse has been implicated in the recent rise in heroin use across the country. Some providers explained that the safety net clinics in which they work are no longer prescribing any controlled substances because of the risk of abuse and addiction.

iii. Physical Environment

Two health needs identified in the CHNA are categorized under physical environment in the MATCH framework.

Climate and Health
Riverside County, and especially the eastern portion, experiences climate and environmental conditions that pose distinct challenges to health. The region is, on average, hotter and drier than the state, and has experienced increasingly severe drought in recent years. Higher temperatures contribute to heat-related emergency room visit rates that are roughly twice as high in Riverside MCA (22 per 100,000) as in the state (11.1 per 100,000).[22] Canopy cover, or the percent of an area covered by trees, is only 4.76% in the Riverside MCA[23]; in addition to shade, trees provide important protection from environmental pollutants, heat, and noise. During 2012-2014, Riverside County spent 94.37% of weeks in drought conditions, which contributed to degradation of air, food, and water system quality.[24]

In addition, the Riverside MCA is a major transit zone, with much of the freight traffic serving Southern California passing through the region. Some stakeholders described the proliferation of warehouses dedicated to shipping in the area, as well as increases in the number of tractor trailers. Molecules from vehicle emissions react with sunlight to produce ozone, which then collects in certain geographical areas, including the Riverside MCA. Consequently, the percentage of days with ozone readings that exceed the National Ambient Air Quality Standard is much higher in Riverside (7.28%) than in the state as a whole (2.65%).[25] Stakeholders also discussed how the lack of jobs in the county increases commutes for residents, thereby putting more cars on the road and more pollution in the air.

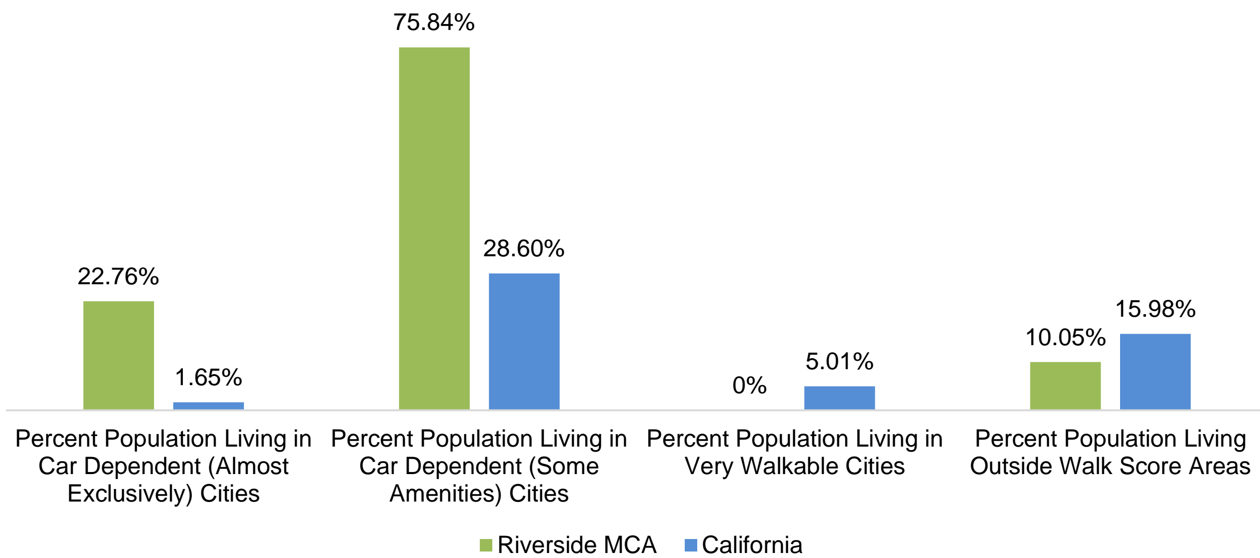
Transportation
Geographically, Riverside County is one of the largest counties in California, and much of the eastern portion of the county is very rural. CHNA stakeholders explained that in comparison with neighboring Los Angeles and Orange Counties, there is a lack of jobs in Riverside County. These two factors contribute to ongoing transportation issues in Riverside MCA. The percent of the population that walks or bikes to work in Riverside (1.87%) is lower than the state average (3.84%).[26] Perhaps more significantly, 20.95% of Riverside MCA residents have commutes of over an hour, compared to 10.4%

---

[20] Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12.
[21] Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12.
[22] California Department of Public Health, CDPH - Tracking. 2005-12.
[23] Multi-Resolution Land Characteristics Consortium, National Land Cover Database 2011. Additional data analysis by CARES. 2011.
[24] US Drought Monitor. 2014.
[25] Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network. 2012.
[26] US Census Bureau, American Community Survey. 2009-13.

of California residents.[27] CHNA stakeholders explained that insufficient public transportation created significant barriers to accessing some basic needs—including healthy foods, health care, and other social services. In low-income rural areas, children in families without cars who miss the school bus often end up missing school; over time, these absences can impact educational attainment and long-term economic security. Walk Score, an organization that rates walkability based on the presence of walking routes to grocery stores, schools, parks, restaurants, and retail, categorizes 100% of Riverside MCA cities as car-dependent.[28]

Figure VI.9 Transit and Walkability in Riverside MCA



Data Source: Walk Score®. 2012.

This indicator is relevant because an environment with safe walking routes and nearby amenities encourages physical activity and other healthy behaviors and decreases dependence on motor vehicle transportation.

iv. Socioeconomic Factors

Using the MATCH framework, one health need identified through the CHNA is categorized as a socioeconomic factor.

Economic Security

Economic security facilitates access to health services, healthy food, and other necessities that contribute to good health status. Conversely, poverty, unemployment, and low education attainment create barriers to health. While the unemployment rate has been declining across the country since 2010, unemployment in the MCA is consistently higher than state and national rates. There are particular socioeconomic challenges facing some geographies and communities.

Socioeconomic status impacts what neighborhoods or areas people can live in, and thus their access to resources like parks, grocery stores, and transportation. While 14.31% of Californians have low food access, the figure for the Riverside MCA is 26.47%.[29] High housing costs can be an additional burden for working families, as the cost of housing limits funds available for health care, child care, food, and

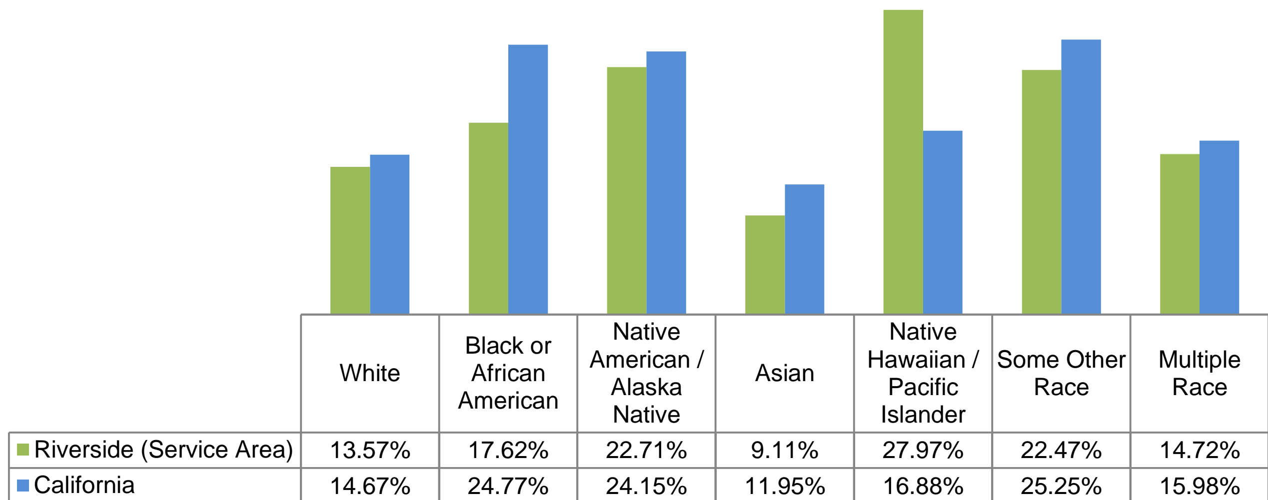
[27] US Census Bureau, American Community Survey. 2010-14.
[28] Walk Score®. 2012.
[29] US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2010.

transportation. In the Riverside MCA, 45.81% of households are considered cost-burdened—meaning they spend more than 30% of income on housing costs.[30]

According to CHNA stakeholders, the region is still recovering from the economic downturn in the late 2000s. CHNA stakeholders identified food insecurity as a major concern specifically for the elderly and the homeless populations. Economic instability has forced residents to make difficult choices between basic necessities like food and shelter and addressing health needs. While the Affordable Care Act has increased the proportion of the population with health insurance, the costs of premiums have placed an additional strain on some families.

Figure VI.10 Poverty

Poverty in the Riverside MCA - Population Below 100% FPL



	White	Black or African American	Native American / Alaska Native	Asian	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Race
Riverside (Service Area)	13.57%	17.62%	22.71%	9.11%	27.97%	22.47%	14.72%
California	14.67%	24.77%	24.15%	11.95%	16.88%	25.25%	15.98%

Data Source: U.S. Census Bureau, American Community Survey. 2010-14.

v. Prioritized list of health needs

The table of prioritized health needs reflects the prioritization process described in Section VI B.

	KFH-Riverside MCA
Access to Care	11.00
Obesity	10.40
Transportation	10.40
Economic Security	10.37
Diabetes	10.20
Cardiovascular Disease	10.07
Cancer	9.53
Mental Health	9.10
Climate and Health	8.60
Substance Abuse and Tobacco	8.60
Asthma	8.47
HIV and STIs	7.76

[30] US Census Bureau, American Community Survey. 2009-13.

D. Community assets, capacities and resources potentially available to respond to the identified health needs

For the purposes of this CHNA, community assets included resources and factors that positively impact health, such as cultural or community values, effective program models, existing institutions, collaboratives, and networks. These assets, capacities, and resources may operate at the individual or community level. Tangible elements of community assets could be physical and environmental, such as walking trails for community residents to use and be physically active, while the intangible assets could be values, beliefs and life experiences, such as valuing to live healthy by eating organically grown foods. Both elements can help community improve and change health behaviors and outcomes.

Various community resources were shared by stakeholders and community leaders in addition to hospitals and clinics in the KFH-Riverside MCA that can help community residents address various health problems. Overall, the Riverside MCA benefits from a number of assets that seek to address many of the health needs identified through this CHNA. These include community and school based programs, public health programs administered by the county, the growing trend of incorporating health elements into city general plans, collaborations between health care providers, community based organizations, and public agencies, and advocacy organizations.

Stakeholders also identified several gaps in resources. These included a lack of understanding of the health care system and how to utilize insurance and primary care effectively; several stakeholders thought that the community needed programs and policies to improve understanding. Stakeholders lamented the fact that many school districts have eliminated physical education, and thought that reincorporating physical education into schools would help to address some of the health needs, like obesity and overweight. Lastly, stakeholders explained that existing public transportation systems were insufficient, and highlighted the difficulty of getting to medical care facilities.

CHNA stakeholders identified the following resources by health need (in order of community prioritization). Assets, capacities, and resources are described in more detail in the health need profiles in Appendix C.

1. Access to Care

Many organizations offer educational trainings and informational workshops on health care advocacy. Some CHNA stakeholders shared they are leveraging resources to help community residents learn about health services available to them. Many stakeholders identified a need to inform newly insured stakeholders how to navigate the health care system, such as making appointments with primary doctors instead of seeking care at the emergency room.

2. Obesity

Several collaborations in the Riverside MCA address issues related to overweight and obesity, including the Riverside County Health Coalition, and Riverside Community Health Foundation's Diabetes Collaborative. Certified farmers' markets (CFM) also serve to provide communities with healthy and fresh produce. There are several certified farmers' markets (CFM) located in the KFH-Riverside MCA.

3. Transportation

The Riverside County Transportation Commission oversees funding and coordination of all public transportation within Riverside County. Riverside University Health Systems - Public Health is working with various city and county officials to begin planning on improving environmental and health impact.

4. Economic Security

CHNA stakeholders mentioned several organizations that are actively working to address the needs of those living in poverty, such as the Community Action Partnership. There are many physicians who are

willing to volunteer their time; however, due to physician shortage in Riverside County and limited health care staff, health care services free of cost are not readily available.

5. Diabetes

Many organizations offer educational trainings on diabetes and other chronic diseases. CHNA stakeholders shared that classes are offered as part of a process to teach diabetics how to take care of themselves and address such topics as: warning signs and symptoms of worsening diabetes, how to read a food label, and recipes for healthy foods. Multiple resources are available to help communities stay active in various school districts and community neighborhoods throughout Riverside County.

6. Climate and Health

CHNA stakeholders shared about the impact climate has on individuals, especially during the summer when high temperatures become dangerous for vulnerable populations, such as seniors. Many organizations open their air conditioned facilities for community residents to come in and cool off.

7. Cancer

Some providers offer support and mental health services for their clients and family members who are going through cancer treatment. They also provide grief counseling for the surviving family members.

8. Mental Health

CHNA stakeholders shared there is a lack of behavioral health physicians available to address the increasing demand for mental health services. Many providers offer educational trainings on emotional wellness and management. CHNA stakeholders shared that classes are intended to increase awareness and knowledge about mental health and stigma.

9. Cardiovascular Disease

CHNA stakeholders mentioned several organizations doing work in the community to improve cardiovascular health. CHNA stakeholders shared a few resources of organizations that aim to increase health knowledge and access to fitness opportunities.

10. Substance Abuse and Tobacco

Substance abuse was mentioned by CHNA stakeholders as an issue with prescription drug abuse. Some providers mentioned various pain management programs offered in various hospitals and clinics to help with this issue of pain medication addiction.

11. Asthma

Asthma clinics exist in the community in conjunction with smoking cessation programs. CHNA stakeholders mentioned one main issue with asthma triggers is the environment with high levels of smog in Riverside.

12. HIV and STIs

The Riverside University Health System - Public Health offers a range of programs that target HIV, including education and prevention, HIV testing, early intervention, surveillance, and mental health. Some stakeholders shared there are a couple of organizations that provide advocacy around HIV/AIDS and STIs through education and mobilization.

VII. KFH-Riverside 2013 IMPLEMENTATION STRATEGY EVALUATION OF IMPACT

A. Purpose of 2013 Implementation Strategy evaluation of impact

KFH-Riverside's 2013 Implementation Strategy report was developed to identify activities to address health needs identified in the 2013 CHNA. This section of the CHNA Report describes and assesses the impact of these activities. For more information on KFH-Riverside's Implementation Strategy report, including the health needs identified in the facility's 2013 service area, the process and criteria used for developing Implementation Strategies, please visit https://share.kaiserpermanente.org/wp-content/uploads/2013/10/IS-Report-Riverside.pdf . For reference, the list below includes the 2013 CHNA health needs that were prioritized to be addressed by KFH-Riverside in the 2013 Implementation Strategy report.

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

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

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

B. 2013 Implementation Strategy Evaluation of Impact Overview

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

- **KFH Programs:** From 2014-2015, KFH supported several health care and coverage, workforce training, and research programs to increase access to appropriate and effective health care services and address a wide range of specific community health needs, particularly impacting vulnerable populations. These programs included:
  - **Medicaid:** Medicaid is a federal and state health coverage program for families and individuals with low incomes and limited financial resources. KFH provided services for Medicaid beneficiaries, both members and non-members.
  - **Medical Financial Assistance:** The Medical Financial Assistance (MFA) program provides financial assistance for emergency and medically necessary services, medications, and supplies to patients with a demonstrated financial need. Eligibility is based on prescribed levels of income and expenses.
  - **Charitable Health Coverage:** Charitable Health Coverage (CHC) programs provide health care coverage to low-income individuals and families who have no access to

public or private health coverage programs.

  - **Workforce Training:** Supporting a well-trained, culturally competent, and diverse health care workforce helps ensure access to high-quality care. This activity is also essential to making progress in the reduction of health care disparities that persist in most of our communities.
  - **Research:** Deploying a wide range of research methods contributes to building general knowledge for improving health and health care services, including clinical research, health care services research, and epidemiological and translational studies on health care that are generalizable and broadly shared. Conducting high-quality health research and disseminating its findings increases awareness of the changing health needs of diverse communities, addresses health disparities, and improves effective health care delivery and health outcomes.

- **Grant-making:** For 70 years, Kaiser Permanente has shown its commitment to improving Total Community Health through a variety of grants for charitable and community-based organizations. Successful grant applicants fit within funding priorities with work that examines social determinants of health and/or addresses the elimination of health disparities and inequities. From 2014-2015, KFH-Riverside made 45 grant payments amounting to a total of $879,928 in service of 2013 health needs. Additionally, KFH-Riverside has funded significant contributions to a donor advised fund (DAF), managed by The California Community Foundation, in the interest of funding effective long-term, strategic community benefit initiatives. During 2014-2015, a portion of money managed by this foundation was used to support 47 grant payments totaling $7,248,789 in service of 2013 health needs. An illustrative list of active grants is provided in each health need section below.
- **In-Kind Resources:** Kaiser Permanente's commitment to Total Community Health means reaching out far beyond our membership to improve the health of our communities. Volunteerism, community service, and providing technical assistance and expertise to community partners are critical components of Kaiser Permanente's approach to improving the health of all of our communities. From 2014-2015, KFH-Riverside donated several in-kind resources in service of 2013 Implementation Strategies and health needs; an illustrative list is provided in each health need section below.
- **Collaborations and Partnerships:** Kaiser Permanente has a long legacy of sharing its most valuable resources: its knowledge and talented professionals. By working together with partners (including nonprofit organizations, government entities, and academic institutions), these collaborations and partnerships can make a difference in promoting thriving communities that produce healthier, happier, more productive people. From 2014-2015, KFH-Riverside engaged in several partnerships and collaborations in service of 2013 Implementation Strategies and health needs; an illustrative list is provided in each health need section below.

C. 2013 Implementation Strategy Evaluation of Impact by Health Need

KFH-Riverside Priority Health Need: Access to Health Care

- Increase health care coverage for uninsured, underinsured, and low income residents
- Improve service infrastructure of safety net providers for improved capacity to serve the uninsured and underinsured
- Increase access to primary care services
- Increase access to specialty care services including mental health
- Improve health care capacity through workforce development
- Increase access to oral health care

Access to Health Care
KFH Administered Program Highlights

KFH Program Name	KFH Program Descriptions	Results to Date
Medicaid	Medicaid is a federal and state health coverage program for families and individuals with low incomes and limited financial resources. KFH provided services for Medicaid beneficiaries, both members and non-members.	• In 2014, $7,645,981 was spent on the Medicaid program and 15,287 Medi-Cal managed care members were served • In 2015, $15,240,815 was spent on the Medicaid program and 25,286 Medi-Cal managed care members were served
Medical Financial Assistance	The Medical Financial Assistance (MFA) program provides financial assistance for emergency and medically necessary services, medications, and supplies to patients with a demonstrated financial need. Eligibility is based on prescribed levels of income and expenses.	• In 2014, $4,332,587 was expended for 4,270 MFA recipients • In 2015, $3,861,725 was expended for 4,407 MFA recipients
Charitable Health Coverage	Charitable Health Coverage (CHC) programs provide health care coverage to low-income individuals and families who have no access to public or private health coverage programs.	• In 2014, $655,857 was spent on the CHC program and 1,202 individuals received CHC • In 2015, $449,652 was spent on the CHC program and 1,371 individuals received CHC

Access to Health Care
Grant-Making Highlights

Grant-Making Snapshot During 2014-2015, there were 26 KFH grant payments, totaling $552,928, addressing the priority health need in the KFH-Riverside service area. In addition, a portion of the money managed by a donor advised fund (DAF), the California Community Foundation, was used to support 15 grant payments, totaling $1,537,500; DAF grants are denoted by asterisks (*). Donor advised fund (DAF) grants may cover multiple KFH service areas and address multiple health needs. All grant amounts reflect the amount paid in 2014 or 2015 and may not be reflective of the total grant amount awarded.

Grantee	Grant Amount	Project Description	Results to Date
The California Health Care Safety-Net Institute	$150,000*	The California Health Care Safety Net Institute received funding to sustain its core operations with specific emphasis on providing services to member public hospitals to assure that public hospitals and health systems are able to meet the rapidly changing requirements of the Affordable Care Act and impending payment reform.	The Safety Net Institute (SNI) will increase operational and clinical effectiveness of public hospital members as evidenced by tracking data and provide travel stipends for SNI members to attend the Institute for Healthcare Improvement training offerings.
Council of Community Clinics	$25,000*	The Council of Community Clinics (CCC) will develop a strategic business plan that will serve as a guiding document for the expansion of services in Riverside County.	In early 2015, CCC contracted with Pacific Health Consulting Group to conduct interviews with key stakeholders in Riverside County to determine community needs and perspectives about CCC's expansion into Riverside County. CCC will use the information and recommendations gathered from the stakeholder interviews to develop a strategic business plan, to include recommendations on a governance structure for Riverside County. They will also engage in a minimum of five planning sessions and consortia meetings with CCC executives, health center staff and key stakeholders to develop and implement a strategic business plan.

Grantee	Grant Amount	Project Description	Results to Date
Community Clinics Health Network	$175,000*	Please see description for the ALL HEART program under Impact of Regional Initiatives.	Please see description for the ALL HEART program under Impact of Regional Initiatives.
The Carolyn E. Wylie Center for Children, Youth & Families	$30,000	The Inland Empire Perinatal Maternal Health Collaborative aims to provide maternal/paternal mental health counseling to at-risk families throughout Riverside County. Services include individual/couples/ family treatment, support groups, outreach, and seminars.	In 2015, the program provided 181 counseling sessions to 34 families and 27 depression screenings to perinatal women. The Inland Empire Perinatal Maternal Health Collaborative meets monthly and has increased membership to involve 121 mental health agencies. The services provided continue to be critical in preventing infanticide, maternal suicide, child abuse, and abandonment.
Neighborhood Healthcare	$20,000	Neighborhood Healthcare targets patients in primary care with chronic mental illness that could benefit from health behavior change interventions and consultation with a psychiatric nurse practitioner.	In 2015, a psychiatric nurse practitioner (PNP) was hired and 217 patients have received services from the PNP through 480 encounters. Telepsych visits from both behavioral health consultants and the PNP total 728 unique patients and represents 1,924 encounters.
St. Jeanne de Lestonnac Free Clinic	$25,000	Lestonnac Free Clinic's Bridge to Care program provides indigent Riverside and Moreno Valley residents with free primary medical consultations, diagnosis, treatment, and follow-up services through mobile clinics throughout Riverside County.	Lestonnac Free Clinic's mobile medical team provides medical care services to uninsured residents in four locations across Riverside County: Riverside, Jurupa Valley, Perris, and Moreno Valley. As of December 2014, the mobile clinic team has provided 588 patients with care through 1,270 visits. The grant is on track to reach or exceed the grant goal of servicing 800 uninsured residents in 2015.

Access to Health Care
Collaboration/Partnership Highlights

Organization/Collaborative Name	Collaborative/Partnership Goal	Results to Date
Community Surgery Day - Riverside Area	In partnership with five community clinics, KFH-Riverside coordinated the annual Community Surgery Day events on Saturday, May 17, 2014 and February 28, 201	Community Surgery Day events in 2014 and 2015, in partnership with Borrego Community Health Foundation, Coachella Valley Volunteers in Medicine, Lestonnac Free Clinic, Health to Hope and SAC Clinic. A combined Kaiser Permanente team of 14 physicians, 7 Certified Nurse Anesthetists, 56 community service workers, and 41 volunteers helped provide specialty care services for 29 uninsured patients including hernia repair, gall bladder removals, orthopedic surgeries, cataract removal, gynecological procedures, and colonoscopy screenings.

Access to Health Care
In-Kind Resources Highlights

Recipient	Description of Contribution and Purpose/Goals
Riverside Unified School District and Desert Sands Unified School District	The Kaiser Permanente Hippocrates Circle Program is designed to provide youth from under-represented communities and diverse backgrounds with an awareness of career opportunities as a physician.
National Alliance for Mental Illness (NAMI) Western Riverside County	KFH-Riverside conference room space was made available during the weekends to provide the 10-week series: Peer to Peer and Family to Family sessions to the community. NAMI Western Riverside County collaborates with Kaiser Permanente to provide its program at no cost to participants. Prospective participants are referred from several sources, including Kaiser Permanente, Riverside University Health Systems, Behavioral Health, and NAMI. To date, 109 participants attended the sessions at Riverside Hospital.

Impact of Regional Initiatives Addressing Access to Health Care

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

Kaiser Permanente's Building Clinic Capacity for Quality (BCCQ) initiative aims to improve the quality of health care provided to Southern Californians by enhancing the capacity of community clinics to implement Quality Improvement (QI) strategies that are supported by health information technology (HIT). The overall goals of BCCQ are to increase the capacity of participating community clinics and to advance community clinics' implementation of HIT. In order to accomplish these goals, Kaiser Permanente funded a project office (Community Partners) to develop and implement a three series training program designed to reach clinics that were at different levels of QI experience and capacity. Additionally, the project office piloted the Proactive Office Encounter (POE) program to translate a promising practice from Kaiser Permanente to community clinics. POE is a model of planned care that uses clinical care guidelines, patient data, and team and practice organization to proactively ensure all patient needs are met. Clinics were recruited to participate in BCCQ in Los Angeles, Orange, and San Diego Counties. BCCQ also engaged with Riverside University Health System by implementing a tailored program. To date, Kaiser Permanente's Southern California Community Benefit (KPSC CB has invested a total of three (3) grants, amounting to $3,500,000 to support this initiative. (Note that this initiative continued to operate in 2014 and 2015, although no grant amounts were paid for these years).

BCCQ engaged 17 clinic teams in the Riverside University Health System (RUHS) to foster quality improvement (QI) capacity across their system. Overall, the RUHS aimed to (a) create a learning community for clinic teams to get exposure to quality and process improvement approaches and tools; (b) expand and build internal RUHS knowledge and capacity around QI; (c) support the ongoing transformational efforts of RUHS and (d) help foster an organizational culture of quality. The clinic teams chose QI projects for cancer screening, cycle time, medication reconciliation, and process improvement (prescriptions, referrals, follow-up, and employee satisfaction). All clinic teams reported making progress towards their project goals, with many teams on a track to meet or exceed their goals by the end of the BCCQ project.

ALL HEART - In 2006, Kaiser Permanente's Southern California Community Benefit (KPSC CB) began the translation of Kaiser Permanente's evidence-based cardiovascular disease (CVD) risk-reduction program across the safety net organizations in Southern California through a program called *ALL* (*A*spirin, *L*isinopril, and *L*ipid lowering medications). As a result of receiving the James A. Vohs Award for Quality in 2011, Kaiser Permanente Southern California selected the Community Clinic Health Network (CCHN) to serve as a Project Office to further translate the ALL protocol across the Southern California Region. The program was renamed to *ALL HEART* (Heart Smart Diet, Exercise, Alcohol limits, Rx Medicine compliance, and Tobacco cessation) to include lifestyle measures that were also included in this program. CCHN continues to enroll community health centers across Southern California into the ALL HEART Program. To date, KPSC CB has invested a total of six (6) grants, amounting to $1,220,000 to support this initiative. This current two-year grant began in 2015 and the focus will be on the diabetic and/or hypertension population. The ALL HEART program will also continue its pilot projects around behavioral health integration and clinic to community linkages.

The Riverside University Health System Diabetes Care Clinic was opened in 2010 with a grant from the ALL Initiative and is housed within the hospital along with the Family Care Clinic and Internal Medicine (the designated medical homes for primary care patients). The care management program includes planned visits, health education, coaching, care coordination, and specialty referrals. Data showed positive patient outcomes for control of diabetes, where the percent of patients with hemoglobin A1c greater than 9% declined over time more in the care management programs than in patients seen in the usual primary care clinics. These outcomes were supported by promoting a team approach to care, using data and information technology to support decision making, and developing a culture that promotes continuous quality improvement.

KFH-Riverside Priority Health Need: Diabetes

- Improve healthy eating and active living among high-risk population - Promote early detection of diabetes and prevention of Type 2 diabetes among high-risk population - Improve clinical care for and management of high risk populations - Improve capacity of safety net providers and community-based organizations addressing diabetes care management - Improve diabetes self-management skills
Diabetes **Grant-Making Highlights**
Grant-Making Snapshot During 2014-2015, there were 5 KFH grant payments, totaling $100,000, addressing the priority health need in the KFH-Riverside service area. All grant amounts reflect the amount paid in 2014 or 2015 and may not be reflective of the total grant amount awarded.

Grantee	Grant Amount	Project Description	Results to Date
Riverside Community Health Foundation	$30,000	Riverside Community Diabetes Collaborative seeks to provide outreach, education, and support activities throughout Riverside, Jurupa Valley, Moreno Valley, and Perris, targeting Latino, African American, and elderly populations and their caregivers.	Overall, the Riverside Community Diabetes Collaborative participated in 42 outreach events and connected with 2,199 residents. For instance, the collaborative held several events during Diabetes awareness month to help educate the community about the disease and conduct health screenings. In addition, the coalition organized a training for 23 participants on a diabetes toolkit and supported various diabetes cooking and educational classes in which 784 individuals attended.

Diabetes
Collaboration/Partnership Highlights

Organization/Collaborative Name	Collaborative/Partnership Goal	Results to Date
Riverside Community Diabetes Collaborative (RCDC)	RCDC is a group of more than 40 diabetes-focused organizations and businesses that work together to strengthen community programs and services for the prevention and management of diabetes. KFH-Riverside served as a representative in this collaborative.	RCDC provides outreach, education, activities, including diabetes classes, social support, cooking classes and seminars in English and Spanish to increase personal knowledge and skills to prevent/manage diabetes. It targets Latino and African American families, and older adults in Riverside, Perris, Jurupa Valley & Moreno Valley.

Diabetes **In-Kind Resources Highlights**	
Recipient	**Description of Contribution and Purpose/Goals**
Alvord Unified School District	The following KFH-Riverside personnel provided expertise in the area of diabetes, nutrition and stress management: Julianna Garcia, RN, Nursing Project Coordinator; Alexander Guile, MD and Randy Lee, MD, Family Medicine Residents; Michelle Park and Ranjit Sidhu, Registered Pharmacy Residents; and LaTyce Moyo, Health Educator.

KFH-Riverside Priority Health Need: Obesity and Overweight

- Increase healthy eating among youth and seniors in low income communities
- Increase active living
- Improve weight management skills for overweight / obese

Obesity and Overweight
Grant-Making Highlights

Grant-Making Snapshot During 2014-2015, there were 14 KFH grant payments, totaling $227,000, addressing the priority health need in the KFH-Riverside service area. In addition, a portion of the money managed by a donor advised fund (DAF), the California Community Foundation, was used to support 25 grant payments, totaling $2,881,289[31]; DAF grants are denoted by asterisks (*). Donor advised fund (DAF) grants may cover multiple KFH service areas and address multiple health needs. All grant amounts reflect the amount paid in 2014 or 2015 and may not be reflective of the total grant amount awarded.

Grantee	Grant Amount	Project Description	Results to Date
California Food Policy Advocates	$212,500*	The Improving Nutrition Program Participation and Quality in Southern California project works to ensure that eligible people in need of nutritional support programs have access to CalFresh and Child Nutrition Programs such as federally subsidized school breakfast and lunch programs and child care nutrition.	To date, the California Food Policy Advocates has increased school breakfast participation, increased the number of public school students in Medi-Cal households who are enrolled in free school meal programs, and increased CalFresh enrollment. The grant has built awareness, evidence, and support for child care nutrition policies.
California Center for Public Health Advocacy	$125,000*	The Healthy Eating Active Living (HEAL) Cities Campaign is a partnership between the California Center for Public Health Advocacy and the League	To date, the California Center for Public Health Advocacy and the League of California Cities has collaborated with 10 targeted HEAL Cities to create implementation

[31] These grants primary support obesity and overweight and may address diabetes, as a priority health need.

Grantee	Grant Amount	Project Description	Results to Date
		of California Cities that trains and provides technical assistance to elected city officials throughout California, helping them to establish local policies promoting healthy eating and physical activity.	plans for at least 10 HEAL policies, supported the adoption of at least 40 HEAL policies by training city officials, residents and non-profit organizations and disseminated a Complete Parks Playbook to at least 172 HEAL Cities. The effort has resulted in workshops and technical assistance sessions for at least 30 city leaders and the identification of 10 HEAL Cities champions to work on local sugary beverage warning label policies and provide technical assistance to them.
Alvord Unified School District	$xx,xxx (?)	Alvord Unified School District participates in the Kaiser Permanente Thriving Schools program, in partnership with The Alliance for a Healthier Generation (AHG). The goal of Thriving Schools is to deepen our involvement in efforts that support school wellness and help make good health are part of everyday life.	The 22 schools that make up Alvord Unified District all contribute to a culture of good health, better nutrition, and increased activity to improve the lives of their teachers, staff, students and their families. Supported by the Principals, the 22 school wellness leads meet quarterly for workshops and guidance to achieve policy or system improvements at their respective school sites. The 2015 National Healthy Schools Awards recognized the following schools: • Phillip M Stokoe Elementary School: Bronze • Wells Middle School: Bronze • Loma Vista Middle School: Silver (received Bronze recognition in 2014)
City of Riverside	$49,500*	This Operation Splash program provides swim lessons, extended swim season passes, junior lifeguard training and water safety, and a healthy beverage education classes for low-income youth and adults.	The City of Riverside has partnered in the Operation Splash program since 2008. Since the program started, it has increased the number of youth participants year by year. In 2014 and 2015, it provided approximately 1,400 swim lessons and 100 junior guard trainings on an annual basis. In 2012, the City

Grantee	Grant Amount	Project Description	Results to Date
			collaborated with the Riverside University Health System - Public Health and vending machine companies to reduce the number of sugary drinks. Its Rethink Your Drink campaign is implemented in all pool sites and reaches approximately 3,600 individuals annually.
Riverside County Department of Public Health[1] [1] Riverside University Health System – new name beginning in 2016	$300,000*	This HEAL Zone site focuses on school and community strategies, such as: a) amending the existing school and district policy to improve the nutritional and physical activity, b) providing standards-based physical education program in schools, c) improving school infrastructure to enable physical activity during recess, d) addressing the consumption of healthy foods and beverages and physical activity afterschool, and e) improving the nutrition and physical activity within childcare settings, f) improving access to healthy foods through improvements in corner stores and provision of CSA box and a mini-farmers market pilot, g) developing community gardens, h) improving access to physical activity opportunities and healthier food options at parks and churches, and i) working with community clinics to support patient eating and physical activity behaviors.	To date, there have been improvements in schools and communities to address physical activity and healthy eating opportunities. In schools: a) replenished PE equipment and curriculum at participating schools and observed increased physical activity among students, b) revised and strengthened district wellness policy, c) one large child care center, that serves 144 children, has completed the NAP SACC program and three new child care centers' sites have started the process for certification. In the community: a) two corner stores now have new refrigerated cases and have reported improvements in their produce sales, b) completed the CSA model and mini-farmer's market pilot, c) a new playground was built at Bobby Bonds Park, outdoor fitness equipment were installed at Bordwell and Lincoln Parks, which have been reported to have increased utilization of improved spaces, and d) the City Council passed a healthy food & beverage policy. These efforts have the potential to reach approximately 18,000 community residents.
Community Partners	$350,000	Community Partners provides technical assistance and strategic support for coalition building, resident engagement, and	Community Partners provided technical assistance and strategic support to ten HEAL grantees, their partners, and resident/youth leaders

Grantee	Grant Amount	Project Description	Results to Date
		leadership through peer-to-peer learnings, webinars, teleconferences for the HEAL Zone and HEAL Partnership grant communities.	to apply the knowledge, skills, and competencies to successfully implement their HEAL Community Action Plan strategies in 2015.
Jurupa Unified School District 20640013	$40,000*	This Thriving School project aims to a) implement a district wide employee wellness program, b) revise the school district wellness policy, c) offer more physical activity opportunities, and d) improve healthy food and beverage access at schools.	To date, the school district has established site wellness councils, installed hydration stations at two schools, improved physical activity through the 100 Mile Club, walk to school programs, and intramural sports, and has provided nutrition education through programs such as Harvest of the Month. The school district plans to implement smarter lunchroom assessments and strategies in the near future. This project is being implemented in three (3) elementary schools and potentially reaches 2,026 students.
Feeding America Riverside and San Bernardino Counties	$20,000	Feeding America Riverside and San Bernardino's (FARSB) Senior Nutrition Program helps low-income seniors with enrollment assistance in CalFresh and a monthly food distribution across Riverside County to support better health.	The Senior Nutrition Program is operating at eight sites. The program instituted a new service in which staff help enroll low-income seniors into Cal-Fresh. In addition, the program holds food distribution days for low-income seniors to select food including fresh fruits and vegetables.

Grantee	Grant Amount	Project Description	Results to Date
Reach Out West End Inc.	$20,000	Healthy Jurupa Valley is part of a national Healthy Cities movement to improve the health and quality of life of all residents of Jurupa Valley.	The Healthy Jurupa Valley coalition engaged in advocacy and supported the passage of the Synthetic Drug Ordinance to prevent the sale of synthetic drugs and a Parks and Recreation policy to allow the sale of local, healthy foods. In addition, the coalition (a) helped develop the Farm Share Community Supported Agriculture program, (b) identified parks that would benefit from walking trail markers to increase physical activity, and (c) created an Action Team to build the economic strength of individuals, families and small businesses. The diverse organizers in this coalition (Arts & Recreation; Community Safety & Readiness; Community Prosperity; Gardens & Markets; and Family Resources) continue to support and encourage community residents and leaders to advocate for healthy eating and active living in Jurupa Valley.

Obesity and Overweight
Collaboration/Partnership Highlights

Organization/Collaborative Name	Collaborative/Partnership Goal	Results to Date
Riverside County Health Collaborative (RCHC)	RCHC is a collaboration of more than 60 partners, including public and private sectors such as school districts, community businesses, local and regional organizations, and community members.	The collaboration has supported relationship building among 21 Riverside cities who have adopted resolutions to strengthen collaboration and share best practices. Moreover, KFH-Riverside has leveraged

Organization/Collaborative Name	Collaborative/Partnership Goal	Results to Date
		connections with key leaders including the resources of the HEAL Cities Campaign, Western Region Council of Governments, and The Clinton Health Matters Initiative.

Obesity and Overweight
In-Kind Resources Highlights

Recipient	Description of Contribution and Purpose/Goals
Eastside HEAL Zone Corner Stores	KFH-Riverside Construction volunteers painted a local corner store to cover graffiti. Additionally, a local resident designed a mural which was painted onto the store walls by a group of youth from the Eastside. The mural has caught the attention of several residents and key leaders who have a better understanding of the health impact that the Eastside HEAL Zone has made in their community. Both store owners have realized an increase in the sale of fresh produce and gained new regular customers.
Alvord Unified School District Jurupa Unified School District	Technical support for the Thriving Schools Initiative was provided to both Alvord and Jurupa Unified School Districts. Thriving Schools is an initiative to encourage schools to create a culture for wellness for students, staff, and parents. The following KFH-Riverside personnel provided Alvord Unified School District with expertise in the areas of diabetes, nutrition and stress management: Julianna Garcia, RN, Nursing Project Coordinator; Alexander Guile, MD and Randy Lee, MD, Family Medicine Residents; Michelle Park and Ranjit Sidhu, Registered Pharmacy Residents; and LaTyce Moyo, Health Educator.

Impact of Regional Initiatives Addressing Obesity and Overweight

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

Kaiser Permanente's Thriving Schools initiative expands Kaiser Permanente's commitment to the total health of members and the communities it serves through work with local schools and school districts. It is an effort to improve healthy eating, physical activity and school climate in K-12 schools in Kaiser Permanente's service areas, primarily through a focus on policy, systems and environmental changes that support healthy choices and a positive school climate. For the specific project implemented in KFH-Riverside and the results to date, please see the Thriving Schools listing above for Alvord and Jurupa Unified School District.

Kaiser Permanente's HEAL (Healthy Eating, Active Living) Zone initiative is a place-based

approach that aims to lower the prevalence of obesity and overweight by increasing access to fresh fruit, vegetables and healthy beverages, as well as increasing safe places to be play and be physically active. HEAL Zones work through a collaboration of local organizations and agencies to implement policies, programs and environmental system changes to impact healthy eating and active living behavior. To date, Kaiser Permanente has awarded over $7,000,000 to community-based organizations across Southern California to support this initiative. For the specific project implemented in KFH-Riverside and the results to date, please see the listing above for Riverside HEAL Zone coordinated by the Riverside County Department of Public Health.

PRIORITY HEALTH NEED V: Broader Health Care System Needs in Our Communities – Workforce

<table>
<tr><th colspan="4">KFH Workforce Development Highlights</th></tr>
<tr><td colspan="4">Long Term Goal:
• To address health care workforce shortages and cultural and linguistic disparities in the health care workforce</td></tr>
<tr><td colspan="4">Intermediate Goal:
• Increase the number of skilled, culturally competent, diverse professionals working in and entering the health care workforce to provide access to quality, culturally relevant care</td></tr>
<tr><td colspan="4">Summary of Impact: During 2014-2015, a portion of money managed by a donor advised fund at California Community Foundation was used to pay five grants, totaling $1,780,000, that address this need. An illustrative sample of grants is provided below; DAF grants are denoted by asterisks (*). All grant amounts reflect the amount paid in 2014 or 2015 and may not be reflective of the total grant amount awarded. KFH-Riverside also provided trainings and education for 223 residents in its Graduate Medical Education program, 12 nurse practitioner or other nursing beneficiaries, and 40 other health (non-MD) beneficiaries as well as internships for 51 high school and college students (Summer Youth, INROADS, etc.).</td></tr>
<tr><th colspan="4">Grant Highlights</th></tr>
<tr><th>Grantee</th><th>Grant Amount</th><th>Project Description</th><th>Results to Date</th></tr>
<tr><td>California Institute for Nursing and Health Care (CINHC)</td><td>$100,000*</td><td>To provide expert technical assistance to registered nursing programs at California state universities (CSUs) and their identified California community college (CCC) partners in Southern California. It will also help schools implement an associate degree to a bachelor of science in nursing pathway, facilitating fast tracking and efficient implementation of the California Collaborative Model of Nursing Education</td><td>CINHC will facilitate engagement and partnership to develop, implement, and sustain the CCMNE across all 10 CSUs and respective CCCs. CINHC will engage interested private universities and colleges within the region, including deans, directors, and faculty. Lastly, CINHC will conduct a curriculum review, mapping process, and development of integrated pathways based on prior success strategies that are consistent with evidence based models.</td></tr>
</table>

		(CCMNE).	
Campaign for College Opportunity (CCO)	$50,000*	This grant supports an in-depth research report to analyze trends in California science, technology, engineering, and math (STEM)/health workforce needs. The STEM/Health Workforce Report will focus on factors affecting demand and supply; public higher education funding policies; and programs to help meet workforce demands. This grant supports an in-depth research report to analyze trends in California science, technology, engineering, and math (STEM)/health workforce needs. The STEM/Health Workforce Report will focus on factors affecting demand and supply; public higher education funding policies; and programs to help meet workforce demands.	The Campaign for College Opportunity will develop and disseminate the STEM/Health Workforce Report to increase awareness among the public and policymakers of the growing need for STEM health workers in California and the role California community colleges play in filing the demand. CCO has completed the report and the general release will occur in June 2016. The report's release will be accompanied by a media and communications strategy including a webinar, briefings with key stakeholders (in education, business, community and civic organizations) along with policymakers in Sacramento.
University of California Riverside Foundation	$597,700*	This grant supports University of California Riverside Foundation's establishment of pipeline initiatives and scholarship programs at the new University of California at Riverside (UCR) School of Medicine.	UCR held the third Medical Leaders of Tomorrow program, engaging 40 rising 10th graders in a one week residential summer science program at UCR. It expanded the Health Sciences Partnership program from 8 to 10 participating high schools and increased the number of participants in the Future Physician Leader program from 117 to 178 students.

In-Kind Resources Highlights	
Recipient	**Description of Contribution and Purpose/Goals**
Individuals and organizations in the health care and medical	Kaiser Permanente Southern California Region's Department of Professional Education offered Advanced Practice and Allied Health Care Educational Programs for allied health care providers throughout Southern California. In 2015, across Kaiser Permanente Southern California Region, 644 community-based nurses, nurse practitioners, physician assistants, imaging professionals, clinical laboratory scientists, community audiologists and speech pathologists, and other

workforce.	health care professionals participated in symposia at no cost.

PRIORITY HEALTH NEED VI: Broader Health Care System Needs in Our Communities – Research

KFH Research Highlights			
Long Term Goal: • **To increase awareness of the changing health needs of diverse communities**			
Intermediate Goal: • **Increase access to, and the availability of, relevant public health and clinical care data and research**			
Summary of Impact: Kaiser Permanente conducts, publishes, and disseminates research to improve the health and medical care of members and the communities served. The Southern California Region Department of Research and Evaluation (DRE) conducted a total of 988 studies in 2014 and 1,404 studies in 2015 across all regional hospitals, totaling $16,385,832. Research focuses on clinical trials, building scientific expertise in health services and policy, and implementation science to bridge the gap between research and practice. In addition, a portion of money managed by a donor advised fund (DAF) at California Community Foundation was used to pay two grants, totaling $1,050,000 that address this need. All grant amounts reflect the amount paid in 2014 or 2015 and may not be reflective of the total grant amount awarded.			
Grant Highlights			
Grantee	**Grant Amount**	**Project Description**	**Results to Date**
UCLA Center for Health Policy Research	$500,000*	The California Health Interview Survey (CHIS) investigates key public health and health care policy issues, including health insurance coverage and access to health services, chronic health conditions and their prevention and management, the health of children, working age adults, and the elderly, health care reform, and cost effectiveness of health services delivery models.	At the end of the grant period, UCLA Center for Health Policy Research interviewed approximately 41,500 households and completed 78,127 screenings along with 40,125 adult, 2,255 adolescent and 5,514 child interviews. In addition, 12 AskCHIS online trainings were completed.
In-Kind Resources Highlights			
Recipient	**Description of Contribution and Purpose/Goals**		
Individuals and organizations	Kaiser Permanente Southern California Region's Department of Research and Evaluation works closely with national and regional research institutions and universities to provide high-quality health research. In the KFH-Riverside service		

in the health care and medical community.	area, 14 research projects were active in 2014 and 23 research projects were active as of year-end 2015.
Individuals and organizations in the health care and medical community.	Kaiser Permanente Southern California Region's Nursing Research Program provides administrative and technical support for nurses to conduct, publish and disseminate research studies and evidence based practice projects. In the KFH-Riverside service area, three research projects were active as of year-end 2014 and six research projects were active as of year-end 2015.

VIII. Appendices

Appendix A: Secondary Data Sources and Dates

Quantitative Secondary Data Sources

1. California Cancer Registry. 2015.
2. California Department of Education. 2012-2013.
3. California Department of Education. 2013.
4. California Department of Education, FITNESSGRAM®; Physical Fitness Testing. 2013-2014.
5. California Department of Public Health, CDPH – Birth Profiles by ZIP Code. 2011.
6. California Department of Public Health, CDPH – Breastfeeding Statistics. 2012.
7. California Department of Public Health, CDPH – Death Public Use Data. University of Missouri, Center for Applied Research and Environmental Systems. 2010-2012.
8. California Department of Public Health, CDPH – Tracking. 2005-2012.
9. California Office of Statewide Health Planning and Development, OSHPD Patient Discharge Data. 2011.
10. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2006-2010.
11. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2006-2012.
12. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2011-2012.
13. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. US Department of Health & Human Services, Health Indicators Warehouse. 2005-2009.
14. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-2012.
15. Centers for Disease Control and Prevention, Climate and Health. 2014-2015.
16. Centers for Disease Control and Prevention, Healthy Places. 2014-2016.
17. Centers for Disease Control and Prevention, Heart Disease. 2015.
18. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012.
19. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. US Department of Health & Human Services, Health Indicators Warehouse. 2010.
20. Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. US Department of Health & Human Services, Health Indicators Warehouse. 2012.
21. Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network. 2008.
22. Centers for Disease Control and Prevention, National Vital Statistics System. Centers for Disease Control and Prevention, Wide Ranging Online Data for Epidemiologic Research. 2006-2010.
23. Centers for Disease Control and Prevention, National Vital Statistics System. Centers for Disease Control and Prevention, Wide Ranging Online Data for Epidemiologic Research. 2007-2010.
24. Centers for Disease Control and Prevention, National Vital Statistics System. Centers for Disease Control and Prevention, Wide Ranging Online Data for Epidemiologic Research. 2007-2011.
25. Centers for Disease Control and Prevention, National Vital Statistics System. University of Wisconsin Population Health Institute, County Health Rankings. 2008-2010.
26. Centers for Disease Control and Prevention, National Vital Statistics System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-2012.
27. Centers for Medicare and Medicaid Services. 2012.

28. Child and Adolescent Health Measurement Initiative, National Survey of Children's Health. 2011-2012.
29. Dartmouth College Institute for Health Policy & Clinical Practice. Dartmouth Atlas of Health Care. 2012.
30. Environmental Protection Agency, EPA Smart Location Database. 2011.
31. Federal Bureau of Investigation, FBI Uniform Crime Reports. 2010-2012.
32. Feeding America. 2012.
33. Multi-Resolution Land Characteristics Consortium, National Land Cover Database. 2011.
34. National Center for Education Statistics, NCES – Common Core of Data. 2012-2013.
35. National Oceanic and Atmospheric Administration, North America Land Data Assimilation System (NLDAS). 2014.
36. New America Foundation, Federal Education Budget Project. 2011.
37. Nielsen, Nielsen Site Reports. 2014.
38. State Cancer Profiles. National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results Program. 2007-2011.
39. University of California Center for Health Policy Research, California Health Interview Survey. 2009.
40. University of California Center for Health Policy Research, California Health Interview Survey. 2012.
41. University of Wisconsin Population Health Institute, County Health Rankings. 2012-2013.
42. University of Wisconsin Population Health Institute, County Health Rankings. 2014.
43. US Census Bureau, American Community Survey. 2009-2013.
44. US Census Bureau, American Housing Survey. 2011, 2013.
45. US Census Bureau, County Business Patterns. 2011.
46. US Census Bureau, County Business Patterns. 2012.
47. US Census Bureau, County Business Patterns. 2013.
48. US Census Bureau, Decennial Census. 2000-2010.
49. US Census Bureau, Decennial Census, ESRI Map Gallery. 2010.
50. US Census Bureau, Small Area Income & Poverty Estimates. 2010.
51. US Department of Agriculture, Economic Research Service, USDA – Food Access Research Atlas. 2010.
52. US Department of Agriculture, Economic Research Service, USDA – Food Environment Atlas. 2011.
53. US Department of Agriculture, Economic Research Service, USDA – Child Nutrition Program. 2013.
54. US Department of Education, EDFacts. 2011-2012.
55. US Department of Health & Human Services, Administration for Children and Families. 2014.
56. US Department of Health & Human Services, Center for Medicare & Medicaid Services, Provider of Services File. June 2014.
57. US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2012.
58. US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2013.
59. US Department of Health & Human Services, Health Resources and Services Administration, Health Professional Shortage Areas. March 2015.
60. US Department of Housing and Urban Development. 2013.
61. US Department of Labor, Bureau of Labor Statistics. June 2015.
62. US Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System. 2011-2013.
63. US Drought Monitor. 2012-2014

Additional Literature

1. Alameda County Health Care Services Agency, Indigent Health. 2015
2. California Department of Social Services, CDSS – CalFresh Program. 2007
3. California Health Line, California Among States with Lowest Rate of Obesity, Unhealthy Behaviors. 2015
4. California Healthcare Foundation, Californians with the Top Chronic Conditions: 11 Million and Counting. 2015
5. California Healthcare Foundation, Integrated Clinics for High Utilizers Conference. 2015
6. California Healthcare Foundation, Locally Data Sourced: The Crucial Role of Counties in the Health of Californians. 2015
7. California Healthcare Foundation, Prescription to End Painkiller Misuse: New Work Group Launched in Alameda. 2015
8. California Healthcare Foundation, Small California Cities Rank Poorly in Health, Quality of Life Measures. 2015
9. California Healthcare Foundation, The Crucial Roles of Counties in the Health of Californians: An Overview. 2011
10. California Healthline, Report: Health Spending Grows 3.4%, Rx Drug Spending Jumps 8.2%. 2015
11. California Healthline, U.S. Residents' Rx Drug Use Up, New CDC Study Finds. 2015
12. Community Standards for Opioid Prescribing, Alameda County Safety Net Working Group on Opioid Prescribing. 2015
13. Contra Costa Times. New initiative to address painkiller misuse in Alameda County. 2015
14. Health Assessment Resource Center (HARC). 2015
15. Health Care Cost Institute, Health Care Cost and Utilization Report. 2014
16. Journal of American Medical Association, Trends in Prescription Drug Use Among Adults in the United States From 1999-2012. 2015
17. Los Angeles Times, Rx for America: Nearly 6 in 10 adults take prescription drugs, study says. 2015
18. Modern Healthcare, Health care spending grows modestly among commercially insured, except for drugs. 2015
19. Modern Healthcare, Prescription-price sticker shock: Will federal lawmakers intervene. 2015
20. National Institutes of Health, NIH and the Weight of the Nation. 2012.
21. National Institutes of Health, Overweight and Obesity. 2012
22. Riverside County Department of Public Health: SHAPE Community Needs Assessment data. 2015
23. Southern California Association of Governments' (SCAG) Regional Council: Profile of Riverside County. 2015.
24. US News and World Report, Prescription Drug Use on the Rise in U.S. 2015
25. The Campaign to End Obesity. 2005
26. The National Health and Nutrition Examination Survey (NHANES), 2015
27. The Noun Project, Inc. 2014
28. WalletHub, Best & Worst Small Cities in America. 2015
29. WalletHub, Fattest States in America. 2015
30. Washington Post, Nearly 60 percent of Americans - the highest ever - are taking prescription drugs. 2015

Appendix B: Stakeholder input Tracking Form

KP CHNA - Riverside Community Input Tracking Form

KAISER PERMANENTE

#	Data Collection Method Employed	Who Participated / Title of event	Number of Participants	Who Participant(s) Represent(s)	Position with respect to the group	Date	Comments / Notes
1	Key Stakeholder Interview	Regional Director	1	minority population; low-income community	Community leader	9/15/2015	Identification
2	Key Stakeholder Interview	Dir. Energy & Econ Development	1	minority population; low-income community	Community leader; community representative;	9/15/2015	Identification
3	Key Stakeholder Interview	Program Manager	1	minority population; low-income community	Community leader; community representative;	9/17/2015	Identification
4	Key Stakeholder Interview	Director of Public Health	1	health department rep;	Community leader	9/22/2015	Identification
5	Key Stakeholder Interview	Superintendent	1	minority population; low-income community	Community leader	9/21/2015	Identification
6	Key Stakeholder Interview	Medical Director	1	medically underserved,	Community leader	9/21/2015	Identification
7	Key Stakeholder Interview	Asst City Mgr	1	minority population; low-income community	Community leader	9/22/2015	Identification
8	Key Stakeholder Interview	Dir NEOPP	1	minority population; low-income community	Community leader	9/22/2015	Identification
9	Key Stakeholder Interview	Executive Director	1	minority population; low-income community	Community leader	10/8/2015	Identification
10	Key Stakeholder Interview	Planning Commissions/Principal Planner	1	minority population; low-income community	Community leader	10/7/2015	Identification
11	Key Stakeholder Interview	Executive Director	1	minority population; low-income community	Community leader	10/27/2015	Identification
12	Key Stakeholder Interview	Physician	1	medically underserved; minority population; low-income community	Community leader	10/28/2015	Identification
13	Key Stakeholder Interview	Urgent Care/Govt./RCMA	1	medically underserved; minority population; low-income community	Community leader	10/12/2015	Identification
14	Key Stakeholder Interview	Vice President	1	minority population; low-income community	Community leader	10/12/2015	Identification
15	Key Stakeholder Interview	Nurse Executive	1	medically underserved; minority population; low-income community	Community leader	10/7/2015	Identification
16	Focus Group	Community based organizations and health service providers	10	medically underserved; minority population; low-income community	community leaders; community representatives;	9/23/2015	Identification
17	Focus Group	Health medical staff	6	medically underserved; minority population; low-income community	community leaders;	9/23/2015	Identification
18	Focus Group	Community based organizations and health service providers	9	medically underserved; minority population; low-income community	community leaders; community representatives;	9/29/2015	Identification
19	Focus Group	Community based organizations and health service providers	10	medically underserved; minority population; low-income community	community leaders; community representatives;	9/30/2015	Identification
20	Focus Group	Community based organizations and health service providers	3	medically underserved; minority population; low-income community	community leaders; community representatives;	9/30/2015	Identification
21	Community Forum/world café	Community members and health service providers	26	medically underserved; minority population; low-income community	Community member; community leaders;	10/14/2015	Identification
22	Prioritization Community Forum	Community based organizations and health service providers	43	medically underserved; minority population; low-income community	Community member; community leaders;	1/20/2016	Prioritization
23	Prioritization Community Forum	Community based organizations and health service providers	9	medically underserved; minority population; low-income community	Community member; community leaders;	2/2/2016	Prioritization
24	Prioritization Community Forum	Community based organizations and health service providers	5	medically underserved; minority population; low-income community	Community member; community leaders;	2/3/2016	Prioritization

Appendix C: Health Need Profiles

The following health need profiles provide snapshots of the 12 health needs identified in the Riverside MCA. These profiles include secondary data from a range of national, state, and local data sources, as well as highlights from the primary data collected from key informant interviews, focus groups, and a community café. These highlights reflect expertise of a range of community stakeholders, but may not be represent all the assets, resources, and challenges experienced by the communities of the Riverside MCA.

Access to Care in Riverside

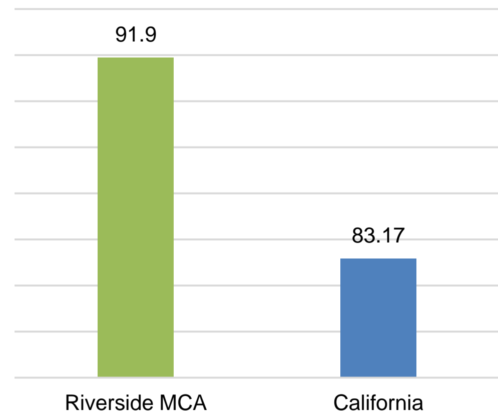
Description & Significance: While the proportion of the population with health insurance has increased in recent years, a lack of providers in Riverside County as a whole continues to limit access to care. Proportionally, there are fewer primary care providers in Riverside (40.5 per 100,000) than there are in the state (77.25 per 100,000 in California). The data for mental health providers also indicates a shortage: the state average is 157 providers per 100,000, compared to 68.4 in Riverside. The proportion of the population that is uninsured in Riverside is (18.78%) and is higher than the state average (17.78%). Hispanic/Latino, “Some Other Race” and Native American/Alaska Native populations have the highest rates of being uninsured. Many CHNA stakeholders shared that veterans, seniors, and homeless in the community have difficulty accessing health care. CHNA stakeholders also shared there is still a lack of insurance among young adults and immigrants, especially the undocumented, who are not eligible for most public programs. Economic instability in the region has contributed to increasing numbers who struggle to maintain health insurance and those who can no longer afford health insurance. In addition, navigating the Affordable Care Insurance plans and understanding health care benefits is a challenge for many who are newly insured.

Health Outcomes

Preventable Hospital Events

This indicator reports the patient discharge rate (per 10,000 population) for conditions that are ambulatory care sensitive (ACS). ACS conditions, including pneumonia, dehydration, asthma, diabetes, and other conditions which could have been prevented if adequate primary care resources were available and accessed. Analysis of ACS discharges allows demonstrating a possible “return on investment” from interventions that reduce admissions through better access to primary care resources.

Data Source: California Office of Statewide Health Planning and Development, OSHPD Patient Discharge Data, 2011.



Health Disparity

Health Disparity in Consistent Care

Report Area	Percentage Without Regular Doctor
Riverside MCA	14.50%
California	14.30%

This indicator reports the percentage of children, teenagers, and adults who self-report that they do not have a usual place to go when sick or needing health advice. This indicator is relevant because access to regular primary care is important to preventing major health issues and emergency department visits.

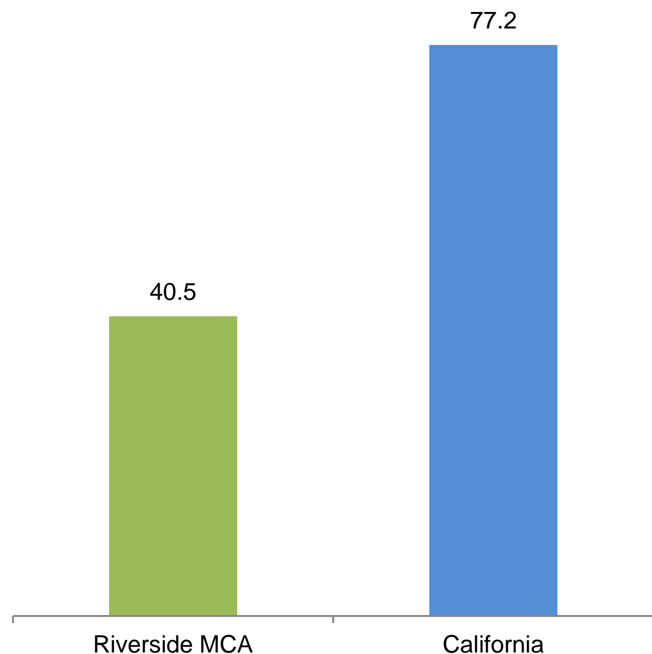
Data Source: University of California Center for Health Policy Research, California Health Interview Survey. 2011-12. Data Source geography: County (Grouping)

Access to Primary Care

This indicator reports the rate of primary care physicians per 100,000 population. Doctors classified as "primary care physicians" by the AMA include: General Family Medicine MDs and DOs, General Practice MDs and DOs, General Internal Medicine MDs and General Pediatrics MDs. As the graph indicates, the Riverside Service Area has a much lower rate of primary care physicians compared to California and the United States.

Data Sources: U.S. Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2012 and CHIS, 2014.

Access to Primary Care rate per 100,000 population



Key Health Drivers

Percentage of Persons Uninsured

Riverside MCA	17.62%
California	16.62%
United States	14.20%

This indicator reports the percentage of the total civilian non-institutionalized population without health insurance coverage. Lack of insurance is a primary barrier to health care access including regular primary care, specialty care, and other health services that contributes to poor health status.

Data Source: U.S. Census Bureau, American Community Survey. 2010-14

Percentage of Population Living in a Health Professional Shortage Area (HPSA)

Riverside MCA	27.94%
California	26.07%
United States	35.62%

This indicator reports the percentage of the population living in a geographic area designated as a "Health Professional Shortage Area" (HPSA), defined as having a shortage of primary medical care, dental or mental health professionals. A shortage of health professionals contributes to access and health status issues.

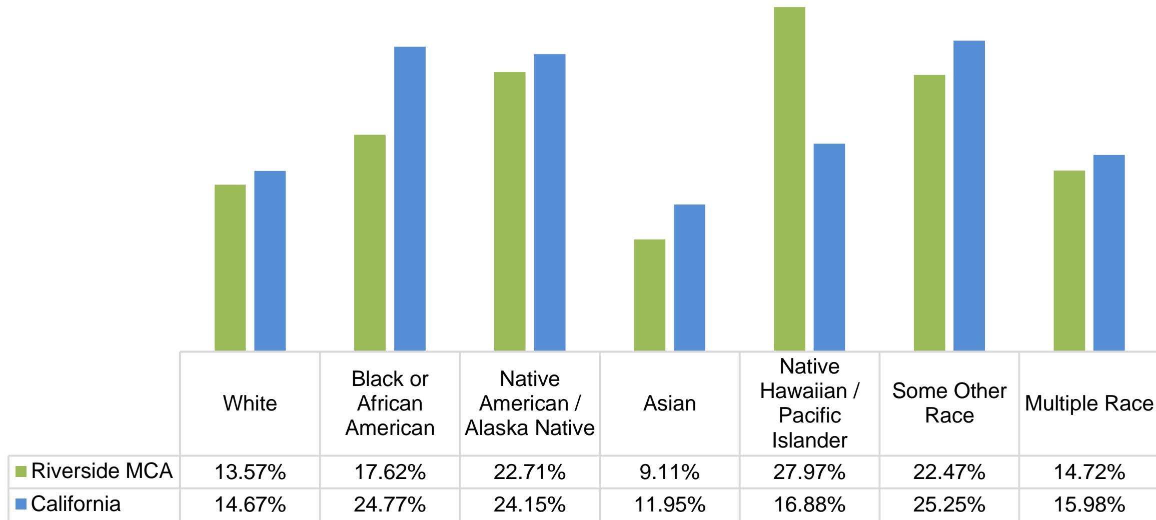
Data Source: U.S. Department of Health & Human Services, Health Resources and Services Administration, Health Resources and Services Administration. April 2016. Data Source geography: HPSA

Health Disparities

Population in Poverty

Poverty is considered a *key driver* of health status. This indicator reports the percentage of the population living in households with income below the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

Percentage of Population in Poverty - by Race Alone



	White	Black or African American	Native American / Alaska Native	Asian	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Race
Riverside MCA	13.57%	17.62%	22.71%	9.11%	27.97%	22.47%	14.72%
California	14.67%	24.77%	24.15%	11.95%	16.88%	25.25%	15.98%

Data Source: US Census Bureau, American Community Survey. 2010-14. Data Source geography: Tract

Assets and Opportunities

The following assets and opportunities were mentioned during community input

Programs: There are various service providers and health promotoras working in the community to support and inform community residents and families about health insurance opportunities, as well as educate many on how to navigate the health care system.

Partnerships and Coalitions: Several health care providers, schools, community-based organizations and foundations are working in collaboration to seek funding, share resources and leverage opportunities to improve the health care access for community residents throughout Riverside County.

Education: Many providers shared the need to begin programs and implement processes to help newly insured make appointments and understand their health insurance benefits.

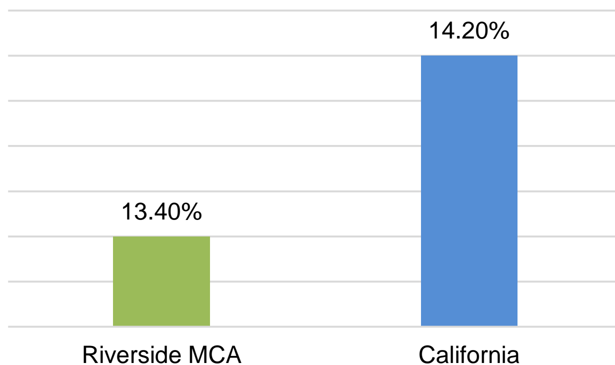
References: Kaiser Permanente CHNA Data Platform, CDC, interviews, focus groups, and community café. Icons from The Noun Project. Please see KFH-Riverside CHNA 2016 Report for information about the data background.

Asthma in Riverside

Description & Significance: Asthma is a chronic respiratory health issue that causes episodes of wheezing, chest tightness, coughing, and shortness of breath. Low income and minority populations, especially children, women, African Americans, people living below the Federal Poverty Level (FPL), and employees with certain exposures in the workplace, have the highest rates. According to CDC and state data, Riverside MCA fares better than the state for asthma prevalence; Riverside (13.4 per 100,000) also fares better in age-adjusted hospitalizations due to asthma and related complications (6.72) than the state (8.9 per 100,000). CHNA stakeholders identified poor air quality and specifically described high levels of pollutant "particulate matter" in Riverside and surrounding geographic areas that are caused by environmental and man-made factors. In addition, CHNA stakeholders discussed asthma as being associated with built environment due to suburban designs. CHNA stakeholders stated that without an optimal public transportation system, communities are forced to drive from one location to the next due to the long distances between locations, as well as the long commutes for residents working outside of Riverside County. In addition, the proximity of schools near highways with dense traffic increases the risk for asthma in children.

Health Outcomes

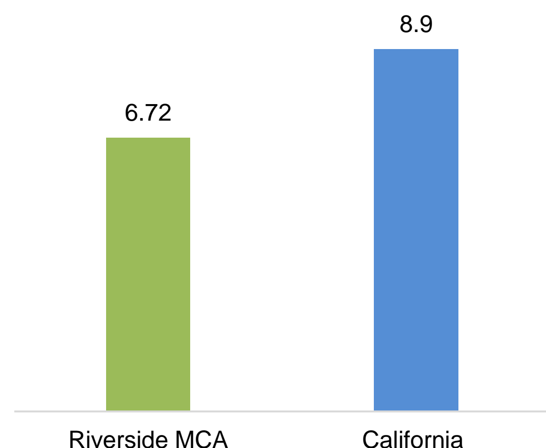
Asthma Prevalence - Percent of Adults with Asthma



Data Source: Data Source: California Office of Statewide Health Planning and Development, OSHPD Patient Discharge Data. Additional data analysis by CARES. 2011. Data Source geography: ZIP Code

This indicator reports the percentage of adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they had asthma. Asthma is a prevalent problem in the U.S. that is often exacerbated by poor environmental conditions, including those related to climate change. While the data indicates that asthma is less prevalent in Riverside County than the California average, it was vocalized as a strong concern during the primary data collection process.

Asthma Hospitalizations (age adjusted discharge rate per 10,000 population)

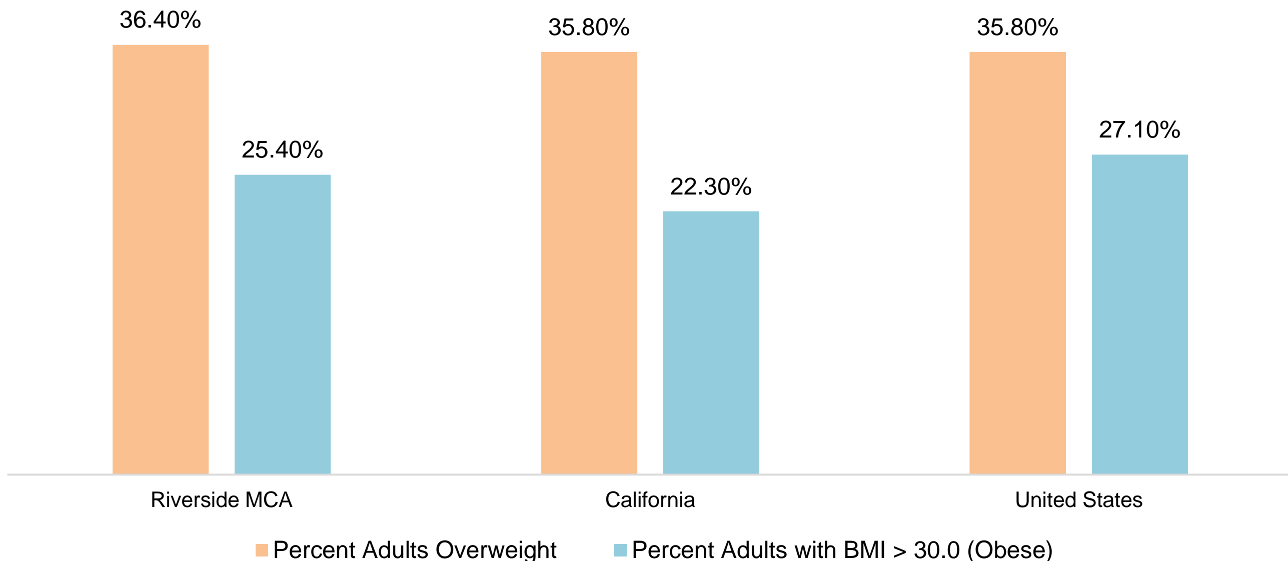


Data Source: California Office of Statewide Health Planning and Development, OSHPD Patient Discharge Data. Additional data analysis by CARES. 2011. Data Source geography: ZIP Code

This indicator reports the patient discharge rate (per 10,000 total population) for asthma and related complications. This indicator is relevant because asthma is a prevalent problem in the U.S. that is often exacerbated by poor environmental conditions, including those related to climate change.

Health Disparity

Obesity and Overweight Disparities in Adults



This indicator reports the percentage of adults age 18 and older who self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese)[a] or a Body Mass Index (BMI) between 25.0 and 30.0 (overweight)[b]. This indicator is relevant because excess weight is a prevalent problem in the U.S.; it indicates an unhealthy lifestyle and puts individuals at risk for further health issues, such as cardiovascular disease, asthma, or diabetes.

Data Source: [a] Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012.
[b] Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12.
Data Source geography: County

Key Health Drivers

Percent Population Smoking Cigarettes (Age-Adjusted)

Riverside MCA	14.6%
California	12.8%

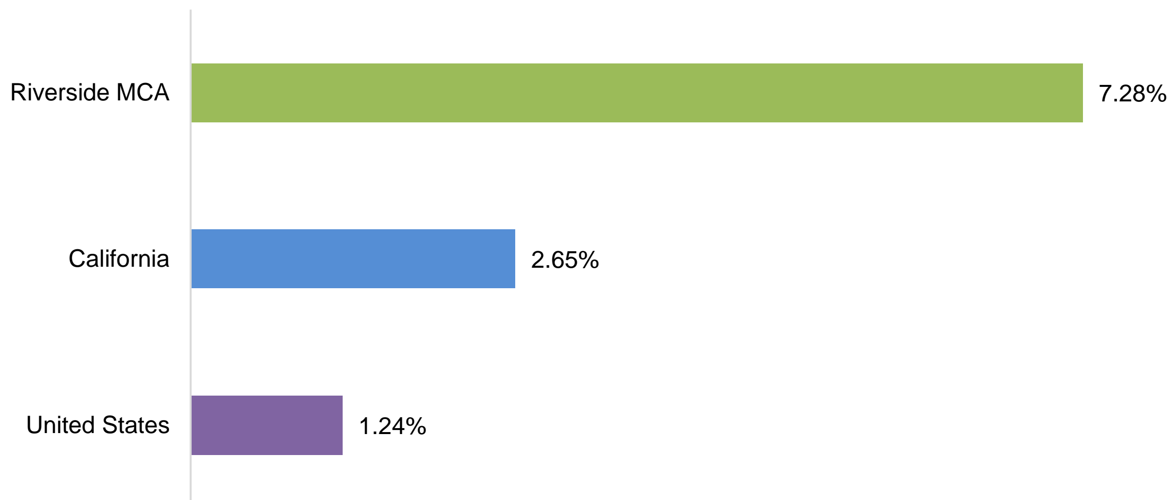
This indicator reports the percentage of adults age 18 and older who self-report currently smoking cigarettes some or every day. Tobacco use can lead to causes of death such as cancer and cardiovascular disease.

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12

Key Health Drivers

Air Quality Ozone (O_3)

Percentage of Days Exceeding Standards, Pop. Adjusted Average



This indicator reports the percentage of days per year with Ozone (O3) levels above the National Ambient Air Quality Standard of 75 parts per billion (ppb). Poor air quality contributes to respiratory health issues, including asthma prevalence and asthma hospitalizations, overall poor health, and community vulnerability to climate change.

Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network. 2012. Data Source geography: Tract

Assets and Opportunities

The following assets and opportunities were mentioned during community input:

Partnerships and Coalitions: Multiple service providers, agencies and community-based organizations are partnering to address the health disparity of asthma. Through the current Riverside County Public Health community needs assessment data, community residents identified asthma as an issue in Riverside County.

School Policies: Stakeholders representing various school sites shared school policies implemented, which do not allow children out when the air quality outside is poor, due to the possible increase of asthma attacks in the children.

Environmental Interventions: Environmental issues such as air quality can lead to an increase in asthma and for this reason, various government officials in Riverside County are looking at policies to improve air quality throughout the county.

References: Kaiser Permanente CHNA Data Platform, CDC, interviews and focus groups. Icons from The Noun Project. Please see KFH-Riverside CHNA 2016 Report for information about the data background.

Cancer in Riverside

Description & Significance: Cancer is the second leading cause of death in California, causing more than 50,000 deaths each year. Smoking, poor diet, and obesity are key risk factors for cancer as well as other diseases, such as heart disease, cerebrovascular disease, chronic lung disease, and diabetes. According to state data, the cancer incidence in Riverside County slightly decreased from 2008-2011, then rose slightly in 2012 (California Cancer Registry, 2016). Cancer mortality rate is higher in Riverside (168.37 per 100,000) MCA than in California (157.1 per 100,000). Nutrition and diet are factors contributing to helping cancer patients regain their physical health, especially after chemotherapy. According to CHNA stakeholders, poverty creates barriers to affordable insurance and access to care and leads to poor cancer outcomes. Stakeholders also connected cancer to mental health conditions, such as depression, stress and anxiety.

Health Outcomes

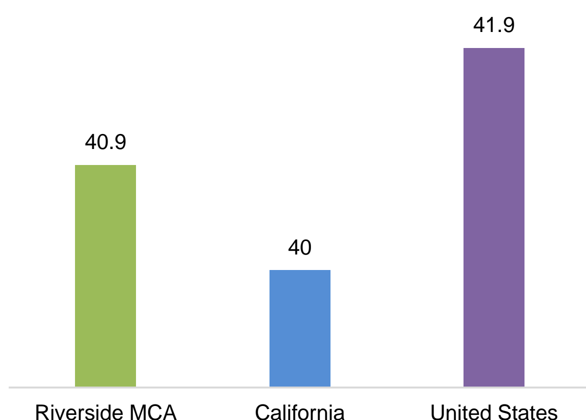
Rate of Death due to Cancer per 100,000 population

Riverside MCA	168.37
California	157.1

This indicator reports the rate of death due to malignant neoplasm (cancer) per 100,000 population, age-adjusted to year 2000 standard. This indicator is relevant because cancer is a leading cause of death in the U.S.

Data Source: University of Missouri, Center for Applied Research and Environmental Systems. California Department of Public Health, CDPH - Death Public Use Data. 2010-12.

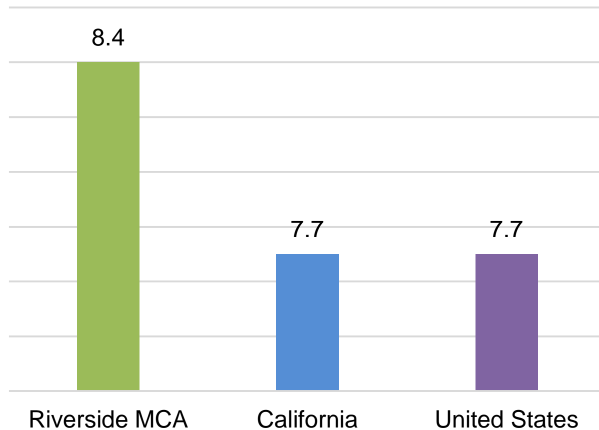
Colorectal Cancer Incidence (rate per 100,000 population)



This indicator reports the age-adjusted incidence rate (cases per 100,000 population per year) of colon and rectal cancer adjusted to 2000 U.S. standard population age groups. Cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Data Source: National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results Program. State Cancer Profiles. 2008-12

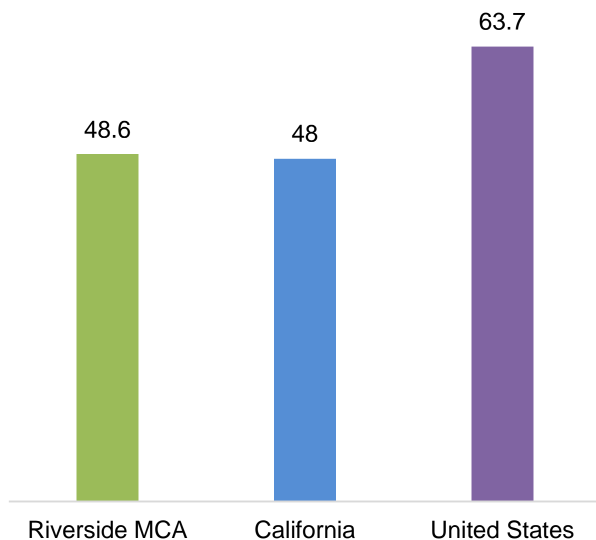
Cervical Cancer Incidence (rate per 100,000 population)



This indicator reports the age-adjusted incidence rate (cases per 100,000 population per year) of females with cervical cancer adjusted to 2000 U.S. standard population age groups. This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Data Source: National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results Program. State Cancer Profiles. 2008-12.

Lung Cancer Incidence (rate per 100,000 population)



This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of lung cancer adjusted to 2000 U.S. standard population age groups.

Data Source: National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results Program. State Cancer Profiles. 2008-12

Health Disparity

Breast Cancer Incidence Rate (Per 100,000 Pop.) by Race / Ethnicity

Report Area	White	Black	Asian / Pacific Islander	American Indian / Alaskan Native	Hispanic or Latino
Riverside MCA	118.4	107.6	83.3	46.7	91.3
California	126.9	123.6	95	42.9	89.1

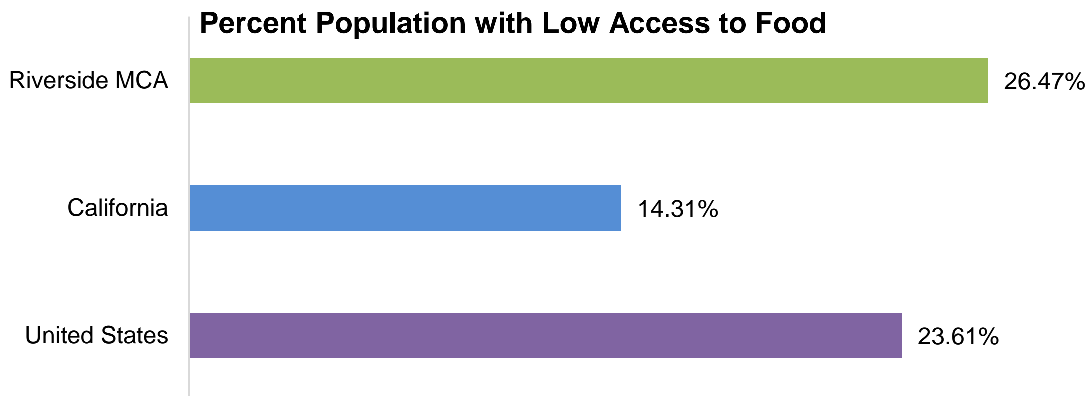
This indicator reports the age-adjusted incidence rate (cases per 100,000 population per year) of females with breast cancer adjusted to 2000 U.S. standard population age groups. Engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Data Source: National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results Program. State Cancer Profiles. 2008-12. Data Source geography: County

Key Health Drivers

Low Access to Food

This indicator reports the percentage of the population living in areas designated as food deserts. A food desert is defined as a low-income census tract where a substantial number or share of residents has low access to a supermarket or large grocery store. This indicator highlights populations and geographies facing food insecurity.



Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2010

Assets and Opportunities

The following assets and opportunities were mentioned during community input:

Programs: Some stakeholders shared the importance of having healthy eating programs for people suffering from cancer. They shared the various fresh farm organic grown food that is available for people to purchase or acquire for free.

Education: Multiple service providers offer support for cancer survivors and their families through support groups and better living workshops. There are workshops being offered by some providers for community and cancer patients to teach about make-up, hair dye and other cosmetics, including household items that are cancer causing agents.

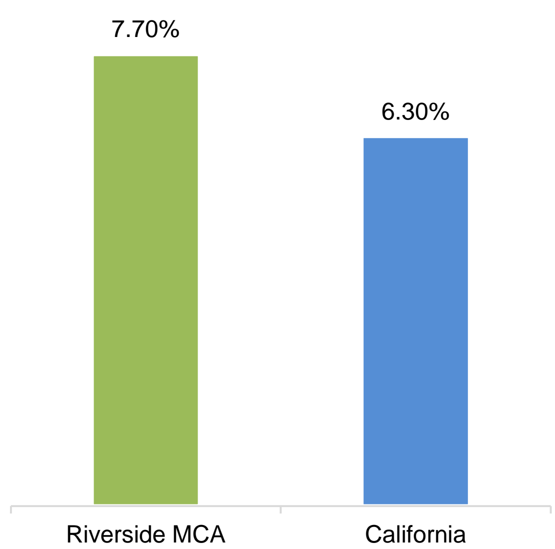
Environmental Interventions: A few stakeholders shared there are environmental factors that impact the health and well-being of community, such as air quality. Poor air quality contributes to respiratory issues and overall poor health, which has been associated to asthma and cancers. Many service providers and community-based organizations are working on environmental impact policies.

References: Kaiser Permanente CHNA Data Platform, CDC, interviews and focus groups. Icons from The Noun Project. Please see KFH-Riverside CHNA 2016 Report for information about the data background.

Cardiovascular Disease in Riverside

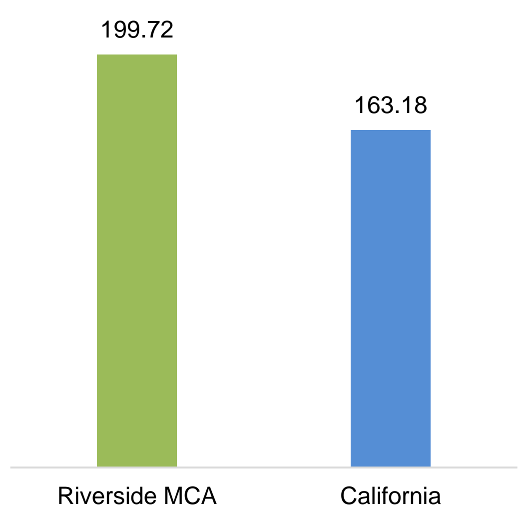
Description & Significance: Cardiovascular disease includes heart disease and stroke, which are leading causes of death in the U.S. According to state data, the prevalence for heart disease in the Riverside MCA (7.7%) is higher than the state (6.3%). The heart disease mortality rate is higher in the Riverside MCA (199.72 deaths per 100,000 population) than in the state (163.18). Stroke mortality is also higher in Riverside MCA (42.1 deaths per 100,000) compared to 37.38 in the state. Cardiovascular disease is associated with economic insecurity, physical inactivity, substance use, and access to care as long wait times force individuals into emergency room visits. CHNA stakeholders stated that it was a major health need within the communities that often became a long-term outcome of obesity and diabetes. Food insecurity was mentioned as an associated factor for cardiovascular disease, particularly among the homeless who have limited healthy food choices.

Health Outcomes



This indicator reports the percentage of adults age 18 and older who have ever been told by a doctor that they have coronary heart disease or angina. Coronary heart disease is a leading cause of death in the U.S. and is also related to high blood pressure, high cholesterol, and heart attacks.

Data Source: University of California Center for Health Policy Research, California Health Interview Survey. 2011-12. Data Source geography: County (Grouping)

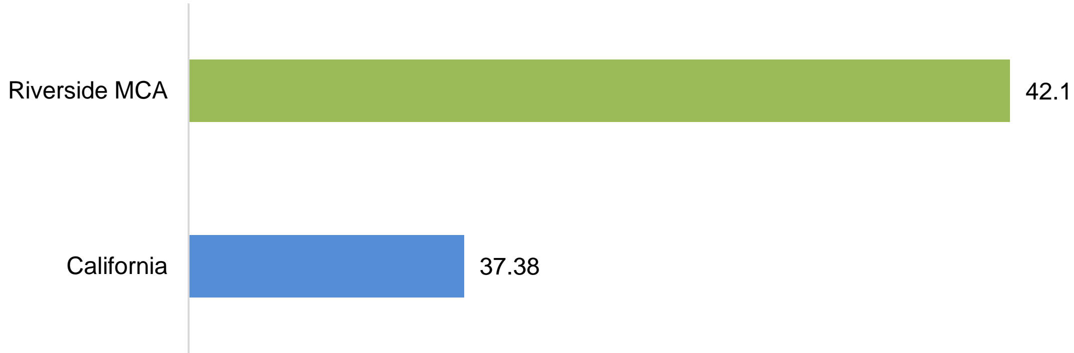


This indicator reports the rate of death due to coronary heart disease per 100,000 population, age-adjusted to year 2000 standard.

Data Source: University of Missouri, Center for Applied Research and Environmental Systems. California Department of Public Health, CDPH - Death Public Use Data. 2010-12. Data Source geography: ZIP Code

Health Outcomes

Death due to Stroke

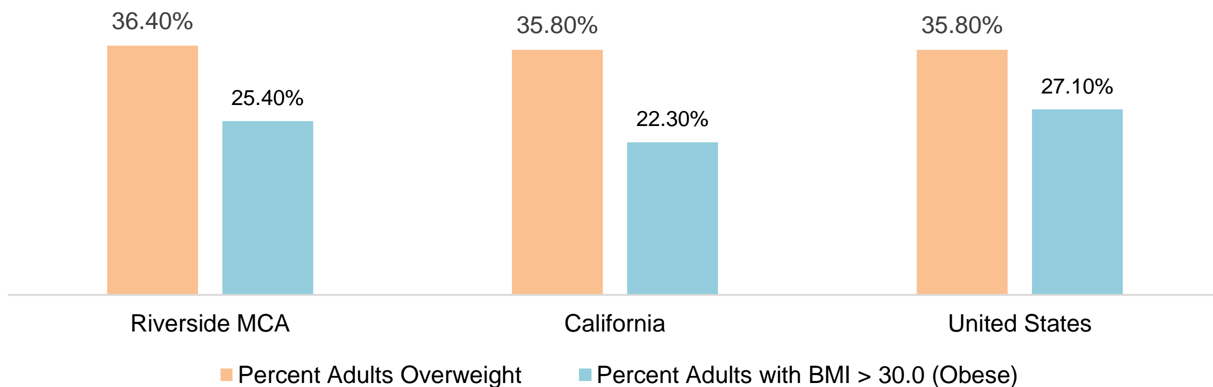


This indicator reports the rate of death due to cerebrovascular disease (stroke) per 100,000 population, age-adjusted to year 2000 standard. This indicator is relevant because strokes are a leading cause of death in the U.S.

Data Source: University of Missouri, Center for Applied Research and Environmental Systems. California Department of Public Health, CDPH - Death Public Use Data. 2010-12. Data Source geography: ZIP Code

Key Health Drivers

Percent of Adults Overweight and Obesity



This indicator reports the percentage of adults age 18 and older who self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese)[a] or a Body Mass Index (BMI) between 25.0 and 30.0 (overweight)[b]. Excess weight may indicate an unhealthy lifestyle and put individuals at risk for further health issues, such as cardiovascular disease, asthma, or diabetes.

Data Source: [a] Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012. [b] Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12.

Assets and Opportunities

Stakeholders mentioned the following assets and opportunities during community input:

Programs: Several programs with resident volunteers and advocates from school professionals to parents are involved in providing regular physical activity to children before school, during school and or after school with individualized goals in physical activity. Local businesses are involved in fundraising for these and similar programs directed at school-aged children.

Partnerships and Coalitions: There are working collaboratives throughout Riverside County with private and public organizations involved. Some collaborations work to fight obesity and offer residents and families resources to make healthy lifestyle changes.

School Policies: School lunch programs are widely available for breakfast and lunch. Additionally, farmers markets at local schools in the area allow parents to purchase fresh fruits and vegetables without being required to travel far distances.

Education: Many diabetes self-management courses are offered by various organizations to help support those diagnosed with diabetes and other related chronic diseases, such as cardiovascular disease.

Environmental Interventions: Multiple organizations are working on policy changes and environmental injustice issues to address poor air quality and traffic commute that causes stress and impacts the quality of life. Stakeholders shared that built environment and climate have an impact on the level of physical activity residents do to improve their health.

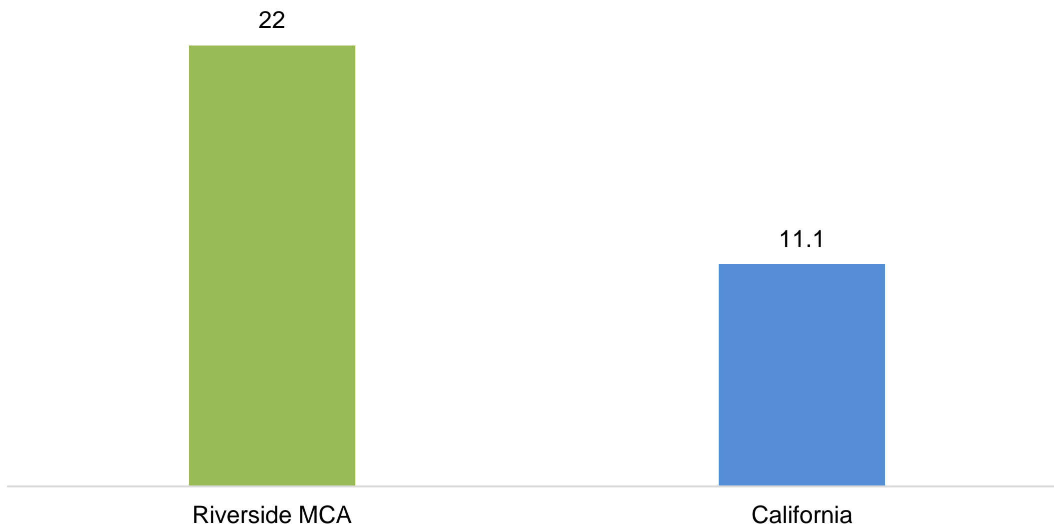
References: Kaiser Permanente CHNA Data Platform, CDC, interviews and focus groups. Icons from The Noun Project. Please see KFH-Riverside CHNA 2016 Report for information about the data background

Climate and Health in Riverside

Description & Significance: Riverside County, and especially the eastern portion, experiences climate and environmental conditions that pose distinct challenges to health. Higher temperatures contribute to heat-related emergency room visit rates that are roughly twice as high in Riverside MCA (22 per 100,000) as in the state (11.1 per 100,000). In addition, the percentage of days with ozone readings that exceed the National Ambient Air Quality Standard is much higher in Riverside (7.28%) than in the state as a whole (2.65%). Some CHNA stakeholders attribute environmental hazards to the high number of warehouses in the region, with correspondingly high transportation and shipping needs. The lack of jobs in the county also increases commutes for residents, thereby putting more cars on the road and more pollution in the air.

Health Outcomes

Heat-related Emergency Events Age-Adjusted Rate (Per 100,000 Population)

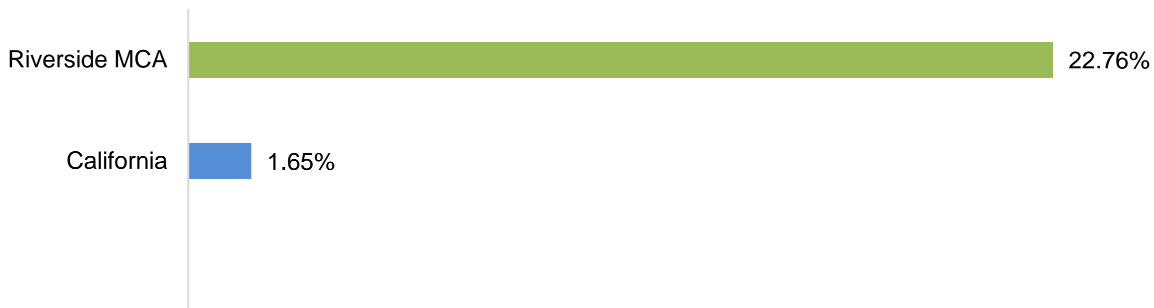


This indicator reports the number and rate of heat-stress related emergency department visits in California. Data is acquired from the California Department of Public Health (CDPH) for the 7-year period 2005-2012. This indicator is relevant because it measures heat-related health impacts of climate change, such as increasing heat indices, and may help identify populations that are most vulnerable to heat-related health risks.

Data Source: California Department of Public Health CDPH - Tracking. 2005-12. Data Source geography: County

Health Outcomes

Percent of Population Living in Transit-Walkabilty Areas



This indicator is relevant because an environment with safe walking routes and nearby amenities encourages physical activity and other healthy behaviors and decreases dependence on motor vehicle transportation.

Data Source: Walk Score®. 2012. Data Source geography: City

Key Health Drivers

Physical Environment

Air Quality. Ozone (O3) is a key indicator for individual health as poor air conditions contribute to respiratory problems, asthmas prevalence and hospitalizations, overall poor health, and general vulnerability to climate change.

Percentage of days above the national air quality standard of 75 PPB of Ozone.

Riverside MCA	7.28%
California	2.65%
United States	1.24%

Data Source: Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network. 2012. Data Source geography: Tract

Key Health Drivers

Physical Environment

Canopy Cover. Tree coverage is a driver of climate and health, since ample covering protects individuals from elements of climate change and provides shaded regions for physical activity.

Percent area tree coverage, population weighted.

Riverside MCA	4.76%
California	15.13%
United States	24.70%

Data Source: Multi-Resolution Land Characteristics Consortium, National Land Cover Database 2011. Additional data analysis by CARES. 2011. Data Source geography: Tract.

Assets and Opportunities

Stakeholders mentioned the following assets and opportunities during community input:

Partnerships and Coalitions: Various organizations are partnering to develop policies and improve the quality of life. Many environmental groups are working on injustice issues in Riverside County regarding air pollution and traffic, and how these conditions impact climate in the region.

Education: Many stakeholders shared there is more knowledge about the climate and how this impacts their well-being with water conservation and food growth. There are more workshops offered through organizations and public agencies to teach about water, food and energy conservation and ways to better improve your health.

Environmental Interventions: Poor air quality and rising heat waves have created opportunities for community residents to learn more about what they can do to improve their environment and protect themselves during severe climate change, such as heat waves and heavy rain fall.

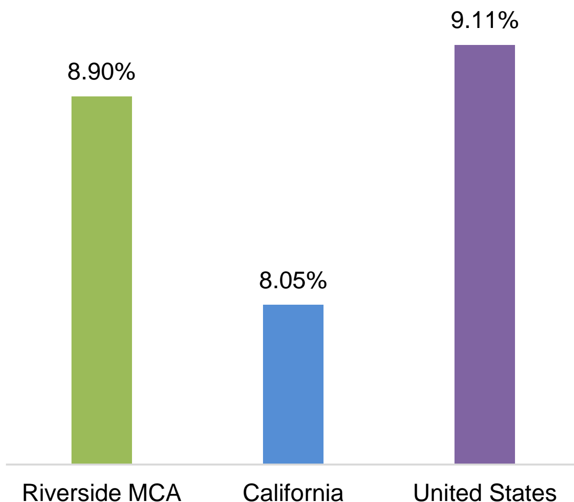
References: Kaiser Permanente CHNA Data Platform, CDC, interviews and focus groups. Icons from The Noun Project. Please see KFH-Riverside CHNA 2016 Report for information about the data background.

Diabetes in Riverside

Description & Significance: Diabetes mellitus is a condition in which the body either fails to produce or becomes resistant to insulin, a hormone necessary for the metabolism of fats and carbohydrates. Diabetes can lead to serious health complications including cardiovascular disease, blindness, kidney failure, and lower extremity amputations when left untreated or improperly managed. Type II diabetes, previously known as adult-onset diabetes, results from an energy imbalance caused by excess weight and insufficient physical activity. Primary prevention includes healthy diet and regular exercise. Secondary prevention includes screening, medication, healthy diet, and exercise. Diabetes can contribute to and be affected by mental illness, including depression. Environmental and socioeconomic interventions that improve access to healthy foods and safe, clean spaces to exercise can help prevent or manage diabetes.

Health Outcomes

Adults Diagnosed with Diabetes

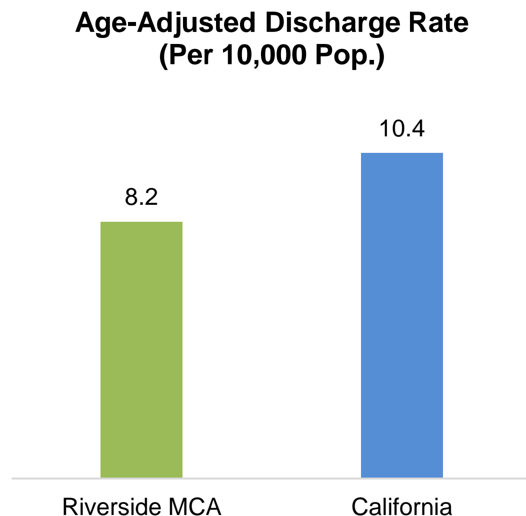


This indicator reports the percentage of adults age 20 and older who have ever been told by a doctor that they have diabetes. Diabetes is a prevalent problem in the U.S. It may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012.

Diabetes Hospitalizations

Age-Adjusted Discharge Rate (Per 10,000 Pop.)



While diabetes hospitalizations are below the state average in the Riverside Service Area, they remain a concern for people living in Riverside County.

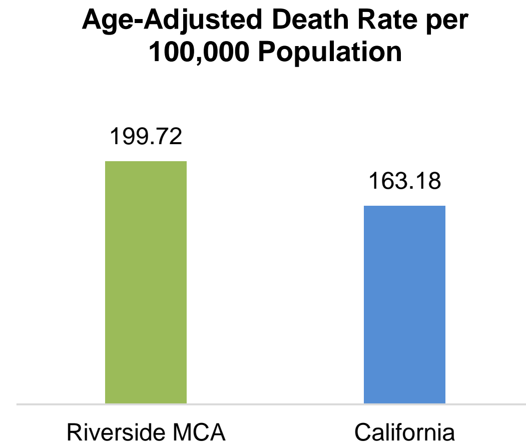
Data Source: California Office of Statewide Health Planning and Development, OSHPD Patient Discharge Data. Additional data analysis by CARES. 2011. Data Source geography: ZIP Code

Health Outcomes

Mortality – Coronary Heart Disease

This indicator reports the age-adjusted rate of death due to coronary heart disease per 100,000 population, Diabetes doubles the risk of heart disease, which is a leading cause of death in the U.S.

Data Source: University of Missouri, Center for Applied Research and Environmental Systems. California Department of Public Health, CDPH - Death Public Use Data. 2010-12



Key Health Drivers

Total Adults with Inadequate Fruit/Vegetable Consumption

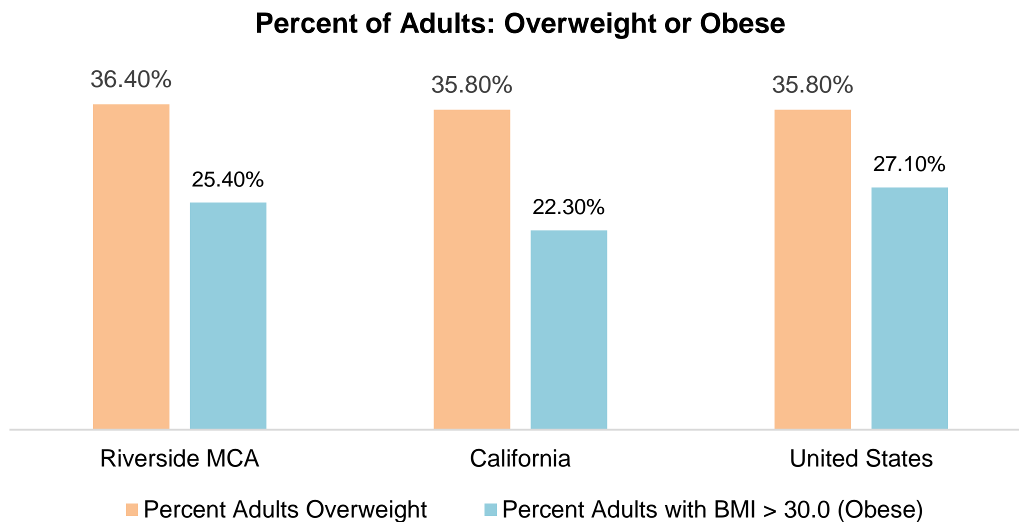
Report Area	Percent Adults with Inadequate Fruit / Vegetable Consumption
Riverside MCA	74.70%
California	71.50%
United States	75.70%

This indicator reports the percentage of adults age 18 and older who consume fewer than 5 servings of fruits and vegetables each day. Current behaviors are determinants of future health, and unhealthy eating habits may illustrate a cause of significant health issues, such as obesity and diabetes.

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2005-09

Adults are Overweight or Obese

This indicator reports the percentage of adults age 18 and older who self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese)[a] or a Body Mass Index (BMI) between 25.0 and 30.0 (overweight)[b]. This indicator is relevant because excess weight is a prevalent problem in the U.S.; it indicates an unhealthy lifestyle and puts individuals at risk for further health issues, such as cardiovascular disease, asthma, or diabetes.



Data Source: [a] Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012. Data Source geography: County; [b] Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Data Source geography: County

Assets and Opportunities

Stakeholders mentioned the following assets and opportunities during community input:

Programs: Volunteers and advocates provide regular physical activity to school-aged children before school, during school and/or after school to help them set goals to become more physically active. Multiple organizations have all-year activities and events to engage residents, families and children in staying active and eating healthy.

Partnerships and Coalitions: Several agencies and community-based organizations are working in collaboration to bring awareness and education about diabetes and other chronic diseases.

School Policies: School meal programs are widely available for breakfast and lunch. Additionally, farmers markets at local schools throughout the region offer parents the opportunity to purchase fresh fruits and vegetables without having to travel far distances.

Education: Many diabetes self-management courses are being offered to residents and those diagnosed with diabetes. Stakeholders shared these courses are successful in engaging community to become more aware about their eating habits and their quality of life.

Environmental Interventions: Parks located within close proximity of residents have shown a positive relationship with healthy lifestyles. Stakeholders shared there are environmental justice advocates working on engaging government officials to change policies on traffic and air quality control near parks.

References: Kaiser Permanente CHNA Data Platform, CDC, interviews and focus groups. Icons from The Noun Project. Please see KFH-Riverside CHNA 2016 Report for information about the data background

Economic Security in Riverside

Description & Significance: Economic security is an important contributor to good health for individuals and communities. Economic insecurity, including poverty, unemployment, and lack of educational attainment, is one of the strongest predictors of poor health. In turn, poor health can exacerbate economic insecurity by limiting access to productivity and the ability to work. Poverty not only increases exposure to factors and conditions that lead to increased morbidity and mortality, but limits the ability of individuals or communities to prevent and respond to these exposures. Common indicators of economic insecurity include lack of education, unemployment, low income, housing instability, and use of public assistance programs. Poverty is linked to increased risk of chronic disease, poor mental health, impaired child development, and premature death.

Health Outcomes

Number of residents receiving SNAP benefits

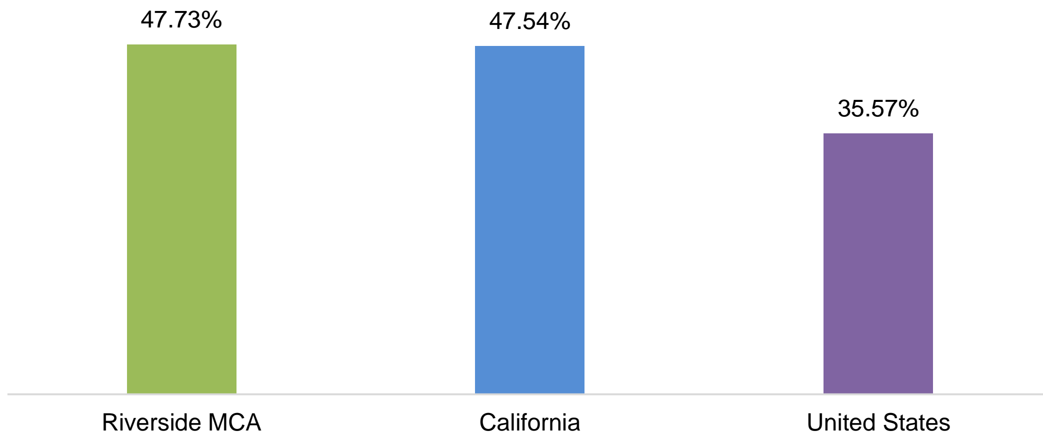
Report Area	Percent Population Receiving SNAP Benefits
Riverside (Service Area)	12.60%
California	11.40%
United States	15.80%

This indicator reports the average percentage of the population receiving the Supplemental Nutrition Assistance Program (SNAP) benefits between the months of July 2010 and July 2011. This indicator assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs; when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment.

Data Source: US Census Bureau, Small Area Income & Poverty Estimates. 2013. Data Source geography: County

Health Outcomes

Percent of Occupied Substandard Housing Units



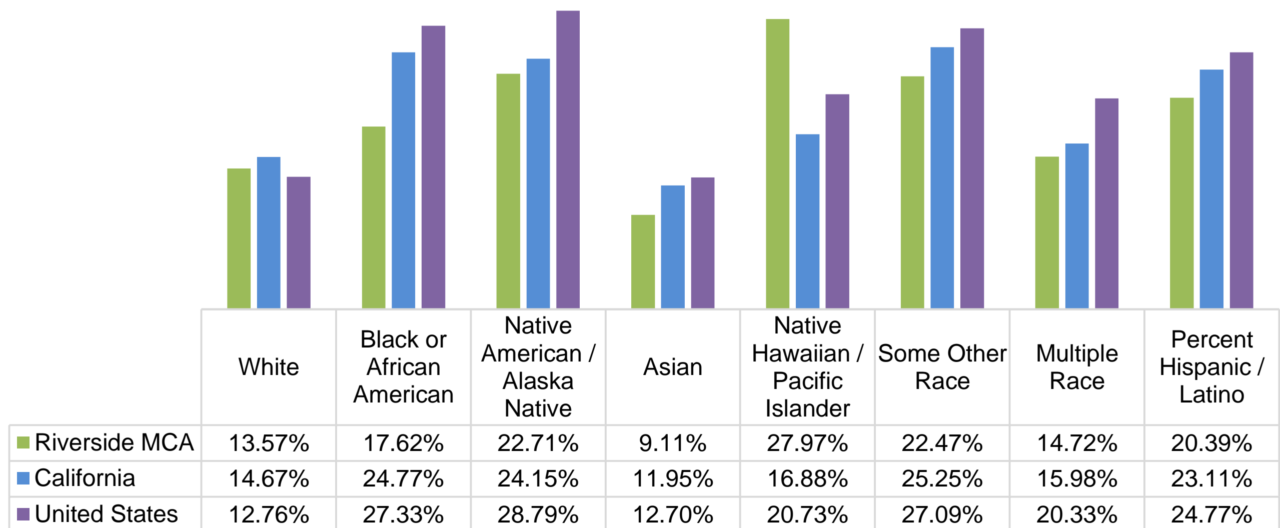
This indicator reports the number and percentage of owner- and renter-occupied housing units having at least one of the following conditions: 1) lacking complete plumbing facilities, 2) lacking complete kitchen facilities, 3) with 1.01 or more occupants per room, 4) selected monthly owner costs as a percentage of household income greater than 30 percent, and 5) gross rent as a percentage of household income greater than 30 percent. Inadequate housing quality can impact stress, mental health, health outcomes and overall quality of life.

Data Source: US Census Bureau, American Community Survey. 2010-14

Health Disparity

Poverty Disparity

Population in Poverty by Race and Ethnicity - Below 100% FPL



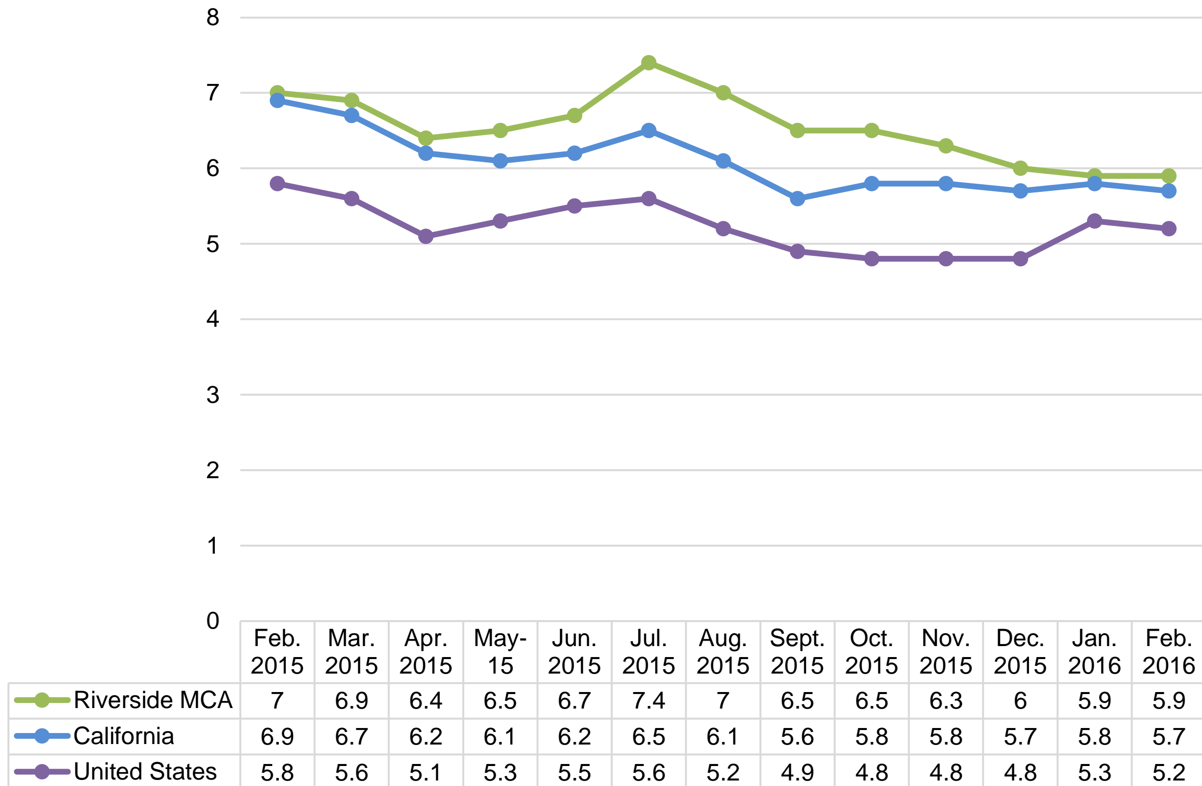
	White	Black or African American	Native American / Alaska Native	Asian	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Race	Percent Hispanic / Latino
Riverside MCA	13.57%	17.62%	22.71%	9.11%	27.97%	22.47%	14.72%	20.39%
California	14.67%	24.77%	24.15%	11.95%	16.88%	25.25%	15.98%	23.11%
United States	12.76%	27.33%	28.79%	12.70%	20.73%	27.09%	20.33%	24.77%

Poverty is considered a *key driver* of health status. This indicator reports the percentage of the population living in households with incomes below the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

Data Source: US Census Bureau, American Community Survey. 2010-14. Data Source geography: Tract

Key Health Driver

Average Unemployment Rates



	Feb. 2015	Mar. 2015	Apr. 2015	May-15	Jun. 2015	Jul. 2015	Aug. 2015	Sept. 2015	Oct. 2015	Nov. 2015	Dec. 2015	Jan. 2016	Feb. 2016
Riverside MCA	7	6.9	6.4	6.5	6.7	7.4	7	6.5	6.5	6.3	6	5.9	5.9
California	6.9	6.7	6.2	6.1	6.2	6.5	6.1	5.6	5.8	5.8	5.7	5.8	5.7
United States	5.8	5.6	5.1	5.3	5.5	5.6	5.2	4.9	4.8	4.8	4.8	5.3	5.2

This indicator reports the percentage of the civilian non-institutionalized population age 16 and older that is unemployed (non-seasonally adjusted). Unemployment trends in the Riverside MCA have mirrored those in California and the nation, but Riverside MCA unemployment rates remained consistently higher than either comparison area.

This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status.

Data Source: U.S. Department of Labor, Bureau of Labor Statistics. 2016 - March. Data Source geography: County

Assets and Opportunities

Stakeholders mentioned the following assets and opportunities during community input:

Programs: Several programs available to low-income Riverside County residents work to provide food security, including public assistance programs, as well as community-based organizations and local farmers.

Partnerships and Coalitions: Multiple public agencies and nonprofit organizations are working together to eliminate poverty through education, wealth building, advocacy, and community organizing.

School Policies: School meal programs are widely available for breakfast and lunch. Additionally, farmers markets at local schools in the area allow parents to purchase low cost fresh fruits and vegetables without requiring to travel far distances.

References: Kaiser Permanente CHNA Data Platform, interviews and focus groups. Icons from The Noun Project. Please see KFH-Riverside CHNA 2016 Report for information about the data background.

HIV and STIs in Riverside

Description & Significance:-The Centers for Disease Control and Prevention (CDC) estimates that there are approximately 20 million new STI cases annually, with about half of them among young people 15 to 24. Women tend to experience more frequent and serious STI complications than men do, with the exception of HIV, where nearly 75% of new infections occur in men and more than half in gay and bisexual men. Because many cases of STIs go undiagnosed—and some common viral infections, such as human papillomavirus (HPV) and genital herpes, are not reported to CDC at all—the reported cases of chlamydia, gonorrhea, and syphilis represent only a fraction of the true burden of STIs in the United States. The majority of STIs either do not produce any symptoms or signs, or they produce symptoms so mild that they are unnoticed; consequently, many infected persons do not know that they need medical care. STIs cause many harmful and costly clinical complications, such as reproductive health problems, fetal and perinatal health problems, cancer, and facilitation of the sexual transmission of HIV. STI prevention is an essential primary care strategy for improving reproductive health. Despite their burdens, costs, and complications, and the fact that they are largely preventable, STIs remain a significant public health problem in the United States. This problem is largely unrecognized by the public, policymakers, and health care professionals.

Health Outcomes

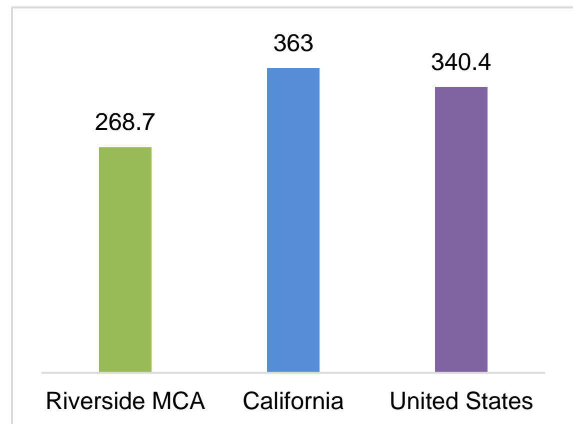
Incidence of Chlamydia in Riverside MCA

2010	171.17
2011	437.66
2012	411.36
2013	386.17
2014	384.16

This indicator reports the number of new cases per 100,000 population of chlamydia reported in Riverside MCA between 2010 and 2014, demonstrating that the incidences of chlamydia more than doubled. This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2012. Data Source geography: County

Incidence of HIV



HIV is a life-threatening communicable disease. This indicator reports the number of new cases of HIV infections among two age groups, those younger than 50 and those 50 years of age and older in Riverside County.

Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2010. Data Source geography: County

Assets and Opportunities

Community leaders call for greater outreach, particularly to young men of color and older adults.

Programs: Multiple non-profit organizations are dedicated to developing programs that work to build social support networks for diverse communities living with HIV and to increase cultural competence of health care providers and policy makers to better serve LGBTQ communities of color.

Partnerships and Coalitions: Stakeholders shared there are a number of community-based organizations working together to offer HIV testing, education and prevention outreach, as well as surveillance, mental health services, partner notification, and assistance to help link newly-diagnosed HIV/STI patients with care.

School Policies: School-based programs are tailoring sex education to schools and communities, with context on ways to prevent HIV/STI infection.

Education: Several stakeholders identified rising STI rates among older adults, and attributed this to misperceptions about risk. Older adults and senior communities may need education on STI risk, transmission, and prevention to curb these rates.

Environmental Interventions: Stakeholders mentioned needle exchange programs and other programs that increase access to clean syringes that can reduce HIV transmission among intravenous drug users. Public destigmatization campaigns using tools like radio spots, billboards, and posters can reduce psychosocial barriers to testing and improve quality of life for people living with HIV.

References: Kaiser Permanente CHNA Data Platform, CDC, interviews and focus groups. Icons from The Noun Project. Please see KFH-Riverside CHNA 2016 Report for information about the data background.

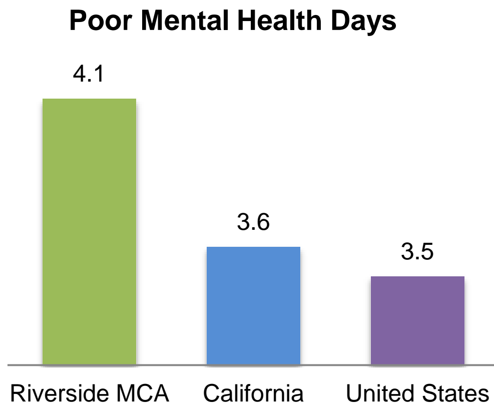
Mental Health in Riverside

Description & Significance: According to the National Alliance on Mental Health, in any given year, an estimated 43.8 million Americans experience mental illness. Mental health disorders are the leading cause of disability in the United States, accounting for 25% of all years of life lost to disability and premature mortality. The resulting disease burden of mental illness is among the highest of all diseases. Moreover, suicide is the 11th leading cause of death in the United States. Mental health and physical health are closely connected. Mental health plays a major role in people's ability to maintain good physical health. Mental illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery.

Health Outcomes

Total Number of Poor Mental Health Days per Month in Riverside MCA

Poor Mental Health Days

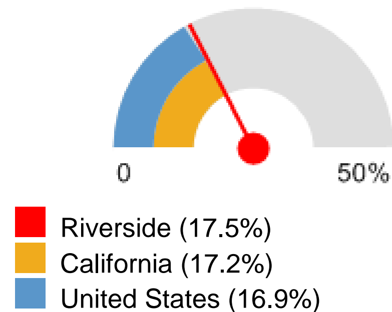


Adult residents of the Riverside MCA report a higher number of poor mental health days in a 30-day period than the state or country. This indicator provides a measure of mental health status and health-related quality of life.

Data Source: Center for Disease Control and Prevention, BRFSS: 2006-2012.

Excessive Alcohol Consumption

Estimated Adults Drinking Excessively (Age-Adjusted Percentage)



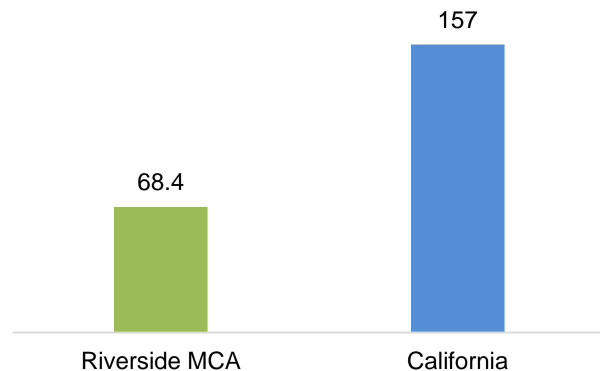
This indicator indicates the percent of adults 18+ who self-report as excessively consuming alcohol (2 or more drinks per day for me and 1 or more for women). Substance use is frequently linked to mental illness.

Data Source: Center for Disease Control and Prevention, BRFSS: 2006-2012.

Key Health Driver

Access to Mental Health Providers is important since a shortage of mental health providers contributes to health outcomes like suicide mortality and excessive drinking. This indicator reports the rate of mental health providers (including psychiatrists, psychologists, clinical social workers, and counsellors) who specialize in mental health care per 100,000 total population.

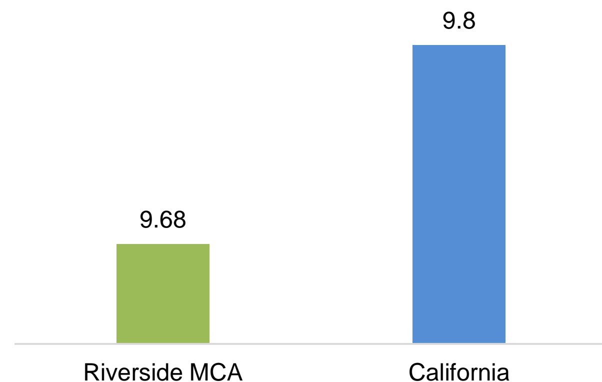
Data Source: University of Wisconsin Population Health Institute, County Health Rankings. 2014. Data Source geography: County



Health Disparity

Intentional Self-Harm

This indicator reports the rate of death due to intentional self-harm (suicide) per 100,000 population, age-adjusted to the year 2000 standard. This indicator is relevant because suicide is an indicator of poor mental health.



Data Source: University of Missouri, Center for Applied Research and Environmental Systems. California Department of Public Health CDPH - Death Public Use Data. 2010-12. Source geography: ZIP Code

Assets and Opportunities

Community leaders call for integration of mental health screenings and services into primary care, expansion of inpatient facilities, and additional support for families and caregivers.

Programs: Stakeholders shared there are various support services available to residents that offer programs with integrated services and resources, including educational workshops.

Partnerships and Coalitions: Several collaboratives with diverse groups of professionals, agencies, and community members are working together to raise awareness and increase access to mental health services for this vulnerable population.

School Policies: Cognitive behavioral therapy has been successfully integrated into primary school curricula, as well as restorative justice programs. The ability to manage emotions has long term implications for educational achievement, career opportunity, and life satisfaction

Education and Environmental Interventions: Public awareness campaigns, through billboards and posters in highly visible areas, have the potential to reduce stigma and increase uptake of mental health services.

References: Kaiser Permanente CHNA Data Platform, CDC, interviews and focus groups. Icons from The Noun Project. Please see KFH-Riverside CHNA 2016 Report for information about the data background.

Obesity in Riverside

Description & Significance: Excess weight is a prevalent problem in the U.S that indicates an unhealthy lifestyle and puts individuals at risk for further health issues. Obesity and overweight result from an energy imbalance, with more energy consumed (through food and drink) than expended through physical activity. Unhealthy life choices are compounded by lack of access to green space (parks) and limited access to healthy food options. Obesity and overweight have been increasing in the U.S. for several decades, with some health officials describing the situation as an epidemic. Excess weight is a critical risk factor for a number of chronic diseases, including diabetes, cardiovascular disease, and some cancers. Childhood obesity and overweight have significant short- and long-term effects on both physical and psychosocial well-being. Cultural stigma attached to excess weight can create an additional burden on individuals.

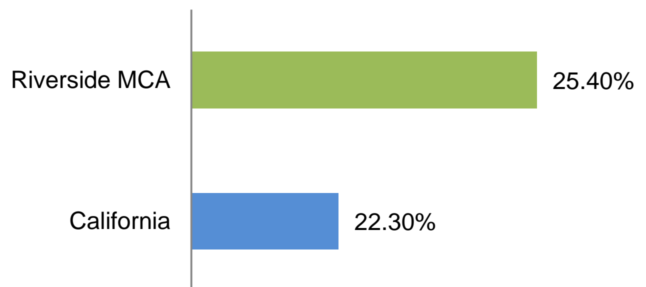
Health Outcomes

Obese Adults (18+) in Riverside MCA

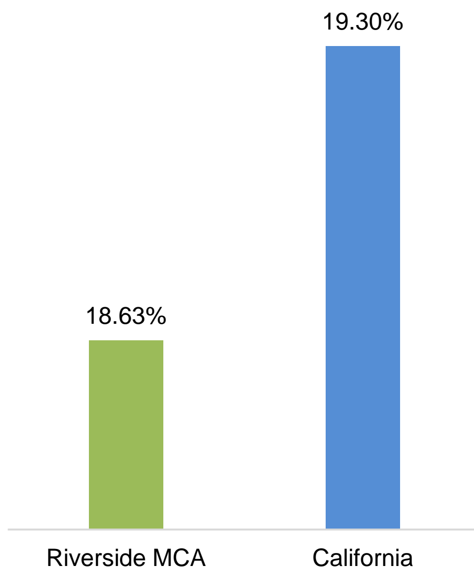
Over a quarter of adults in the Riverside MCA have a body mass index (BMI) greater than 30.0 (obese).

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012. Data Source geography: County

Percent Adults with BMI > 30.0 (Obese)



Overweight Teens in Riverside County

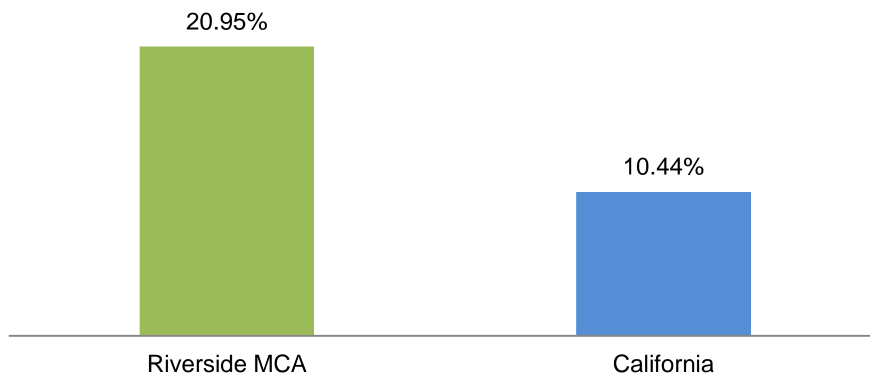


In the Riverside MCA, 18.63% of youth are overweight or obese, which can contribute to future excess weight and earlier onset of chronic disease.

Data Source: California Department of Education, FITNESSGRAM® Physical Fitness Testing. 2013-14. Data Source geography: School District

Key Health Driver

Adults in the Riverside MCA have long commutes



One out of every five residents in the Riverside MCA commutes more than an hour each way. Long commutes can contribute to overweight and obesity by increasing sedentary time and reducing time available for fresh food preparation and physical activity.

Data Source: US Census Bureau, American Community Survey. 2010-14. Data Source geography: Tract

Key Health Drivers

Percentage *Not* Living Within ½ Mile of a Park

Riverside MCA	58.51%
California	41.4%

This indicator reports the percentage of population *not* living within 1/2 mile of a park. Access to outdoor recreation encourages physical activity and other healthy behaviors.

Data Source: US Census Bureau, Decennial Census. ESRI Map Gallery. 2010.

Number of Grocery Stores per 100,000 Residents

Riverside MCA	15.44
California	21.51

This indicator provides a measure of access to fresh fruits and vegetables. Lack of access to healthy foods can contribute to obesity and overweight.

Data Source: US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2011

Assets and Opportunities

Community leaders call for greater access to fresh produce and unprocessed foods, safe and accessible parks and recreation centers, more opportunities for physical activity, and more walkable development.

Programs: Volunteers and advocates provide regular physical activity to school-aged children before school, during school and/or after school to help them set goals becoming more physically active. Multiple organizations have all-year activities and events to engage residents, families and children in staying active and eating healthy.

Partnerships and Coalitions: There are several collaborations working to fight obesity by offering residents workshops and having community events to engage families and residents in awareness of obesity and making healthy lifestyle decisions.

School Policies: School meal programs are widely available for breakfast and lunch. Additionally, farmers markets at local schools in the area allow parents to purchase fresh fruits and vegetables without being required to travel far distances.

Education: Stakeholders shared that nutrition and physical education in schools can help build habits and lifestyles that promote healthy eating and physical activity.

Environmental Interventions: Environmental justice advocates are working on creating policies to improve air quality and traffic commute in Riverside County. Especially, for parks located within close proximity of residents so they may have access to the parks and become physically active.

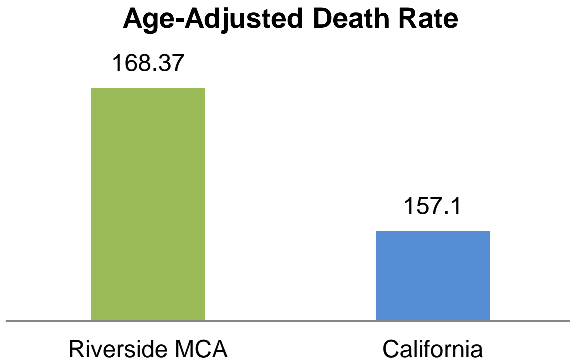
References: Kaiser Permanente CHNA Data Platform, CDC, interviews and focus groups. Icons from The Noun Project. Please see KFH-Riverside CHNA 2016 Report for information about the data background.

Substance Abuse and Tobacco in Riverside

Description & Significance: Substance abuse refers to use, abuse, or dependence on one or more controlled or illegal substances. Environmental, genetic, and social factors strongly influence patterns of substance abuse, which is frequently comorbid with mental illness. Alcohol is the most commonly used and abused substance in the United States. While tobacco use has been declining for decades, it remains a commonly used substance. Tobacco is linked to diabetes, asthma, cardiovascular disease, and lung cancer. Prescription drug abuse has been implicated in the recent rise in heroin use across the country and is connected to overdose and suicide.

Health Outcomes

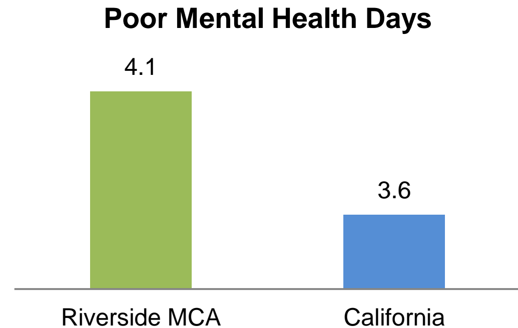
All Cancer Mortality Rate



This indicator reports the rate of death due to malignant neoplasm (cancer) per 100,000 population. Cancer is a leading cause of death in the U.S.

Data Source: California Department of Public Health, CDPH - Death Public Use Data. 2010-12.

Poor Mental Health Days in the Previous Month

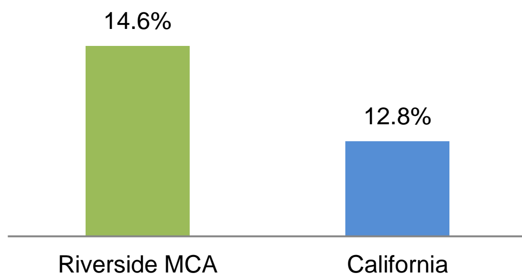


Poor mental health is closely linked with substance abuse. On average, Riverside MCA residents report more poor mental health days than the state average.

Data Source: Centers for Disease Control and Prevention 2012.

Key Health Drivers

Adult Smokers in Riverside MCA



Tobacco use is linked to leading causes of death such as cancer and cardiovascular disease. About one in six adults in Riverside MCA smokes cigarettes.

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12. Data Source geography: County

Excessive Alcohol Consumption

Estimated Adults Drinking Excessively	
Riverside MCA	17.50%
California	17.20%
United States	16.90%

More than one in six adults in the Riverside MCA report heavy alcohol consumption (more than two drinks per day on average for men and one drink per day on average for women). Heavy alcohol abuse can lead to cirrhosis, cancers, and untreated mental and behavioral health needs.

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12. Data Source geography: County

Assets and Opportunities

Community leaders call for innovative approaches to pain management to curb the rate of prescription drug abuse and smoking bans in public places throughout the county.

Programs: Various organizations and agencies offer a range of substance abuse programs that provide treatment services. Some of the services include assessment, individual and group counseling sessions, sobriety support groups, case management, and referrals to outside services.

Partnerships and Coalitions: There are working collaboratives with participants representing sectors from the courts, county departments, education, and substance abuse treatment providers to provide education, counseling, health care, and case coordination for children in families where substance abuse, such as methamphetamine use is an issue.

Environmental Interventions: Public smoking bans are underway in certain areas in Riverside County and could be expanded to leverage their ability to reduce tobacco use.

References: Kaiser Permanente CHNA Data Platform, CDC, interviews and focus groups. Icons from The Noun Project. Please see KFH-Riverside CHNA 2016 Report for information about the data background.

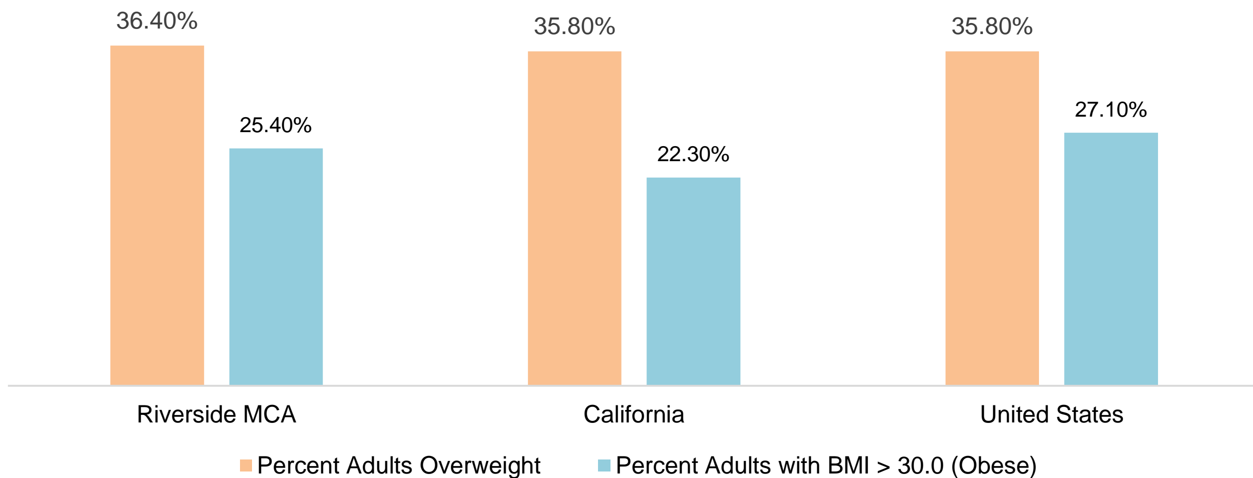
Transportation in Riverside

Description & Significance: Geographically, Riverside County is one of the largest counties in California, and much of the eastern portion of the county is very rural. CHNA stakeholders explained that in comparison with neighboring Los Angeles and Orange Counties, there is a lack of jobs in Riverside County. These two factors contribute to ongoing transportation issues in Riverside MCA. The percent of the population that walks or bikes to work in Riverside (1.87%) is lower than the state average (3.82%). Perhaps more significantly, Riverside residents (20.65%) have commutes of over an hour, compared to 10.1% of California residents. CHNA stakeholders explained that insufficient public transportation created significant barriers to accessing some basic needs—including healthy foods, health care, and other social services. In low-income rural areas, children in families without cars who miss the school bus often end up missing school; over time, these absences can impact educational attainment and long-term economic security.

Health Outcomes

Adults are Overweight or Obese

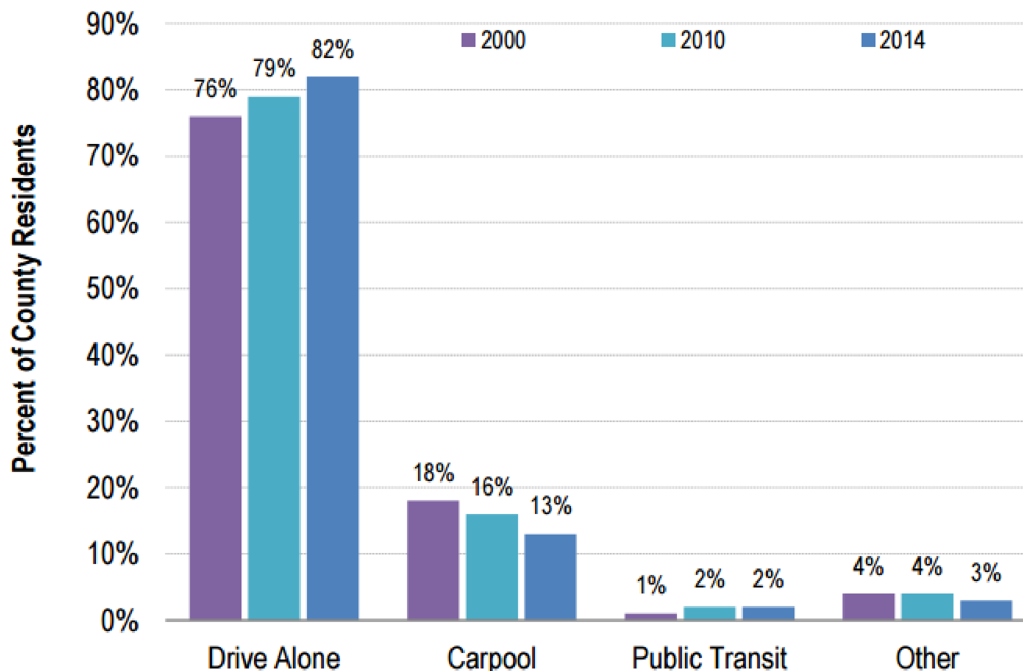
This indicator reports the percentage of adults age 18 and older who self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese)[a] or a Body Mass Index (BMI) between 25.0 and 30.0 (overweight)[b]. This indicator is relevant because excess weight is a prevalent problem in the U.S.; it indicates an unhealthy lifestyle and puts individuals at risk for further health issues, such as cardiovascular disease, asthma, or diabetes.



Data Source: [a] Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012. Data Source geography: County; [b] Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Data Source geography: County

Health Disparity

Commuting to Work Trends in Riverside County; 2000 through 2014



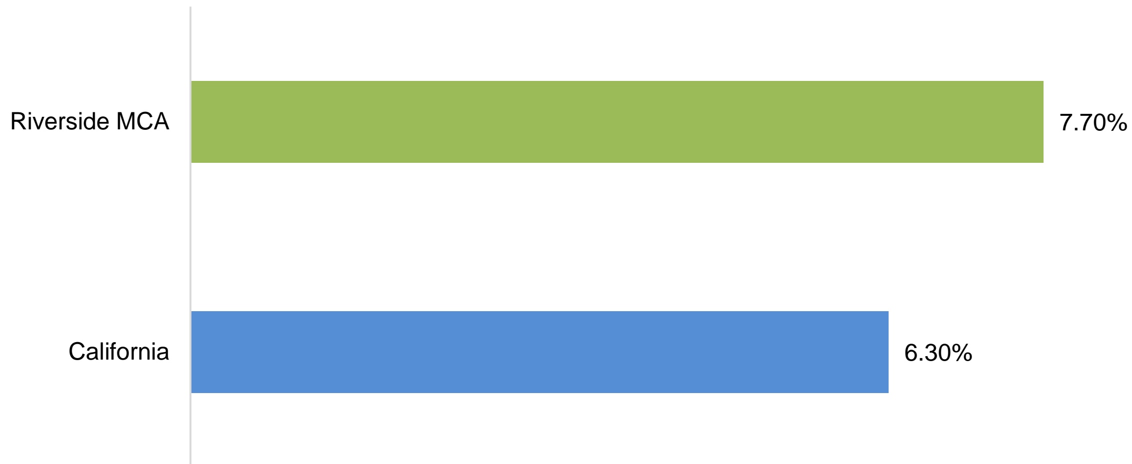
This indicator reports the percent of Riverside adults who commuted to work alone in 2014. "Other" refers to bicycle, pedestrian and home-based employment. This indicator is relevant because the type of transportation taken to work can relate to multiple health outcomes and environmental outcomes such as pollution.

Data Source: Southern California Association of Governments' (SCAG) Regional Council, Profile of Riverside County. 2015.

Health Outcome

Heart Disease

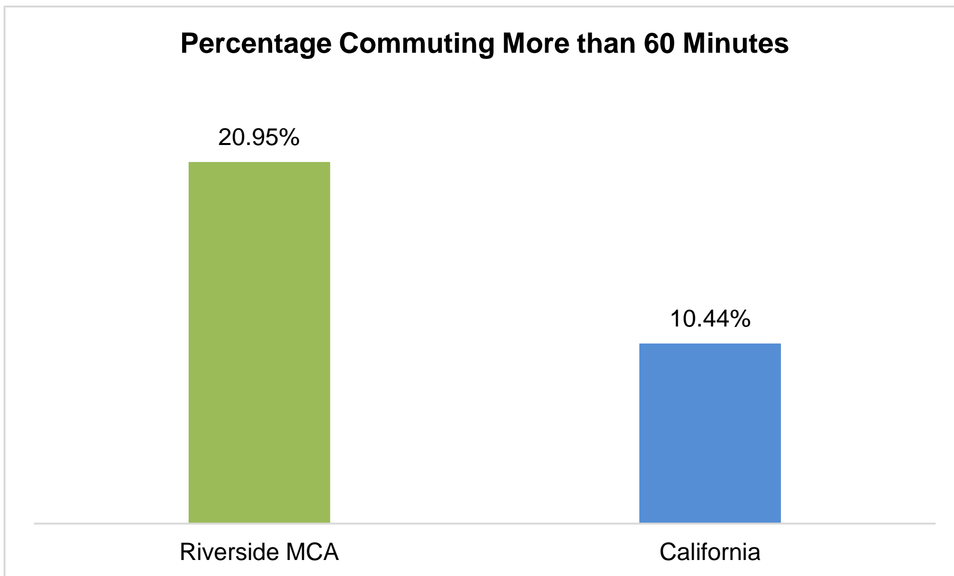
This indicator reports the percentage of adults age 18 and older who have ever been told by a doctor that they have coronary heart disease or angina. This indicator is relevant because coronary heart disease is a leading cause of death in the U.S. and is also related to high blood pressure, high cholesterol, and heart attacks.



Data Source: University of California Center for Health Policy Research, California Health Interview Survey. 2011-12. Data Source geography: County (Grouping)

Key Health Drivers

Number of Residents Commuting More than 60 Minutes to Work



This indicator reports the percentage of the population that commutes to work for over 60 minutes each direction. This indicator is relevant because the amount of time spent commuting impacts health-related activities such as sleeping, engaging in physical activity, and ability to prepare healthy meals.

Data Source: US Census Bureau, American Community Survey. 2010-14.

Assets and Opportunities

Stakeholders shared the following about assets and opportunities:

Partnerships and Coalitions: There are various organizations working together to create policies to bring public transportation all over Riverside County, most especially in the vulnerable geographic areas. Government and community organizations are looking at ways to think about built environment and working with coalitions to develop city policies.

School Policies: Students who miss the public bus in the mornings have no other means of transportation, due to distance and lack of public busing. Schools are attempting to use school buses in some areas to help with the problem of public transportation.

Environmental Interventions: Transportation is a challenge throughout Riverside County. There are groups doing some work to reduce the traffic emissions in the cities and for this reason public transportation would help alleviate much of the excess cars on the highways, which would reduce stress in drivers with long commutes.

References: Kaiser Permanente CHNA Data Platform, CDC, interviews and focus groups. Icons from The Noun Project. Please see KFH-Riverside CHNA 2016 Report for information about the data background.

Appendix D: Glossary of Terms

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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