CHOC

2022 COMMUNITY HEALTH NEEDS ASSESSMENT

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Advisory Committee

We wish to thank the following individuals for their participation on the CHNA Advisory Committee:

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- Dr. Coleen Cunningham, University of California Irvine and CHOC
- Alison Edwards, Orange County Human Relations
- Kim Goll, First 5 OC
- Dr. Olga Guijon, CHOC
- Marie Jeannis, CalOptima
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EXECUTIVE SUMMARY

Executive Summary

Children's Hospital of Orange County (CHOC) has two hospital campuses – CHOC at Orange and CHOC at Mission Hospital. California and federal law require that each licensed hospital conducts a Community Health Needs Assessment (CHNA) every three years. Since both CHOC hospitals are located within Orange County, serve many of the same populations and provide many of the same types of services, this CHNA covers both facilities. Hospitals can collaborate to complete an assessment if the assessment highlights differences in the characteristics and needs of each hospital's population.

The 2022 CHNA, which will cover 2022-2024, has three aims:

- Identify community health assets and issues
- Gauge and monitor the health of children and the factors that influence their health in Orange County
- Assist CHOC's Board of Directors and leadership team in setting priorities and allocating resources

Methodology

CHOC contracted with Health Management Associates (HMA) to conduct a comprehensive CHNA process. Secondary data were also analyzed, including public health and socioeconomic data. Primary data for CHOC's CHNA were collected by engaging with community members, stakeholders, and service providers through:

- A county-wide community health survey with 1,248 responses
- Three focus groups and one town hall
- 12 key informant interviews

Health Priorities

Health priorities were determined because both of the following were found to be true for Orange County in the CHNA:

- Community members expressed concern about the priority
- Secondary data pointed to either significant differences in Orange County compared to California and/or indicated a concerning or worsening trend regarding the priority

Health priorities were selected using the following criteria:

- Can the partnership and/or a single organization influence the issue?
- Is there existing community will and/or opportunity to leverage or influence the issue?
- Is measurable change possible within three years?

Based on results of the primary and secondary data analysis, the team identified two health priorities for Orange County.

Health Priorities	Primary Concerns Identified by the CHNA
Mental Health	• Increase in depressive symptoms among students • Increase in hospitalizations for mental illness in 2020, despite the overall decrease in hospitalizations due to the COVID-19 public health emergency • Need for prevention, early intervention, and treatment for substance use among youth
Access to Pediatric Healthcare Services	• Need for improved access to pediatric services (including pediatric specialists) from diverse providers who understand the county's racial, cultural, and linguistic needs of children and families • Geographic disparity in access to pediatric health care

Key Drivers of Health

To effectively invest in prevention activities that improve population health, it is necessary to identify and understand which factors or drivers are influencing poor health outcomes in a community. This CHNA identified four key drivers of health to consider when developing strategies to respond to the two health priorities.

Key Drivers of Health	Primary Concerns Identified by the CHNA
Healthy and Affordable Foods	• Low participation in food assistance programs • Proximity and affordability of food for low-income children and families
Early Learning Opportunities and Success in School	• Low participation in childcare subsidies by eligible families • Increased rates of chronic absenteeism
Safe Neighborhoods	• Decreased sense of being safe at school among students • Increased community violence
Connectedness	• Low levels of connectedness at school among vulnerable students, including gay, lesbian, straight students, and Black, Indigenous, and People of Color (BIPOC) students • Increased self-reported use of social media and screen time among youth as an important risk factor for youth mental health

The issues identified in this CHNA are not new. CHOC and community partners have been working on these issues for many years. Orange County is getting better in some areas of health, while other needs emerge or persist. This CHNA helps shed light on some barriers that have a direct impact on health outcomes. CHOC's CHNA also serves as a resource to the broader community for communitywide health improvement efforts.

ABOUT CHOC

About CHOC

Children's Hospital of Orange County (CHOC), is a pediatric healthcare system based in Orange County, California. CHOC's growing enterprise includes two state-of-the-art hospitals in Orange and Mission Viejo and a regional network of primary and specialty care clinics serving children and families in four counties. CHOC offers several clinical programs of excellence, providing the highest levels of care for the most severe pediatric illnesses and injuries, physical and mental. CHOC's research and innovation institutes focus on translating patient needs into real-world treatments so every child can live their healthiest and happiest possible life.

CHOC at Orange is a licensed 334-bed tertiary/quaternary children's hospital. The organization is dedicated to providing care ranging from prenatal and neonatal (newborns) through 21 years of age, and up to 25 years of age for patients diagnosed with certain rare conditions.

CHOC at Mission is a licensed 54-bed "hospital within a hospital" that treats patients ranging in age from newborn to 17 years.

CHOC's Mission Statement

To nurture, advance, and protect the health and well-being of children.

CHOC's Vision

To be the leading destination for children's health by providing exceptional and innovative care.

CHOC's Core Values

Excellence	Setting and achieving the highest standards in all we do
Innovation	Advancing children's healthcare by leading with new ideas and technology
Service	Delivering unmatched personal experience
Collaboration	Working together with our colleagues and partners to achieve our mission
Compassion	Caring with sensitivity and respect
Accountability	Serving as dedicated stewards of the lives and resources entrusted to us

Programs and Services

CHOC offers primary, secondary, tertiary, and quaternary services across its network of inpatient, outpatient, and ancillary centers, including, but not limited to:

- A 30-bed pediatric intensive care unit (PICU) at CHOC at Orange and 8-bed PICU at CHOC at Mission offering the highest levels of care to critically ill or injured children.

CHOC's pediatric intensive care specialists are available in the hospital 24-hours-a-day, seven-days-a-week, along with highly skilled nursing and support staff.

- 126 licensed inpatient neonatal intensive care (NICU) beds. This includes a 91-bed, Level 4 NICU at CHOC at Orange, a 22-bed Level 3 NICU at CHOC at Mission, and a 13-bed Level 2 NICU within St. Joseph Hospital. St. Joseph Hospital is next door to CHOC at Orange and is connected by an underground tunnel for fast and efficient patient transfers.
- A 30-bed Small Baby Unit at CHOC, designed for babies born at less than 28 weeks gestation or who weigh less than 1,000 grams.
- CHOC neonatologists treat NICU patients at more than a dozen hospitals throughout Southern California.
- Four community clinics, a growing primary care network, and subspecialty clinics located throughout Southern California.

The following is a list of CHOC's major inpatient and outpatient services. A complete list of services can be found in Appendix A.

- Adolescent Medicine
- Allergy / Immunology
- Autism
- Blood and Donor Services
- Breast Milk Donations
- Cardiology
- Child Life
- Cord Blood Bank
- Craniofacial Orthodontics
- Critical Care
- Dentistry
- Dermatology
- Developmental and Behavioral Pediatrics
- Emergency Medicine
- Endocrinology and Diabetes
- Fetal Care Center
- Gastroenterology
- General and Thoracic Surgery
- Genetics
- Hematology
- Infectious Disease
- Integrative Health
- Laboratory Services
- Lactation Services
- Mental Health
- Metabolic Disorders
- Neonatology / Perinatology
- Nephrology
- Neurology / Neurosurgery Neuroscience Institute
- Nutrition Services
- Oncology
- Ophthalmology
- Orthopedics
- Otolaryngology (Ear, Nose and Throat)
- Palliative Care
- Pharmacy
- Physical Medicine and Rehabilitation
- Plastic Surgery
- Primary Care
- Psychology / Psychiatry
- Pulmonology
- Radiology / Imaging
- Rehabilitation Services
- Research Institute
- Rheumatology
- Social Services
- Spiritual Care
- Urology

Community Benefit Program

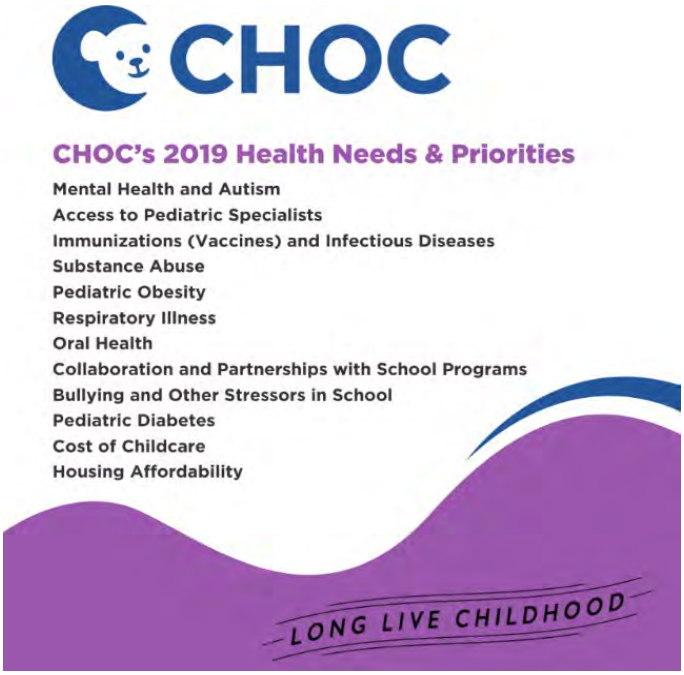
CHOC is dedicated to working cooperatively to expand existing services and develop innovative new programs to benefit the families of Orange County. More than two million children across four counties count on CHOC to provide needed care, regardless of their family's ability to pay.

In fiscal year 2020-2021, CHOC invested $158.6 million in community benefits, which are programs or activities that provide treatment and/or promote health and healing as a response to identified community needs. CHOC continues to invest in 68 different services to address six goals:

1. Healthcare Access: Increasing access to quality pediatric healthcare resources and information to low-income and medically underserved families throughout Orange County
2. Behavioral Health Access: Enhancing the community's access to behavioral health information and social and emotional services, targeting the medically underserved
3. Disease Prevention: Increasing awareness of disease prevention and promoting early intervention of major diseases that affect the community
4. Information Resource: Providing the community with resources for information and education on health risk behaviors
5. Injury Prevention: Actively contributing to reducing the number of unintentional injuries to young children, especially targeting low-income, diverse, and medically underserved populations
6. Community Action: Actively recruiting, recognizing, and advocating for the importance of volunteer leadership and community assistance in providing care for children

CHOC's Community Benefit Plan for 2020-2021 can be viewed here.

Figure 1: CHOC's 2019 health needs and priorities



Activities Since Last CHNA

Figure 1 lists the community health needs identified and prioritized by CHOC's 2019 CHNA. To address the community health needs identified in the 2019 CHNA, CHOC developed an implementation plan with various strategies to address each prioritized need. Following are some of the activities launched since the 2019 CHNA.

WellSpaces

CHOC is partnering with schools across Orange County to develop WellSpaces. WellSpaces offer students a calming space on campus where they can practice mindfulness, meditate, do yoga, and learn about caring for themselves. There are 18 WellSpaces open in Orange County, with plans to create at least 12 more over the next 18 months. Early data shows that most students report an improved mood after visiting a WellSpace, and choose to participate in mindfulness activities, including speaking with counselors.

WellSpaces are permanent spaces within a school, like the library or cafeteria, except that these spaces are constructed using biophilic design, a concept that aims to create a good environment for students. This focus on the natural world contributes to student health and productivity.

COVID-19 Command Center

During the COVID-19 pandemic, CHOC helped respond to community needs and helped prevent the spread of disease by moving fast to safely maintain access to critical health services, set up vaccination stations, screening and testing stations, migrate to hybrid/remote work, and establish a childcare program for hospital employees. In addition to these efforts to keep employees and patients safe, CHOC launched a toll-free line staffed by nurses to provide community members the most up-to-date information about COVID-19 and connect families with resources for pediatric health.

Breathmobile and Wellness on Wheels

CHOC's Breathmobile provides mobile asthma diagnosis, treatment, and education to children and teens. CHOC plans to expand on Breathmobile's long-standing success by launching a new Wellness on Wheels (WoW) program in late 2022. WoW will include advanced health screenings, regular wellness check-ups, guided play, nutritional education, obesity prevention, and mental health awareness for low-income communities. CHOC Foundation's Latino Advisory Council adopted WoW as a funding priority in 2021 and has raised more than $300,000 for the program through events and donations.

Level 1 Pediatric Trauma Center

In October 2021, CHOC at Orange was designated as a Level I pediatric trauma center by the Orange County Health Care Agency's (HCA) Division of Emergency Medical Services and verified by the American College of Surgeons (ACS). CHOC remains the only Level I pediatric trauma center in the county and is responsible for delivering the most advanced medical care to children who experience a traumatic medical event. As a Level I pediatric trauma center, CHOC also provides:

- Public education to the surrounding communities
- Continuing education for staff
- Training for future trauma clinicians and research to help develop and improve trauma care
- Screening and intervention program for people living with substance use disorders

Humanitarian Medical Care for Unaccompanied Children

Beginning in April 2021, hundreds of unaccompanied minors were moved from United States Customs and Border Protection facilities to a temporary shelter at the Long Beach Convention Center with the capacity to house up to 1,000 children ages four to 17. CHOC partnered with UCLA Health and UC Irvine Health to support the United States Department of Health and Human Services by sending more than 110 volunteers including physicians, nurses, physician assistants, nurse practitioners, technicians, and child life specialists. Various services were provided, including intake and initial screening, comprehensive physical screenings and short-term treatment plans, medication and vaccine administration, urgent and ongoing care, and COVID-19 surveillance testing. The children were also provided with clothing, food, and activities. CHOC played a critical role in keeping these children healthy and safe until they could be reunited with family or sponsors.

Medical Intelligence and Innovation Institute (MI3) Summer Internship Program

CHOC's MI3 Summer Internship Program gives students the unique opportunity to explore the future of healthcare and offers invaluable experience for young people interested in the healthcare field. The interns learn to problem solve and create solutions unique to hospitals. With more than 50 expert mentors across multiple fields, students are immersed in topics relevant to the future practice of pediatric medicine, including genomic medicine and personalized medicine,

regenerative medicine and stem cells, nanomedicine, robotics, and artificial intelligence. The program has completed its 10th year and has had more than 600 graduates.

MI3 receives approximately 500 applications each year for its summer internship program, and up to 75 applicants are chosen to participate. CHOC's Belonging, Diversity, Equity, and Inclusion (BDEI) Office provides mentorship on BDEI principles and assists with recruitment to help ensure a diverse pool of applicants and participants. Many MI3 interns are current or former CHOC patients.

Project SEARCH

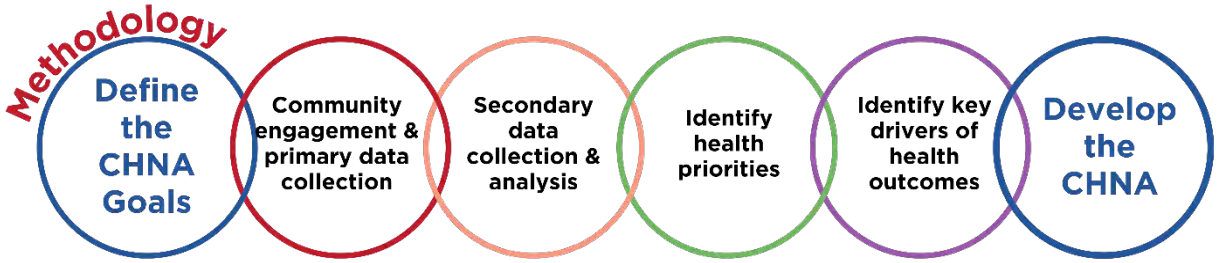
CHOC's Project SEARCH provides an 11-month unpaid internship workforce preparation opportunity for adults with developmental disabilities to build transferable employment skills in an integrated and inclusive environment. The program seeks to support individuals in developing skills that advance employment opportunities, provide pathways to careers, and help participants succeed in their community.

Project SEARCH interns participate in four internship rotations, working in up to four different departments throughout CHOC. Each rotation is ten weeks long, with one week for review and preparation between rotations. Interns may also participate in employability-related community college/continuing education courses through Santiago Canyon College, provided onsite at CHOC during program hours.

METHODOLOGY

CHNA Methodology

CHOC retained Health Management Associates (HMA) to conduct its 2022 CHNA and ensure this assessment meets California's revised hospital community health needs assessment and benefit plan requirements, the requirements for 501(c)(3) hospitals under the Affordable Care Act (ACA) Section 501(r) as well as the state's future requirement for hospitals to prepare and submit to the Department of Health Care Access and Information (HCAI) an annual equity report and health equity plan to reduce health disparities in the community. The equity report and strategy will consist of measurable objectives and specific timeframes to reduce disparities in the communities served by the hospital.



Definition and Characterization of Primary Service Area

CHOC's primary service area (PSA) is Orange County, California, based on the place of residence of most of its patients served. Statewide inpatient data was used to define CHOC's PSA. CHOC's target population is prenatal and neonatal infants, children, and youth through 21 years of age, and up to 25 years of age for patients diagnosed with certain rare conditions. Orange County has a total pediatric population of 782,110 children and youth (0-19 years).[1] Cities and ZIP codes within CHOC's PSA (Orange County) are provided in Appendix B.

CHNA Goals

The CHNA aims to identify and give a voice to the health needs of children and families in Orange County through comprehensive primary and secondary data collection, analysis, and reporting. Broadly, the CHNA aims to:

- Identify community health assets and issues
- Gauge and monitor the health of children and the factors that influence their health in Orange County
- Assist CHOC's Board of Directors and leadership team in setting priorities and allocating resources

CHOC's 2022 CHNA seeks to specifically:

- Define the patient population served by CHOC and the communities from which this population originates

- Determine community health needs and resources, including those related to pediatric inpatient and outpatient care
- Identify significant gaps that prevent the provision of pediatric primary and specialty healthcare services
- Identify areas of health inequity, including health status and access to care for patients who experience discrimination based on race, ethnicity, language, disability status, sexual orientation, gender identity, and payer
- Identify community assets that improve the health and well-being of community members
- Address barriers to meeting the health and social needs of the community
- Meaningfully engage the Orange County community and build relationships with a broad and diverse group of stakeholders

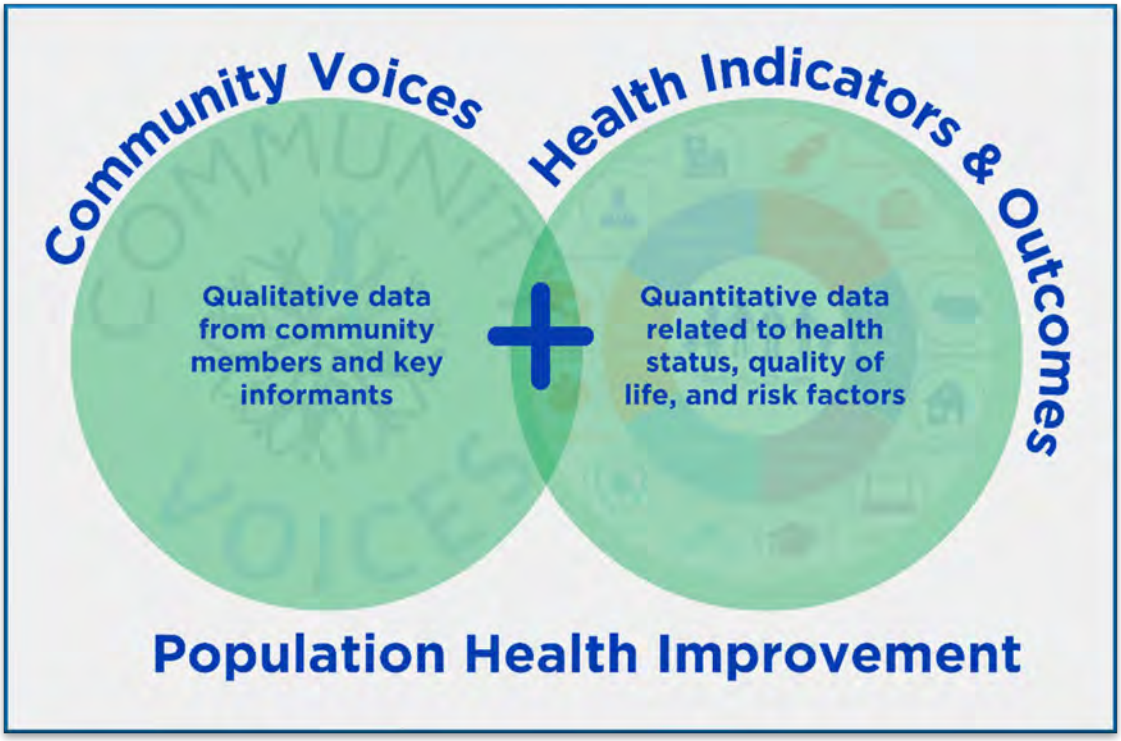
The following questions were answered:

- What are the most pressing health issues in the community, and how do these issues vary across the community?
- Why do these health issues exist in the community? What factors create or determine health issues?
- What resources are available to address these health issues?
- What are the health needs of the community from a population-based perspective?

CHOC approached these questions by investigating the needs of infants, children, youth, and families, using a modified Mobilizing for Action through Planning and Partnerships (MAPP) framework to gather insights from patients and community members. This process does not rely on any single source of information, but rather the consideration of multiple data sources in analysis before arriving at findings, as shown in Figure 2.

The CHNA team collected quantitative and qualitative data from primary sources (data collected first-hand through surveys, focus groups, and interviews) and secondary data sources (data collected by another entity or for another purpose). Quantitative data used in the CHNA is considered high-quality, population-based data that came from local, state, and national sources such as Vital Statistics and records from the California Department of Public Health and Environment, the United States Census Bureau, the Behavioral Risk Factor Surveillance System, the California Healthy Kids Survey (CHKS), and the California Health Interview Survey (CHIS).

Figure 2: CHNA approach



The CHNA timeframe is 2022-2024. The CHNA was conducted between April and July 2022, and included the following key components:

- County-wide community health survey
- Community member focus groups and key informant interviews
- Secondary data review and analysis

Findings from data collection and analysis will guide CHOC's CHNA implementation plan and community benefits plan, ensuring resources are focused on the assessment's most pressing pediatric healthcare needs.

Community Health Survey

CHOC gathered community opinions about crucial health issues and the quality of life in Orange County for children and families through an online community health survey. The survey was provided in English, Spanish, and Vietnamese, and was open from June 1 – June 21, 2022. To receive as many responses as possible from residents throughout Orange County, CHOC's marketing team, the CHNA Advisory Committee and a variety of community partners shared and promoted the online survey through:

- Social media posts, including Twitter, Facebook, and Instagram
- In-person distribution at community-based primary care clinics
- Email newsletters and other communications within their professional networks

- External mail blasts to Orange County-based collaboratives or coalitions and internal email and facsimile blasts to CHOC providers and associates
- Outreach to CHOC associates

The community health survey generated 1,248 unique responses from across the community and not restricted to CHOC providers or patients, including:

- 745 responses from parents, guardians, and others caring for children (59.7%), of which 54 responses were from foster parents. This group of respondents will be collectively referred to as "family" in the CHNA.
- 215 responses from young adults 18-24 years of age (17.2%)
- 145 responses from service providers (11.6%)
- 143 responses from healthcare professionals (11.5%)

Most survey respondents received the survey by email (42%), 13% by Facebook, and 11% in the workplace.

Table 1: How respondents received the community health survey

Method	Number	Percent
Email	522	42%
Facebook	158	13%
Workplace	134	11%
Twitter	77	6%
Community meeting	64	5%
Healthcare provider	56	5%
Personal contact (such as friends or family)	51	4%
Newsletter	44	4%
School	39	3%
Church	18	1%
Instagram	18	1%
Newspaper	16	1%
Target/Walmart or similar	13	1%
Grocery store	11	1%
Next door	10	1%
Library	1	<1%

Source: CHNA Community Health Survey, 2022

Survey Respondent Demographics

Length of Residency in Orange County

More than half of the survey respondents have lived in Orange County for more than six years. Specifically, 45% lived within the county for 11 or more years, and 18% between 6-10 years.

Age

Compared to the United States Census, age groups 25-34 years, 35-44 years, and 45-54 years were overrepresented among the survey respondents. This overrepresentation is appropriate since the target population was families of children 0-24 years.

Table 2: Community health survey respondents by age group and proportionality with United States Census estimates for age groups

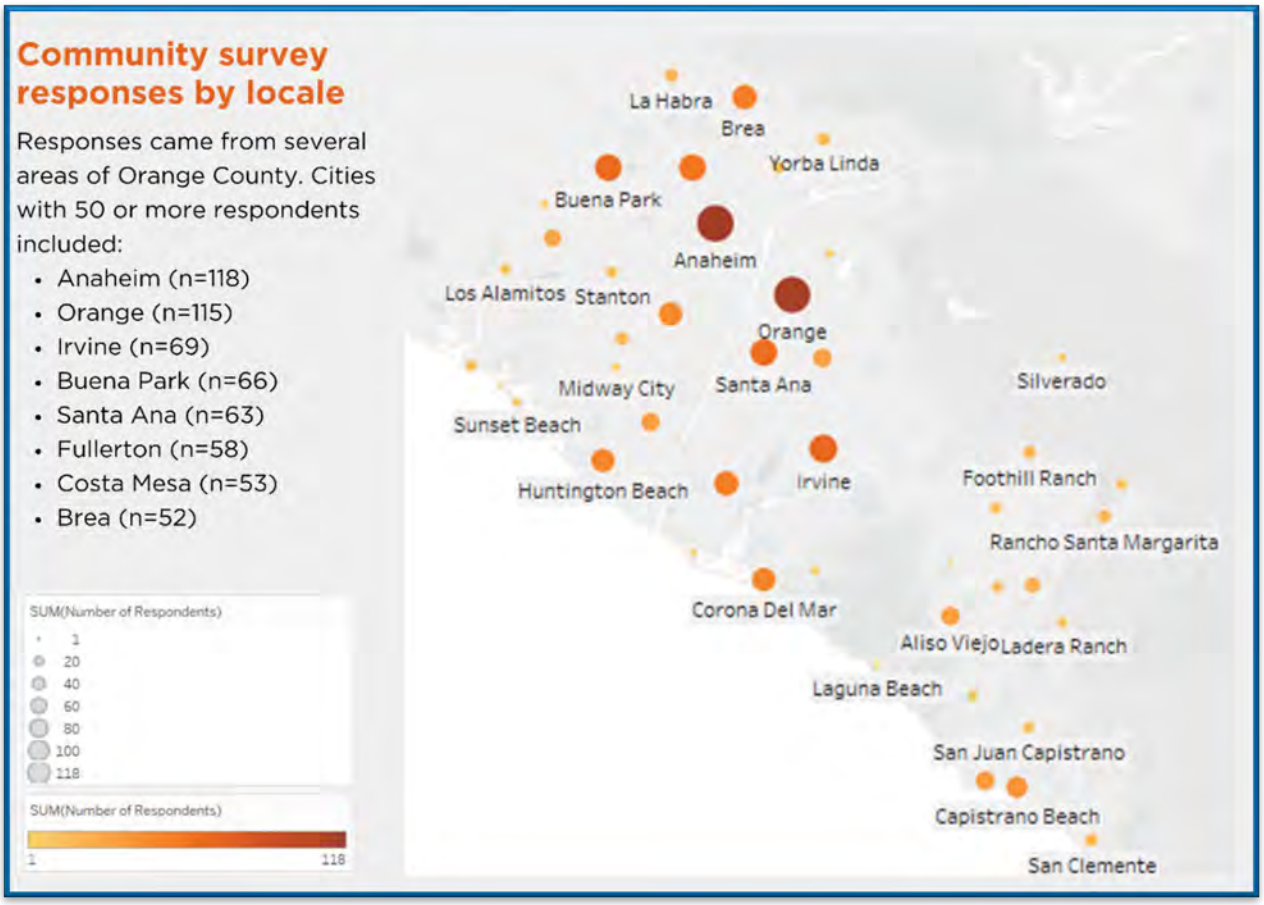
Age	Percent of Survey Respondents (n=1,237)	Orange County Population Estimate
18 - 24	10%	9%
25 - 34	29%	14%
35 - 44	31%	13%
45 - 54	18%	14%
55 - 64	8%	13%
65 or older	2%	14%
I prefer not to say	2%	

Source: CHNA Community Health Survey, 2022. Population estimate source: U.S. Census, 5-year estimate 2015-2019, Table B01001.

Zip Code

There was geographic representation with the survey responses.

Figure 3: Community health survey respondents by city of residence



Source: CHNA Community Health Survey, 2022.

Household Income

More than half (52%) of survey respondents have household incomes of less than $74,999, which is higher than the United States Census estimate at 42% of Orange County households.

Insurance Type

Seventy nine percent of respondents had private health insurance, and 31% had Medicaid. In Orange County, Medicaid is administered by CalOptima Health.

Table 3: Community health survey respondents by insurance coverage type

Health Insurance Type	Percent of Survey Respondents (n=1,229)
Private health insurance	79%
Medicaid (CalOptima Health)	31%
Medicare	28%
Indian Health Services	3%
My child(ren) do(es) not have health insurance	2%
I do not have health insurance	2%

Source: CHNA Community Health Survey, 2022.

Race and Ethnicity

Proportional to the United States Census estimates, 31% of survey respondents represented Black, Indigenous, and People of Color (BIPOC) race categories.

Table 4: Community health survey respondents by race and proportionality with United States Census estimates for race

Race	Percent of Survey Respondents (n=1,238)	Orange County Population Estimates by Race
White/Caucasian	63%	61%
BIPOC	39%	39%
I prefer not to say	6%	--

Note: Selections are not mutually exclusive and therefore, percentages will not add up to 100%. Source: CHNA Community Health Survey, 2022. Population estimate source: U.S. Census, 5-year estimate 2015-2019, Table DP05.

Specifically, 11% were Asian/Pacific Islander, followed by American Indian (9%), Alaska Native (4%), Black/African American (4%), and Middle Eastern/ North African (2%). Forty-two percent of respondents were Hispanic or Latino/a.

Table 5: Community health survey respondents by race and ethnicity (n=1,238)

Race	Number	Percent
White/Caucasian	778	63%
Asian/Pacific Islander	133	11%
American Indian	116	9%
Alaska Native	54	4%
Black/African American	53	4%
Middle Eastern/North African	22	2%
Other	107	9%
I prefer not to say	79	6%
Ethnicity		
Non-Hispanic or Latino/a	637	51%
Hispanic or Latino/a	527	42%
I prefer not to say	77	6%

Note: Selections are not mutually exclusive and therefore, percentages will not add up to 100%. Source: CHNA Community Health Survey, 2022.

Mexico and the United States were the top two countries of origin selected for Hispanic or Latino/a respondents, followed by Spain, Colombia, Cuba, and El Salvador.

Table 6: Country of origin for Hispanic or Latino/a respondents (n=527)

Country of Origin for Hispanic or Latino/a Respondents	Number	Percent
Mexico	178	34%
United States	163	31%
Spain	45	9%
Colombia	27	5%
Cuba	25	5%
El Salvador	26	5%
Costa Rica	14	3%
Guatemala	14	3%
Chile	10	2%
Puerto Rico	6	1%
Honduras	2	<1%
Venezuela	2	<1%
Other	15	3%

Note: Selections are not mutually exclusive and therefore, percentages will not add up to 100%. Source: CHNA Community Health Survey, 2022.

Among Asian or Pacific Islander respondents, 25% were Vietnamese.

Table 7: Asian or Pacific Islander respondents (n=133)

Asian or Pacific Islander Respondents	Number	Percent
Vietnamese	33	25%
Filipino	23	17%
Chinese	21	16%
Indian	18	14%
Japanese	16	12%
Guamanian or Chamorro	13	10%
Korean	11	8%
Native Hawaiian	7	5%
Samoan	3	2%
Other	12	9%
I prefer not to say	3	2%

Note: Selections are not mutually exclusive and therefore, percentages will not add up to 100%. Source: CHNA Community Health Survey, 2022.

Gender Identity

More than half of the community health survey respondents identified as cisgender women (55%) followed by cisgender men (29%). Cisgender denotes personal identity and gender are the same as the birth sex.

Table 8: Community health survey respondents by gender identity (n=1,227)

Gender Identity	Number	Percent
Agender	52	4%
Cisgender man	356	29%
Cisgender woman	679	55%
Gender expansive*	69	6%
Intersex	43	4%
Transgender man	48	4%
Transgender woman	43	4%
Two-spirit or other Native identity	19	2%
Questioning	28	2%
Other	47	4%
I prefer not to say	90	7%

Note: Selections are not mutually exclusive and therefore, percentages will not add up to 100%. *Includes gender fluid, gender neutral, genderqueer, gender nonconforming, and non-binary. Source: CHNA Community Health Survey, 2022.

Sexual Orientation

There was diversity among survey respondents by sexual orientation. More than one in four respondents (26%) identified as non-heterosexual.

Table 9: Sexual orientation (n=1,231)

Sexual Orientation	Number	Percent
Heterosexual or straight	1,003	81%
Bisexual or bi	78	6%
Lesbian or woman who has sex with other women	56	5%
Pansexual or pan	41	3%
Gay or man who has sex with other men	37	3%
Queer	37	3%
Asexual or ace	29	2%
Questioning	17	1%
Other	19	2%
I prefer not to say	58	5%

Note: Selections are not mutually exclusive and therefore, percentages will not add up to 100%. Source: CHNA Community Health Survey, 2022.

See Appendix C for a copy of the Community Health Survey.

Community Member Focus Groups and Key Informant Interviews

Conversations with community members took place throughout the CHNA process to validate community health survey findings and dig deeper into the challenges and needs of populations experiencing health inequity. The aim was to hear from key sectors that serve or have frequent contact with children, youth, and families.

Outreach and engagement focused on representatives from physical health, behavioral health, specialty care providers, schools, human services, criminal justice, courts, probation, and community-based organizations serving youth and families. Although virtual and in-person interviews and focus groups were offered, all participants opted for virtual conversations.

Two central questions guided these discussions:

- What do you think is the root of the health issues you see in the survey data?
- What health issues do you think your community and its healthcare system can change for the better?

Focus groups and interviews were carried out with individuals representing priority populations and geographic locations. These discussions were designed to gain a deeper understanding of families' experiences from historically underrepresented communities in past assessments. Priority populations included in the CHNA are:

- BIPOC
- Hispanic or Latino/a
- Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, Intersex, Asexual (LGBTQIA+)
- Families of Children with Special Health Care Needs (CSHCN)
- Survey respondents who self-identified with the following demographics were emailed and invited to participate in one or more of the following focus groups
- Individuals who identify as LGBTQIA+
- Spanish-speaking individuals
- Mental health providers
- Parents, guardians, and others caring for children

This outreach resulted in three focus groups being conducted: (1) Spanish-speaking parents guardians, and caregivers of children, (2) mental health providers, and (3) CHOC social work staff.

CHOC and HMA worked with First 5 Orange County to extend focus group invitations to Spanish-speaking parent ambassadors and other community contacts. Nine mothers and two First 5 Orange County consultants participated in the Spanish-speaking focus group, which was held in the evening for participants' convenience.

A CHOC social worker virtual focus group was conducted to gain an observer's perspective of the clinical care providers' interactions with families from under-represented groups. Participants spoke about access and barriers to care, as well as initiatives to improve the overall health of children and families in Orange County.

A focus group discussion on the topic of mental health occurred with two individuals involved with the mental health system. They shared an in-depth perspective on youth mental health, the impact of the pandemic, and the role that CHOC is playing and can play in addressing the youth mental health crisis.

In addition to the three focus groups, all community health survey respondents who volunteered to engage in post-survey interviews (n=757) were invited to a town hall event scheduled for July 6, 2022. See Appendix D for the presentation.

Key Informant Interviews

The community health survey and early conversations with community members identified access to services covered by insurance, challenges understanding how to navigate the healthcare system and community violence as key issues. To learn more, the CHNA team conducted additional interviews to dig deeper into root causes and strategies to mitigate these challenges. Virtual interviews were conducted with representatives from the Community Health Initiative of Orange County, Waymakers Orange County, and Orange County Department of Education - School Safety. See Appendix E for the Key Informant Interview Guide.

Table 10: Key informant interviews

Sector/Focus Area	Number of Interviewees
Behavioral health	3
County health	2
School-based health	2
Community health centers	1
Community violence	1
School-based violence	1
Insurance access/navigation	1
Service provider for children with special care needs	1
Human trafficking	1

Secondary Data

Data from several local, state, nationwide databases and public health sources provided a comprehensive picture of Orange County child and family health, including:

- Population characteristics, such as race/ethnicity, education level, income level, and employment statistics
- Health outcomes, including chronic disease prevalence and mortality rates
- Health behaviors, including physical activity, nutrition, alcohol, and drug and tobacco use
- Healthcare utilization, including hospital inpatient and outpatient data
- Access to care indicators, such as population to provider ratios and health professional shortage area designations
- Social determinants of health indicators, including affordable housing, food security, and access to childcare

Particular attention was paid to data collected pre- and post-COVID-19. To the extent possible, data was obtained and analyzed at the sub-county geography and compared with state-level data and comparable data from prior years (trend analysis).

Information Gaps

Many social, economic, morbidity, mortality, and health outcomes data points (secondary data) are tracked and recorded at the county level, and not at the city or neighborhood level. A high percentage of health-related data lacks race and ethnicity, making it difficult to accurately understand the breadth and depth of health disparity in a given location. For example, race and ethnicity data is often missing in surveillance data; and most health plans lack race and ethnicity data on non-White/Caucasian members. Hospitals and other providers are better at collecting these data. However, the data is often inaccurate because it is not self-reported by the patient but through observation of admitting or registration staff. Data are also commonly reported in wide age bands that include the age 18+ cohort, making it challenging to determine the effect of these indicators on CHOC's patient population.

Additionally, there is increasing discussion in data collection and analysis regarding data equity and the concern that harmful decisions can be justified through data. Because data collection, sourcing, and research can be affected by biases, data scientists are working to develop equity standards that balance minority populations' privacy concerns with achieving reliability and eliminating unsupported assumptions.

Other limitations in qualitative and quantitative information include:

Community Engagement: Opinions gathered from community representatives could differ from those of the broader Orange County population. While every effort was made to recruit a sample size representative of parents, guardians and other caregivers of CHOC's entire pediatric population, a diverse group of participants representing each of the unique cities within Orange County could not be guaranteed. This challenge is expected in metropolitan areas such as Orange County. However, the process deployed to complete this CHNA creates a solid foundation for an intentional community engagement process needed to meet the 2025 equity report and strategy.

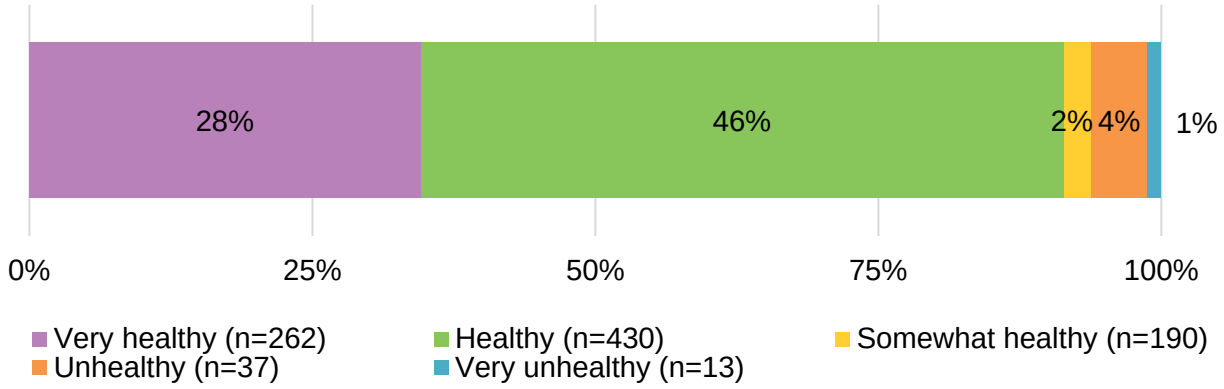
Data Lag: Although the data was valuable and allowed the identification of Orange County's health needs, older datasets may not reflect recent trends in health statistics and outcomes. This challenge was mitigated through comparison with community input and identification of possible discrepancies.

Limitations of CHKS Data: Factors that can impact the quality, validity, and generalizability of the CHKS results include changes that occur in survey content, administration, and/or sample characteristics between survey administrations. Not all schools participate in CHKS, which limits the validity and representativeness of the results. However, even with a low response rate, the results provide an indication of what those students who did respond felt about the school and their experiences and behavior. Additionally, when interpreting the results, it is important to consider that changes in the results over time may be due to differences in the characteristics or size of the sample of students that completed the survey, changes in the questions themselves, or differences between time periods in which the survey was administered (for example, some risk behaviors tend to increase as students age, or may increase during holidays or social events).

Community Health Survey: Important Factors for Healthy Kids

Three in four families who responded to the CHNA community health survey rated the overall health of child(ren) living in their home as “healthy” (46%) or “very healthy” (28%).

Figure 4: Please rate the overall health of the child(ren) living in your home. My child(ren) is/are

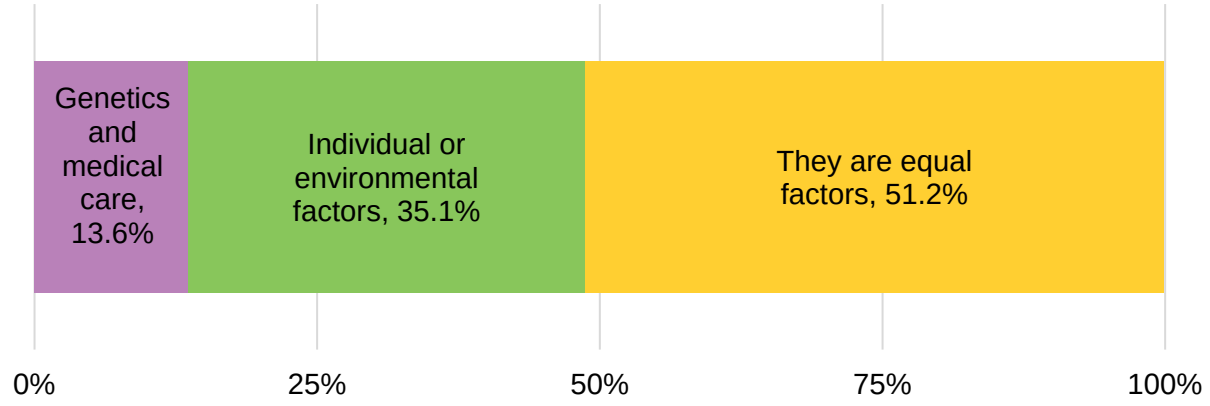


Source: CHNA Community Health Survey, 2022.

The community health survey respondents were asked to use one word that describes healthy children and families. Overwhelmingly, respondents described healthy children and families as happy, thriving, and mentally and physically healthy.

Rarely, if ever, does one factor determine the health of a community and its residents. In 2020, the California Health Interview Survey (CHIS) found that 13.6% of Orange County adults reported the most important factor to health was genetics and medical care while 35.1% reported it was individual or environmental factors.[2] The remaining adults, more than half (51.2%), answered that these things are equal factors.

Figure 5: Most important factor to health as reported by CHIS, 2020



Source: CHIS, 2020.

The CHNA community health survey asked respondents to identify the three factors they feel are essential characteristics of a happy, healthy, and thriving community for children and families. Access to healthcare providers (e.g., family doctors, pediatricians) was the number one characteristic across all respondent types. Families also prioritized low crime and safe neighborhoods. Safe, stable, and nurturing relationships within the family unit were ranked among the top three characteristics by both healthcare professionals and service providers.

Table 11: Top three factors by survey respondent type that most benefit the health and well-being of children and families

Factors that benefit the health and well-being of children and families	Healthcare Professionals (n=157)	Service Providers (n=143)	Families (n=1,029)	All Respondents (n=1,340)
Access to healthcare providers (e.g., family doctors, pediatricians)	43%	46%	41%	42%
Low crime and safe neighborhoods	25%	25%	33%	32%
Healthy food and proximity to grocery stores	31%	27%	27%	27%
Safe, stable, and nurturing relationships within the family unit	33%	47%	20%	25%
Access to mental health services (e.g., counselors, psychiatrists)	24%	29%	24%	25%

Note: Green fill indicates the top three for each respondent type. Source: CHNA Community Health Survey, 2022.

The top three problems that have the most significant impact on the overall health of children and families were poor mental health, developmental disabilities, and drug addiction. Cancer was ranked as a top-three problem among community members, while the COVID-19 pandemic ranked in the top three among healthcare professionals and service providers.

Table 12: Top three health problems by survey respondent type that have the most significant impact on the overall health of children and families

Most significant health problems	Healthcare Professionals (n=154)	Service Providers (n=153)	Community Members (n=1,028)	All Respondents (N=1,335)
Poor mental health	67%	80%	45%	52%
Developmental disabilities (e.g., autism, ADHD)	32%	36%	29%	30%
Drug addiction	12%	22%	22%	21%
Cancer (all types)	14%	9%	23%	20%
COVID-19 pandemic	23%	29%	17%	19%

Note: Green fill indicates the top three for each respondent type. Source: CHNA Community Health Survey, 2022.

The top three harmful behaviors, factors, and conditions contributing to injuries, violence, and poor health outcomes were community violence (e.g., gang violence, homicide), social isolation, and domestic violence, including intimate partner violence and elder abuse. Healthcare professionals ranked tobacco use, including vaping, among the top three, while service providers ranked overuse of technology/excessive screen time and child abuse/neglect. Community members ranked not completing high school and not using seat belts or child safety seats among their top three.

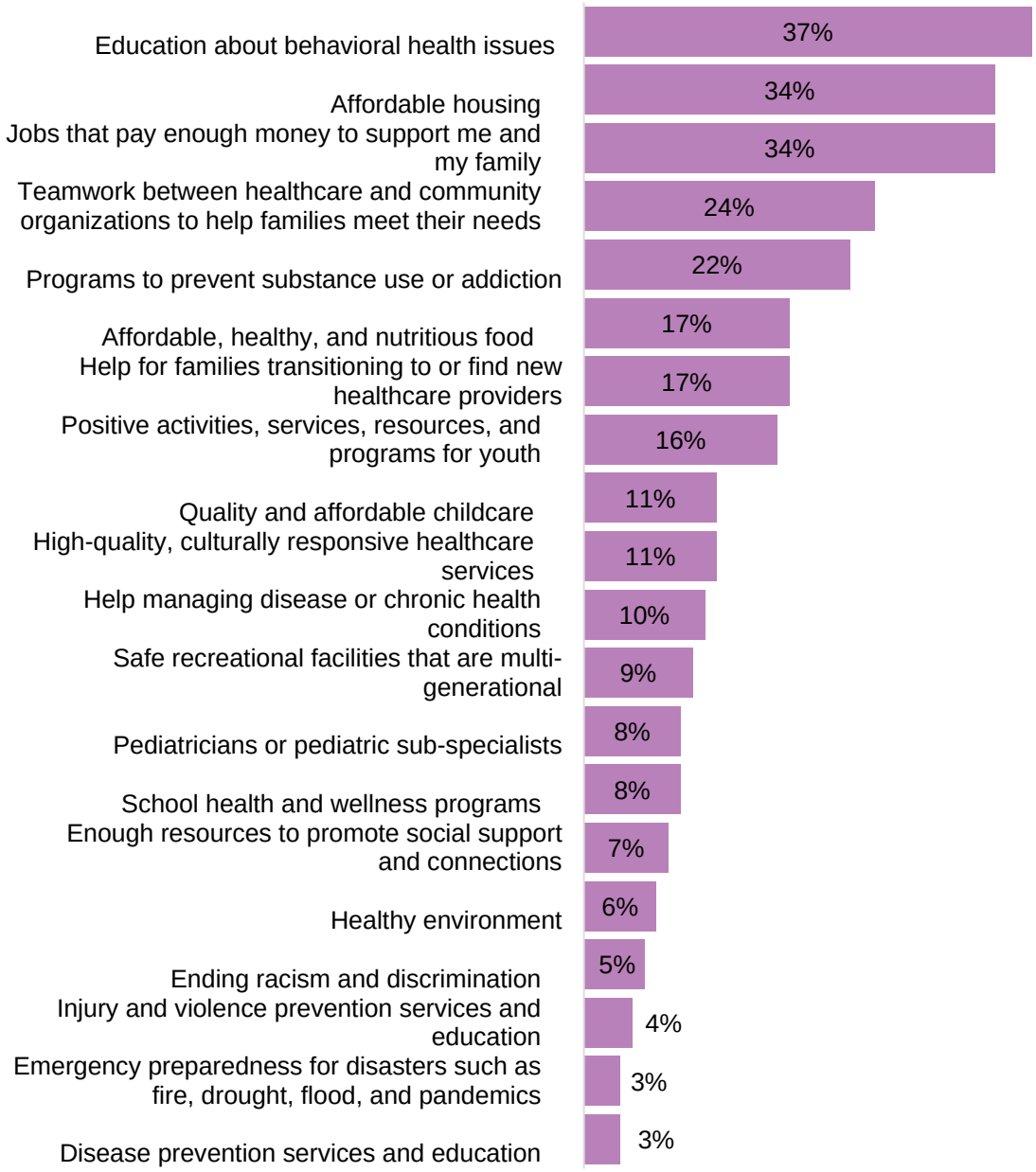
Table 13: Top three harmful behaviors, factors, and conditions contributing to injuries, violence, and poor health outcomes

Harmful Behaviors, Factors & Conditions	Healthcare Professionals (n=152)	Service Providers (n=153)	Community Members (n=1,029)	All Respondents (N=1,334)
Community violence (e.g., gang violence, homicide)	30%	27%	26%	26%
Social isolation	14%	18%	23%	21%
Domestic violence, including intimate partner violence and elder abuse	32%	22%	18%	20%
Not completing high school	11%	5%	19%	17%
Not using seat belts or child safety seats	7%	5%	19%	16%
Overuse of technology/excessive screen time	17%	31%	12%	14%
Tobacco use, including vaping	20%	18%	11%	13%
Child abuse/neglect	16%	23%	10%	12%

Note: Green fill indicates the top three for each respondent type. Source: CHNA Community Health Survey, 2022.

Community health survey respondents were asked to think about their community and select the top three needs that, if met, would make their community healthier. The list includes items that are outside of CHOC's services but provide important insights into issues that have the most impact.

Figure 6: Community identified top needs that if met, would make their community healthier (n=964)



Source: CHNA Community Health Survey, 2022.

Identification and Prioritization of Health Needs

The factors that determine the health of children, teens and families expressed through the community health survey were vast. The factors were considered potential priorities when two conditions were met:

- Community members expressed concern about the health factor
- Secondary data, including public health and socioeconomic data, indicated significant differences in Orange County compared to California or indicated a concerning or worsening trend with that factor

CHOC's 2022 CHNA was guided by three questions in selecting the final set of health priorities:

- Can a partnership or a single organization exert influence the issue?
- Is there existing willingness and an opportunity in the community to influence the issue?
- Is measurable change possible within the three-year life cycle of the CHNA?

Based on results of the primary and secondary data analysis, the team identified two health priorities for Orange County:

- Mental health
- Access to pediatric healthcare services

The team also identified four key drivers of health to consider when developing strategies to respond to the two health priorities. The four key drivers of health are:

- Healthy and affordable foods
- Early learning opportunities and success in school
- Safe neighborhoods
- Connectedness

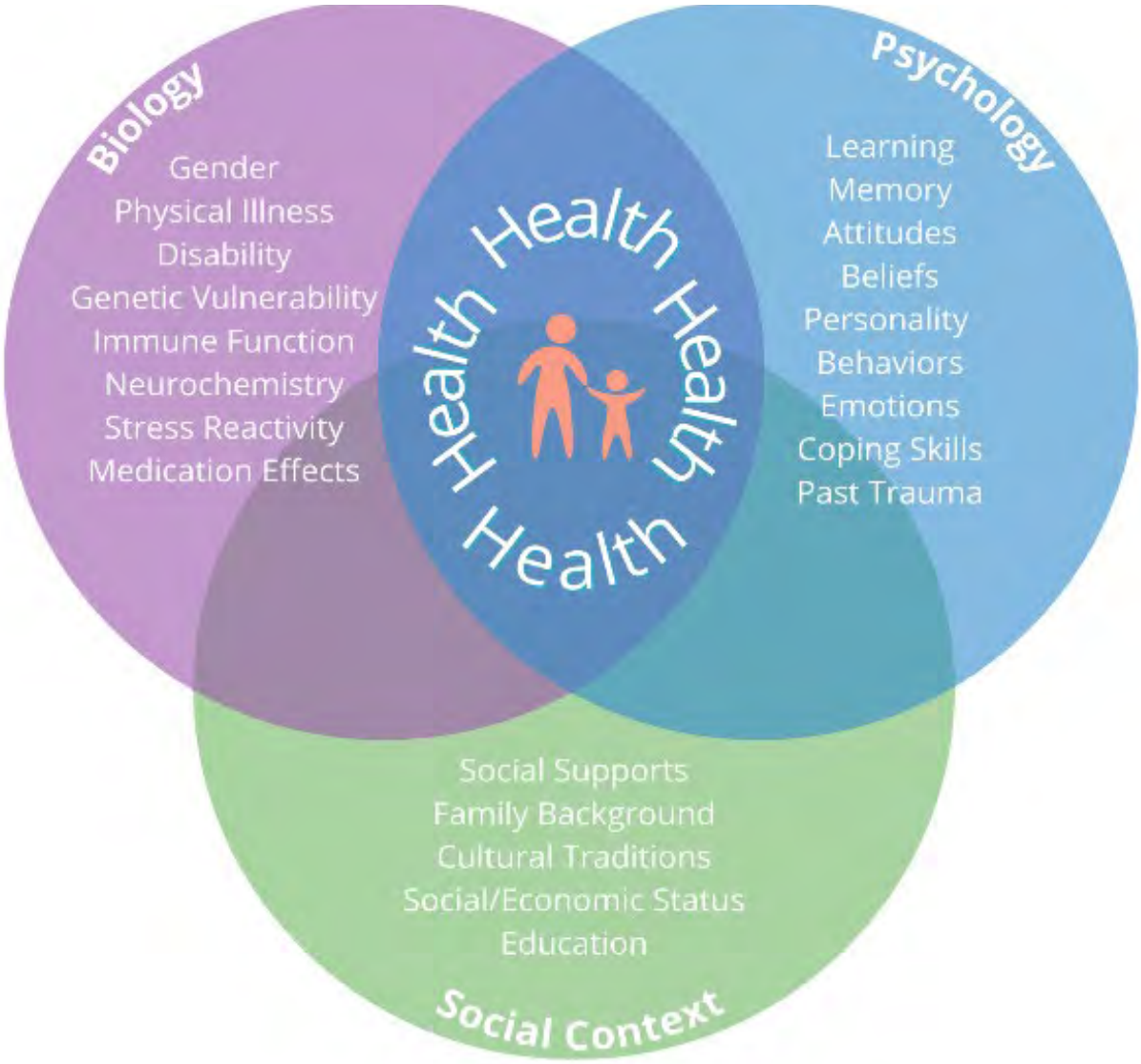
HEALTH PRIORITIES

Priority 1: Mental Health

The World Health Organization (WHO) describes mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.” Mental health is not simply the absence of a mental disorder.

People who do not have a mental disorder might differ in how well they are doing, and people who have the same diagnosed mental disorder might differ in their strengths and weaknesses, in how they are developing and coping, and in their quality of life. Mental health exists on a continuum and is influenced by biological, social, and psychological factors, as described in Figure 7.

Figure 7: Biopsychosocial factors



The social influences on mental health include discrimination and social exclusion, poor education, unemployment or underemployment, lack of job security, poverty, food insecurity, lack of quality or affordable housing, lack of access to healthcare, and Adverse Childhood Experiences (ACEs). ACEs include experiences of child maltreatment, parental substance abuse, divorce, and domestic violence, among others. A large body of research confirms the harmful effect ACEs can have on the health and well-being of individuals. Children exposed to four or more ACEs are at four to 12 times greater risk for substance abuse, depression, and suicide.[3] Largely, these determinants stem from unequal distribution of opportunity.

Issues of mental health can impact not only individuals and their families but also systems within the community, such as schools or the juvenile justice system. Poor mental health is a growing problem and identified as a health priority in both 2019 and 2022 CHOC CHNAs.

More than half (52%) of the community health survey respondents selected poor mental health as the problem with the most significant impact on the overall health of children and families in Orange County. This was identified as a problem less frequently among families (45%) compared to healthcare professionals (67%) and service providers (80%).

Table 14: Percent of respondents who said a top problem impacting the overall health of children and families was mental health, by respondent type

	Healthcare Professionals (n=154)	Service Providers (n=153)	Families (n=1,028)	All Respondents (n=1,335)
Poor mental health	67%	80%	45%	52%

Note: Ninety-five respondents answered the survey from both the perspective of a provider and as a parent, guardian, or caregiver of children. Therefore, the total number of responses is greater than number of unique survey respondents of 1,248. Source: CHNA Community Health Survey, 2022.

Poor mental health was ranked as the number-one problem for priority populations. While fewer LGBTQIA+ respondents ranked poor mental health as the top concern, they ranked eating disorders – also a mental health disorder – as a number-one problem (25%).

Table 15: Percent of respondents who said a top problem impacting the overall health of children and families was mental health, by priority population

	BIPOC (n=375)	Hispanic or Latino/a (n=556)	LGBTQIA+ (n=204)	Families of Children with Special Healthcare Needs (n=655)
Poor mental health	42%	46%	23%	41%

Source: CHNA Community Health Survey, 2022.

In October 2021, American Academy of Child and Adolescent Psychiatry's (AACAP) together with the American Academy of Pediatrics (AAP) and the Children's Hospital Association, joined together to declare a national state of emergency in children's mental health, stating the *"worsening crisis in child and adolescent mental health is inextricably tied to the stress brought on by COVID-19 and the ongoing struggle for racial justice, and represents an acceleration of trends observed before 2020. Rates of childhood mental health concerns and suicide rates rose steadily between 2010 and 2020; by 2018, suicide was the second leading cause of death for youth ages 10-24*."[4]

These sentiments were expressed by parents, guardians, mental health providers, school personnel, and others throughout the CHNA's community engagement process. School personnel reported that more students are suffering from anxiety, depression, and insomnia since the pandemic, and loneliness has "skyrocketed" along with the number of prescriptions written to treat these conditions. The consensus is that children and youth are not getting help for their mental health conditions. It was also an issue commonly tied to other concerns, like substance use and gun violence. Shared themes on mental health include:

- An identified need to pay attention to the mental health needs of younger children, not just adolescents
- The COVID-19 Public Health Emergency (PHE) as a source of stress for children, especially students
- Access to mental health services as a major barrier for children to be and get well, especially those who are uninsured

This CHNA identified three primary concerns related to mental health:

1. Increase in depressive symptoms among students
2. Increase in hospitalizations for mental illness in 2020, despite the overall decrease in hospitalizations due to the COVID-19 PHE
3. Need for prevention, early intervention, and treatment for substance use among youth

Prevalence of Depression Among Children and Youth

According to a COVID-19 survey conducted by the Orange County Healthcare Agency, Behavioral Health Services Division, in Fall 2020, almost 51% of parents indicated their child was potentially experiencing significant issues related to anxiety and depression. Specifically, approximately 20% of children were exhibiting elevated levels of disruptive behavior, and nearly 50% were experiencing elevated sadness or worry. The survey identified that COVID-19 was also taking a toll on Orange County adults' well-being, finding that:

- More than 50% reported high levels of stress (59%) or anger (55%)
- Thirty-seven percent reported increased or new use of substances or gambling
- Twenty-eight percent reported an elevated level of serious psychological distress
- Thirty-one percent indicated they were having a "very" or "extremely" difficult time coping during the pandemic

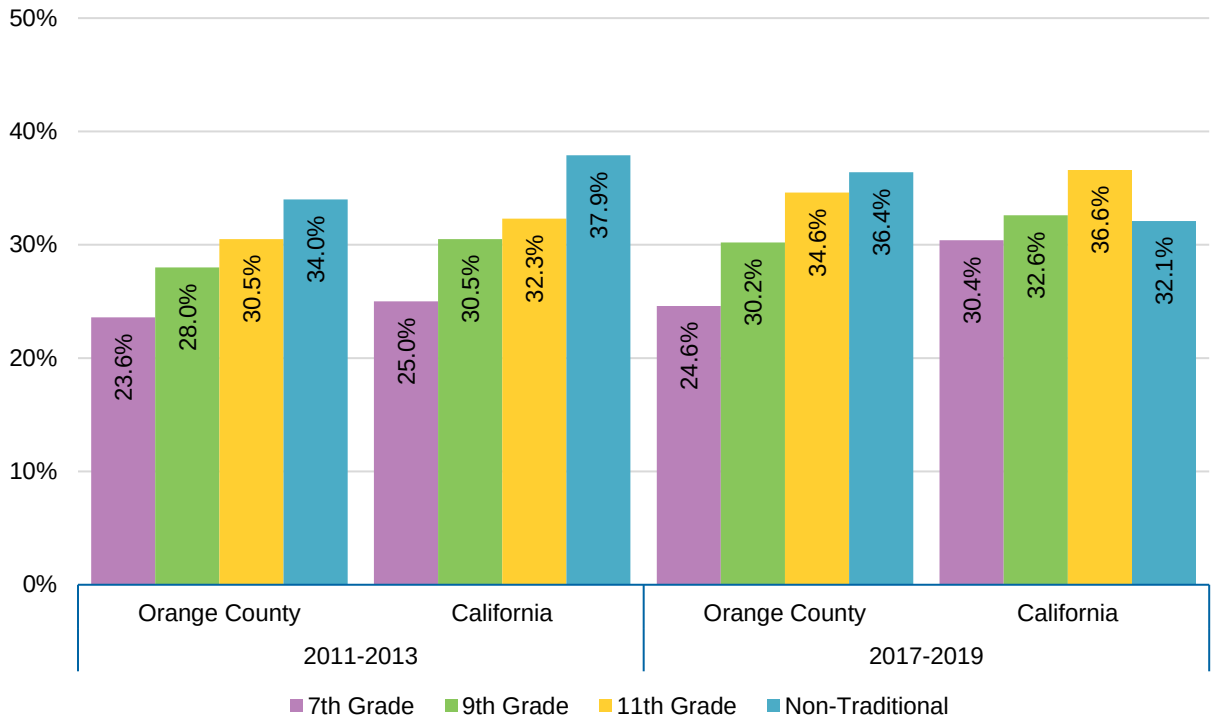
According to the CDC, being mentally healthy in childhood means reaching developmental and emotional milestones and learning healthy social skills and how to cope when there are problems. [5]

In 2022, according to the Orange County Early Development Index, approximately one in 10 kindergarteners (11%) exhibited anxious and fearful behavior upon entry into kindergarten.[43] This rate has remained the same since 2015.

During school year (SY) 2020-2021, 5.0 students per 1,000 county-wide reported having depression.[32] Several Orange County school districts reported rates of 14.1 students with depression per 1,000 students in SY 2020-2021 – Huntington Beach, Irvine, Fullerton, Anaheim, Placentia-Yorba Linda, and OCDE Special Education.

The CHKS suggests that in 2017-2019, the percent of Orange County students who reported experiencing depression-related feelings ranged from 24.6% among 7th grade students, to 34.6% among 11th grade students, and 36.4% for non-traditional school-based students. Orange County rates were lower than California.[56] The percent of students in grades 7, 9, and 11 who reported experiencing depression-related feelings had increased between 2011-2013 and 2017-2019, except for non-traditional students in California. [56]

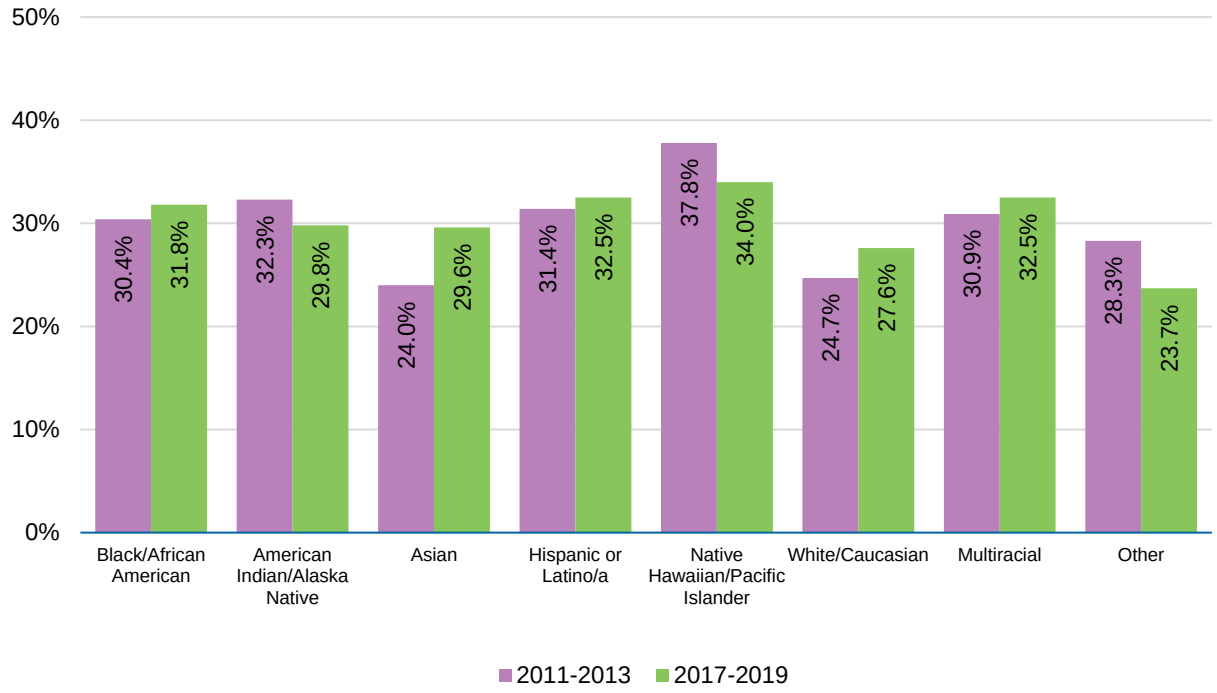
Figure 8: Students who reported experiencing depression-related feelings, by grade level



Note: Depression-related feelings were defined as when a student felt so sad or hopeless almost every day for two weeks or more that they stopped doing some usual activities. Source: CHKS, 2017-2019.

In 2017-2019, BIPOC students were more likely to report depression-related feelings than their White/Caucasian classmates. Black/African American students in Orange County have higher rates of depression-related feelings compared to their peers in California. Since 2011-2013, rates have increased for Asian (5.6 percentage point increase), White/Caucasian (2.9%), Multiracial (1.6%), Black/African American (1.4%), and Hispanic or Latino/a (1.1%) students in Orange County.[56]

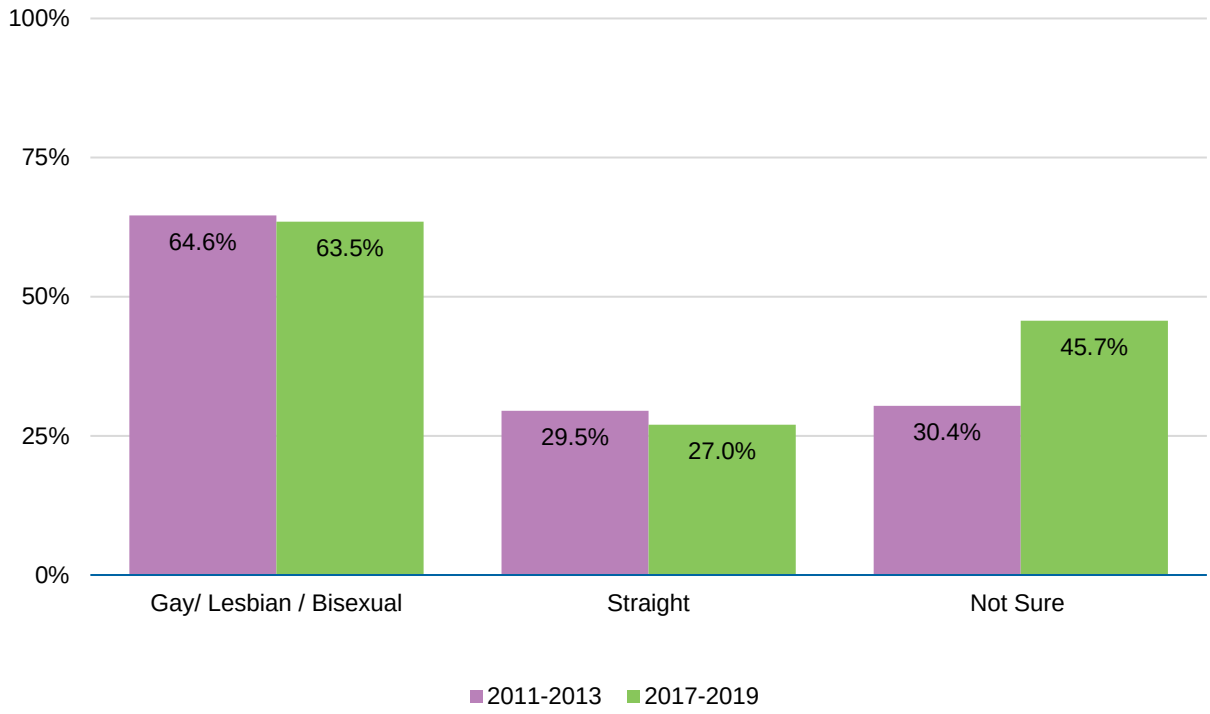
Figure 9: Students who reported experiencing depression-related feelings, by race and ethnicity, Orange County



Source: CHKS, 2017-2019.

Students who identified as gay, lesbian, or bisexual (as defined by HKCS) were more than twice as likely to report depression-related feelings than their heterosexual classmates (63.5% to 27.0%) in 2017-2019.[56] This disparity is comparable to student experiences across California.

Figure 10: Students who reported experiencing depression-related feelings, by sexual orientation, Orange County



Source: CHKS, 2017-2019.

Hospitalizations for Mental Health

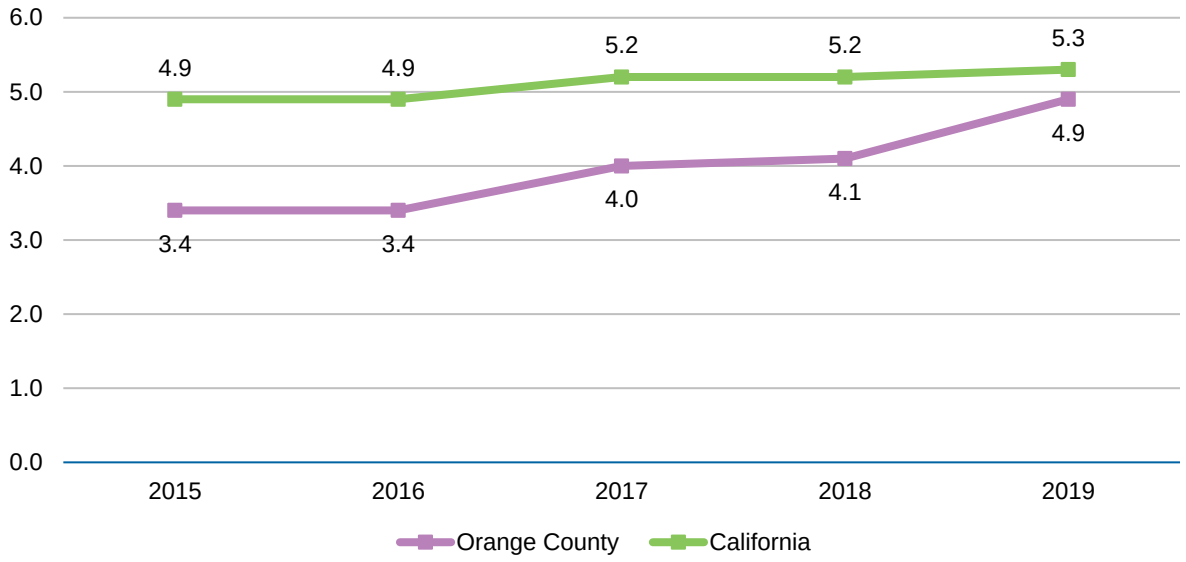
Mental health is a leading health indicator (LHI) of Healthy People 2030 (HP2030). The HP2030 primary objective for mental health is to increase the proportion of adolescents with major depressive episodes (MDEs) who receive treatment. The earlier young people get treatment for depression, the more effective it can be in preventing more severe, long-term problems in adults. However, many adolescents with depression do not get treatment.[6] In 2020, in Orange County, 12.7% of youth ages 12-17 years reported receiving psychological/emotional counseling in the past year, and this percentage has remained stable since 2016.[19]

In 2019, there were 4.9 hospital discharges for mental health issues per 1,000 Orange County youth ages five to 19 years.[i, 7] This was lower than California's rate of 5.3 per 1,000 youth. Between 2015 and 2019, the rate of discharges due to mental health issues had increased

[i] Data are based on the number of hospitalizations, not the number of children hospitalized. Data are limited to hospital admissions; emergency room visits that do not result in admission are excluded. A full list of diseases and disorders included in these data can be found here. Mental disorders related to substance abuse are excluded. County-level data reflect the patient's county of residence, not the county in which the hospitalization occurred. Cases with unknown county of residence are included in California totals. Data are excluded for cases of patients with erroneous birth dates.

faster in Orange County than in California. It is important to note that an increase in hospitalization discharges may be due to multiple factors including, but not limited to, increased capacity and access to these services as well as decreased stigma around help seeking.

Figure 11: Number of hospital discharges for mental health issues per 1,000 youth ages 5-19

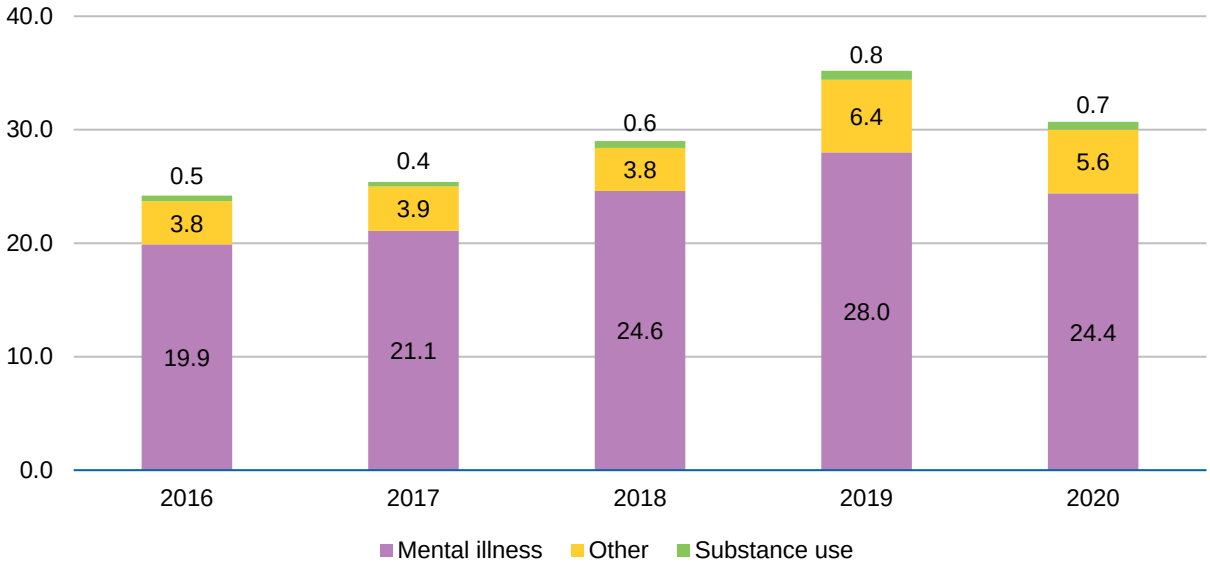


Source: As cited in KidsData.org, California Office of Statewide Health Planning and Development, 2020.

In Orange County, the combined hospitalization rate for serious mental illness and substance abuse conditions for children and youth (ages 0 to 17 years) increased by 27.3%, from 24.2 per 10,000 children in 2016 to 30.8 per 10,000 children in 2020.[ii] The hospitalization rate for serious mental illness increased 22.6%, from a low of 19.9 in 2016 to 24.4 per 10,000 children in 2020. In 2020, Major Depression and Mood Disorders accounted for the majority (65%) of all such hospitalizations, followed by Bipolar Disorder (9.5%), Schizophrenia/ Psychoses (3%), and Schizoaffective Disorders (1.7%).

[ii] These data are not compared to previously reported hospital discharge data as cited in Kidsdata.org, which offered an opportunity to benchmark Orange County to California.

Figure 12: Mental health and substance abuse related-hospitalization rates in Orange County, rate per 10,000 youth (0-17 years), 2016 to 2020

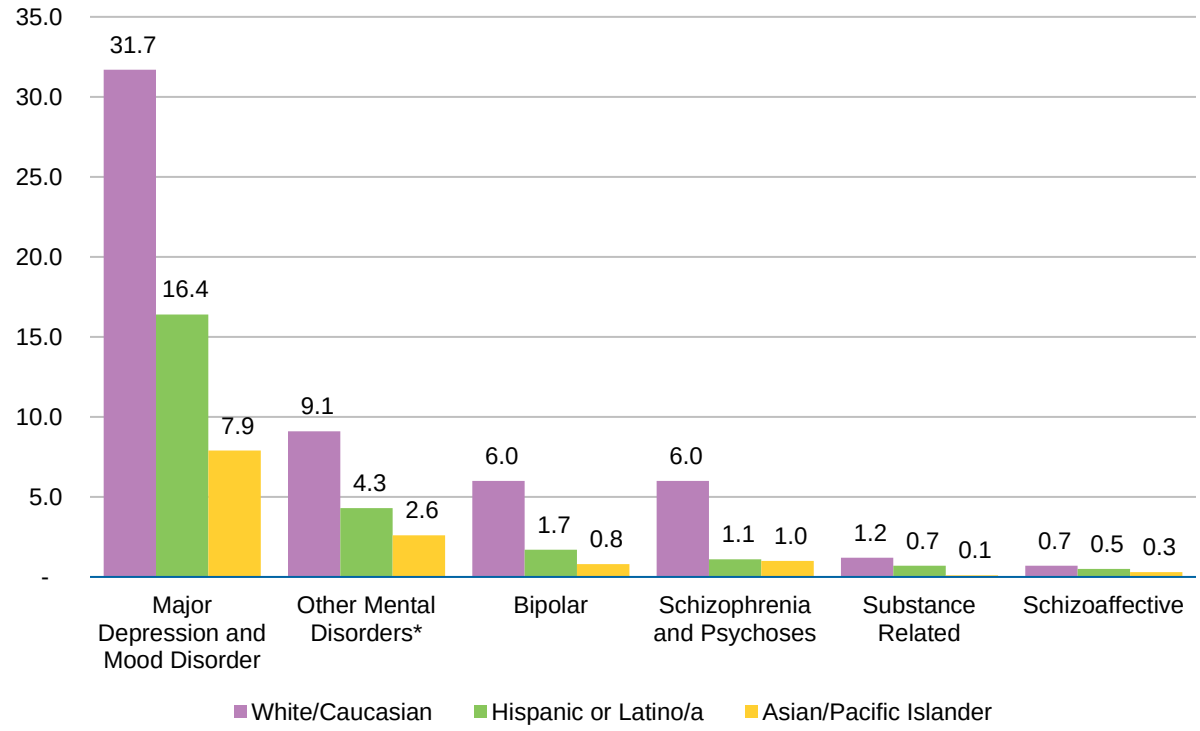


Note: 'Other' includes mental disorders such as other unspecified mood disorders, conduct disorders, and disorders related to sleep, eating, elimination, and pain. Source: HCA, 2020.

White/Caucasian youth accounted for 34.6% of all mental illness and substance abuse-related hospitalizations, followed by Hispanic or Latino/a (33.7%), Asian and Pacific Islander (6.3%), and Black/African American (3.5%) youth. Females accounted for half (50%) of substance-related hospitalizations, the majority (66.2%) of mental illness hospitalizations, and 64% of all admissions.

The 2,155 Orange County-based hospitalizations for mental health or substance use disorders in 2020 accounted for 5.0% of all hospitalizations to youth, including births.

Figure 13: Mental health hospitalization rates per 10,000 children, by race/ethnicity, 2020



Note: *'Other includes mental disorders such as other unspecified mood disorders, conduct disorders, and disorders related to sleep, eating, elimination, and pain. Rates for Black/African American children are not included due to unstable and unreliable estimates for small case numbers and populations. Source: HCA, 2020.

In 2020, the majority (66%) of the 2,155 mental illness and substance use hospitalizations for Orange County youth occurred at hospitals in Orange County. As a proportion of hospitalizations, Orange County hospitals were serving increasingly more Orange County youth between 2016 and 2019. However, this proportion decreased between 2019 and 2020, from 69.5% of hospitalizations to 66.0%.

The remaining Orange County youth with a hospitalization for mental illness or substance use disorder received their care in Los Angeles (23%), San Bernardino (1%), and San Diego (1%) hospitals. Most of these hospitalizations were covered by Medi-Cal (56%) and private insurance (42%). Since 2016, Medi-Cal has covered an increasing proportion of hospitalizations related to youth mental illness and substance use.

Table 16: Number and percent of hospitalizations among Orange County youth that occurred at Orange County hospitals, by payer type

Youth Hospitalizations	2016	2017	2018	2019	2020
Number of Hospitalizations	1,733	2,022	2,098	2,537	2,155
Percent of Hospitalizations for Mental Health and Substance Use Disorders	n/a	n/a	n/a	5%	5%
Percent of the hospitalizations among Ornge County youth that occurred at hospitals in Orange County	55.0%	56.0%	64.0%	69.5%	66.0%
Medi-Cal covered hospitalizations	51.0%	51.0%	53.0%	56.3%	56.0%
Private insurance covered hospitalizations	45.0%	45.0%	46.0%	41.3%	42.0%

Source: HCA, 2020.

The Orange County hospitalization rate for mental health and substance use per 10,000 youth varied greatly by city of residence. The top four cities from which youth are hospitalized for mental illness or substance use are Newport Beach, Fountain Valley, Costa Mesa, and Orange. Between 2016 and 2019, the number of hospitalizations increased in nearly all communities except for Ladera Ranch, Laguna Hills, and Los Alamitos.

Table 17: Change in hospitalization rate for mental health and substance use per 10,000 Orange County youth, by city and year

City of Residence	Count			Rate per 10,000			Change in rate of hospitalizations	
	2016	2019	2020	2016	2019	2020	2016 - 2019	2019-2020
Aliso Viejo	26	38	23	20.1	29.6	18.1	47%	-39%
Anaheim	240	352	249	27.1	36.5	26.3	35%	-28%
Brea	23	30	16	24.9	33.1	17.9	33%	-46%
Buena Park	41	59	36	20.7	31.2	19.5	51%	-38%
Costa Mesa	74	125	117	30.8	50	47.3	62%	-5%
Cypress	28	45	33	26.3	48	36.4	83%	-24%
Dana Point	16	40	11	26.5	91.1	25.3	244%	-72%
Fountain Valley	26	41	51	23	40	51.5	74%	29%
Fullerton	83	144	114	26.5	47	38	77%	-19%
Garden Grove	95	115	111	23	27.5	27.0	20%	-2%
Huntington Beach	109	153	150	27.7	42	42.2	52%	0%
Irvine	103	151	176	19.8	29	33.7	46%	16%
La Habra	17	53	36	10.9	31.9	22.0	193%	-31%
La Palma	4	9	6	12.2	29.9	20.6	145%	-31%
Ladera Ranch	20	24	28	23	21.4	24.9	-7%	16%
Laguna Beach	11	16	11	28.3	44.4	31.4	57%	-29%
Laguna Hills	23	19	13	36.5	34.5	24.2	-5%	-30%
Laguna Niguel	36	50	38	26.6	39.1	30.3	47%	-23%
Laguna Woods	1	0	1	0	0	27.1	n/a	n/a
Lake Forest	42	43	34	22.5	31.3	24.8	39%	-21%
Los Alamitos	11	10	15	38.3	24.4	38.2	-36%	57%
Mission Viejo	49	70	60	24.7	38.8	34.2	57%	-12%
Newport Beach	28	46	54	18.1	49.1	59.0	171%	20%
Orange	132	173	150	43.9	53.7	47.1	22%	-12%
Placentia	34	36	35	27.2	29.6	29.0	9%	-2%
Rancho Santa Margarita	29	46	29	21.8	39.4	25.5	81%	-35%
San Clemente	34	46	53	21.8	26.5	31.2	22%	18%
San Juan Capistrano	29	30	17	33.7	35.7	20.8	6%	-42%
Santa Ana	191	269	225	19.9	26.9	23.0	35%	-14%
Santa Ana/N. Tustin	22	40	28	36.7	38.2	27.1	4%	-29%
Seal Beach	5	10	5	15.7	34.5	17.5	120%	-49%
Stanton	15	19	24	14.7	23.4	30.1	59%	29%
Tustin	63	87	64	31.7	40.8	30.5	29%	-25%
Unincorporated	10	48	33	3.6	67.2	46.2	1,767%	-31%
Villa Park	0	4	1	0	47.5	12.6		-73%
Westminster	34	54	56	18	27.2	28.8	51%	6%
Yorba Linda	29	42	52	18.3	30.1	38.5	64%	28%

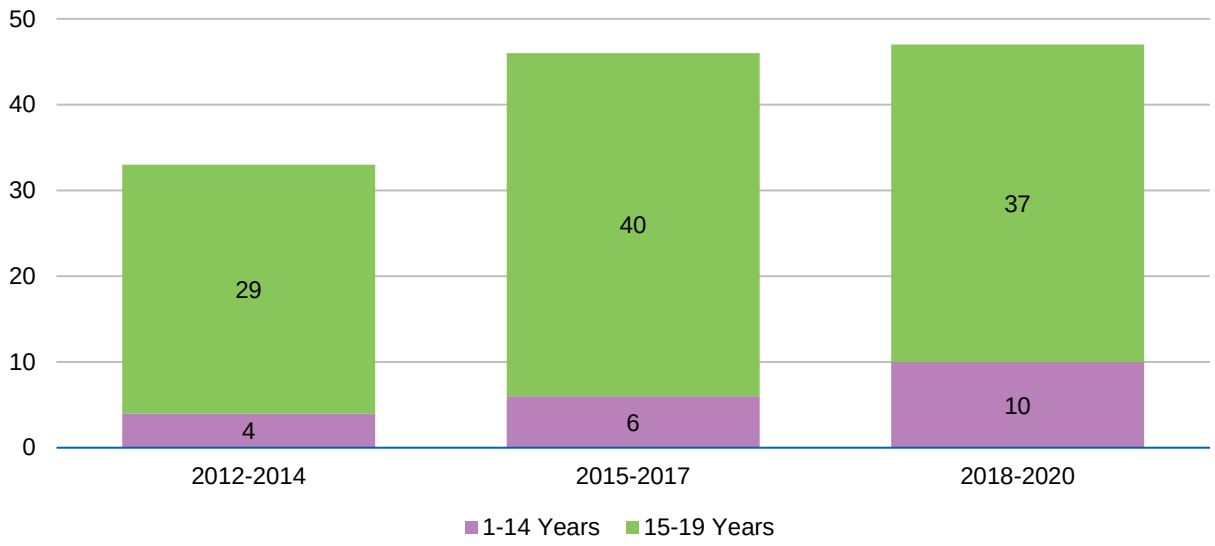
Source: HCA, 2020.

Suicidality and Suicide

Suicide is a leading cause of death and major public health problem in the United States, responsible for nearly 46,000 deaths in 2020, according to the Centers for Disease Control and Prevention. Nationally, suicide rates (all ages) increased 3% between 2000 to 2018 and declined in 2019 and 2020.In 2020, suicide was among the top nine leading causes of death for people ages 10-64. Suicide was the second leading cause of death for people ages 10-14 and 25-34.[8]

In 2018-2020, in Orange County, suicide was the second leading cause of death among youth ages 1-19 years, with 47 deaths. The number of deaths in Orange County due to suicide has increased from 33 deaths in 2012-2014, despite a 6.1% decrease in the population ages 0-17 years between 2012 and 2019.

Figure 14: Number of suicide deaths for children (1-19 years), by age group and number of deaths, 2012-2014 to 2018-2020



Source: HCA, 2020.

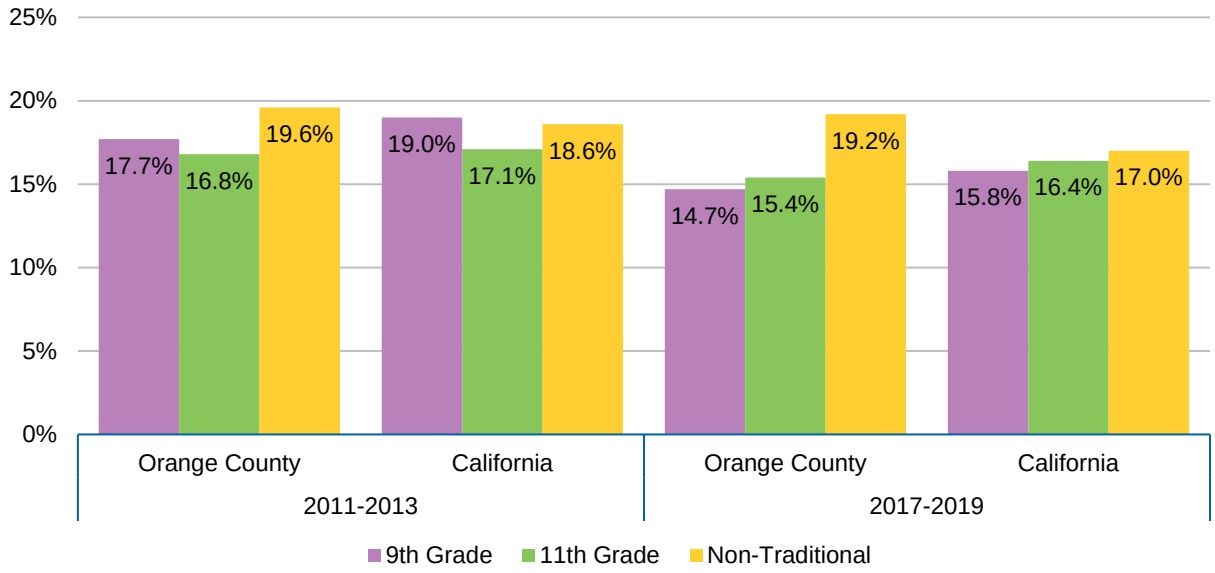
Suicide deaths, however, account for only part of the problem. The number of people who think about or attempt suicide is even higher. In 2020, an estimated 12.2 million people in the United States seriously thought about suicide, 3.2 million planned a suicide attempt, and 1.2 million attempted suicide.[9] Those who survive suicide may have serious injuries, in addition to experiencing depression and other mental health problems.

According to The Substance Abuse and Mental Health Services Administration's (SAMHSA') 2020 National Survey on Drug Use and Health, about 11% of young adults (ages 18-25) report that they've had serious thoughts about suicide, and about 1% to 2% report a suicide attempt during the prior year. Nationally, according to the 2019 Youth Risk Behavior Survey, these

numbers are higher among high school students — nearly 20% report serious thoughts about suicide and 9% report a suicide attempt.[10]

In Orange County, the percentage of students who seriously considered suicide during the past 12 months ranged from 14.7% among 9th grade students to 19.2% among non-traditional school students in 2017-2019, a wider range than in California from 15.8% for 9th grade students to 17.0% for non-traditional students.[56] Both Orange County and California experienced small decreases in suicidality trends since 2011-2013 for all grade levels.

Figure 15: Percent of public-school students who seriously considered attempting suicide in the previous year, by grade level



Source: CHKS, 2017-2019.

Substance Use and Mental Health

Youth struggling with emotional problems sometimes turn to alcohol or drug use to help them manage painful or difficult feelings. Substance use may help mitigate mental health symptoms like hopelessness, anxiety, irritability, and negative thoughts at first.[11] However, since a youth's brain is still developing, the substance use can exacerbate these symptoms and result in abuse or dependence more quickly than with an adult.[11] A 2016 study of 10,000 adolescents found that two-thirds of those who developed alcohol or substance use disorders had experienced at least one mental health disorder.[12]

Among the types of health problems listed in the community health survey, drug addiction was ranked to have the most significant impact on the health of children and youth by 21% of respondents, with alcohol addiction ranked 10th by 10%.

Among the list of harmful behaviors, factors and conditions contributing to injuries, violence and poor health outcomes provided to survey respondents, substance use, including opioid

use/misuse (e.g., fentanyl); tobacco use, including vaping; and alcohol misuse ranked 8th, 9th, and 12th, respectively.

Table 18: Percent of survey respondents ranking as top three substance use related harmful behaviors, factors, and conditions contributing to injuries, violence, and poor health outcomes

	Healthcare Professionals (n=152)	Service Providers (n=153)	Families (n=1,029)	All Respondents (n=1,334)
Tobacco use, including vaping	20%	18%	11%	13%
Opioid use/misuse (including fentanyl)	4%	3%	15%	13%
Alcohol misuse	7%	4%	13%	11%

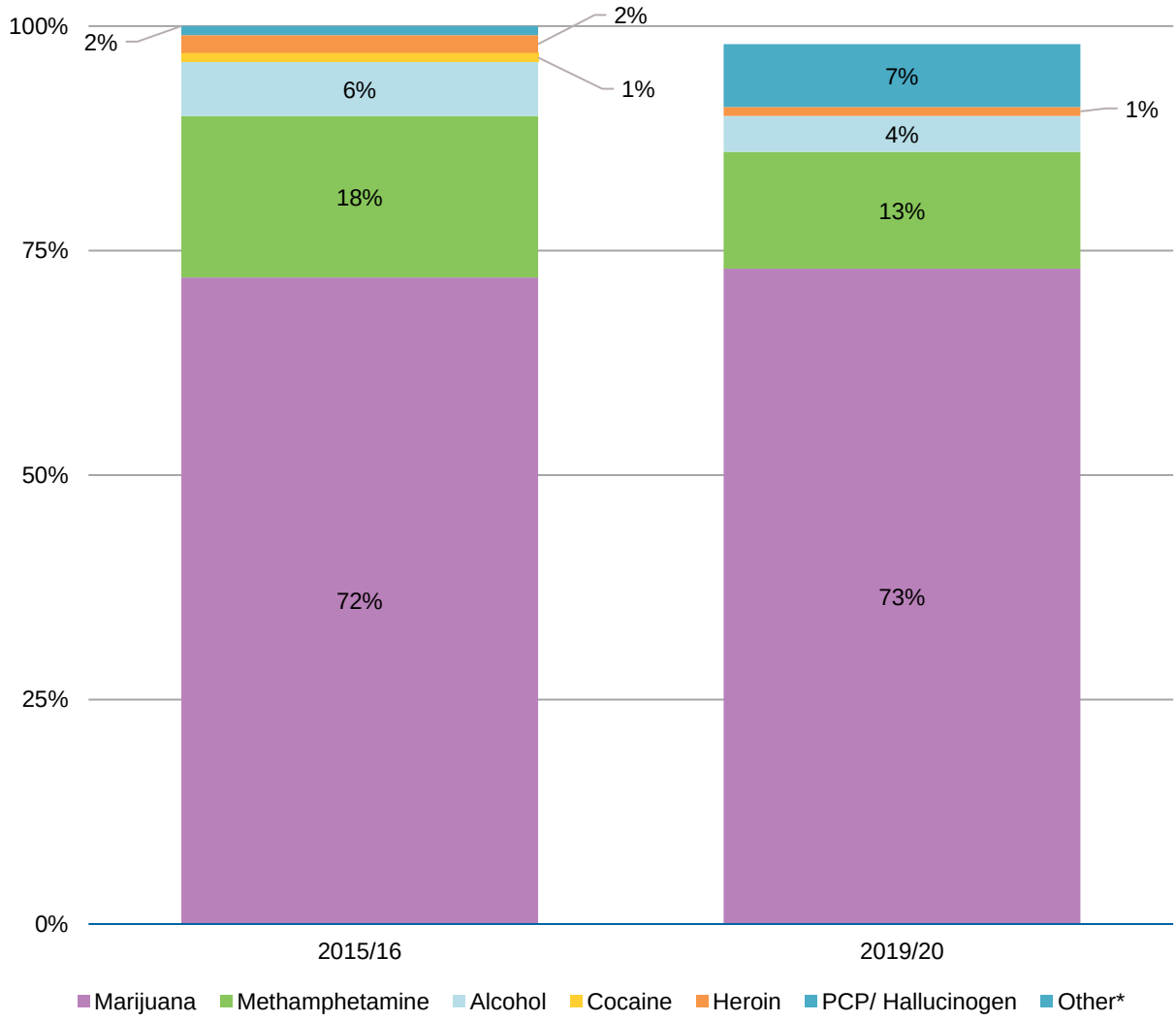
Source: CHNA Community Health Survey, 2022.

Hospitalizations among Orange County youth (0-17 years) for substance-related diagnoses accounted for 2.4% of all youth admissions in 2020. This was a decrease of 3% over the past decade to 0.7 per 10,000 population.

The number and percent of adolescents receiving substance use treatment services provided by the Orange County Healthcare Agency's (HCA) Behavioral Health Services reflect that treatment for marijuana use is the most common, followed by methamphetamine and "other" substances (e.g., inhalants, amphetamines, sedatives, stimulants and over the counter drugs). Since 2015-2016, treatment services for substances counted in the "other" category has increased, while treatment for methamphetamines and alcohol decreased. HCA Behavioral Health Services predominately serves youth ages 15-17; however, the proportion of youth substance users ages 13-14 years increased between 2015-2016 and 2019-2020, from 10.3% of adolescents served to 19.9% of adolescents served. [iii]

[iii]Data reflects the trend of adolescent utilization of services provided by ADAS and its contract providers rather than the absolute number of adolescents needing services or using alcohol or other drugs in Orange County.

Figure 16: Percent of adolescents receiving substance use services, by drug of choice and age, 2010/11 to 2019/20



*Note: Includes inhalants, amphetamines, sedatives, stimulants and over the counter drugs. Source: HCA, 2019/2020.

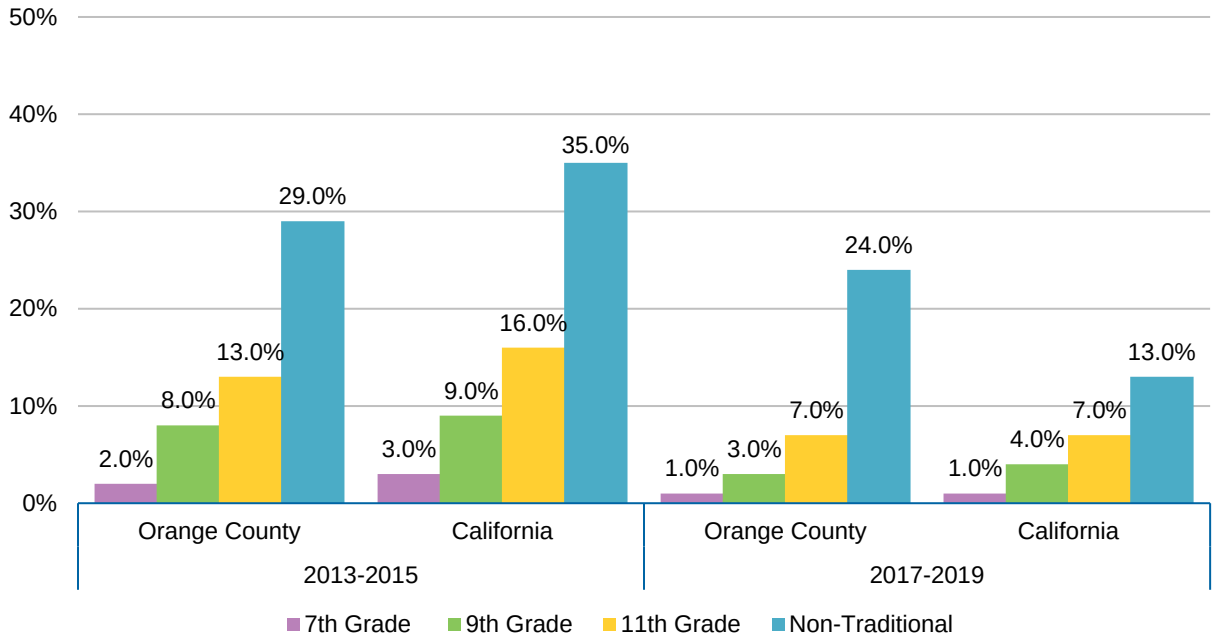
Alcohol

Patterns formed during adolescence play a critical role in health throughout adulthood. According to research by the National Institute on Alcohol Abuse and Alcoholism, adolescents who begin drinking at a young age are more likely to develop alcohol dependence than those who begin drinking at age 21. Alcohol use also impairs judgment and can lead to other high-risk behaviors such as driving while intoxicated.

As part of the CHKS, self-reported binge drinking rates had decreased between 2013-2015 and 2017-2019 in Orange County and California. In Orange County, 9th grade (14-15 years), and 11th grade (16-17 years) students were less likely to binge drink when compared to students in non-traditional programs (e.g., students in all grades attending an alternative education

program). In 2017-2019, non-traditional program students in Orange County had higher binge drinking rates compared to their peers in California, 24.0% and 13.0%, respectively.

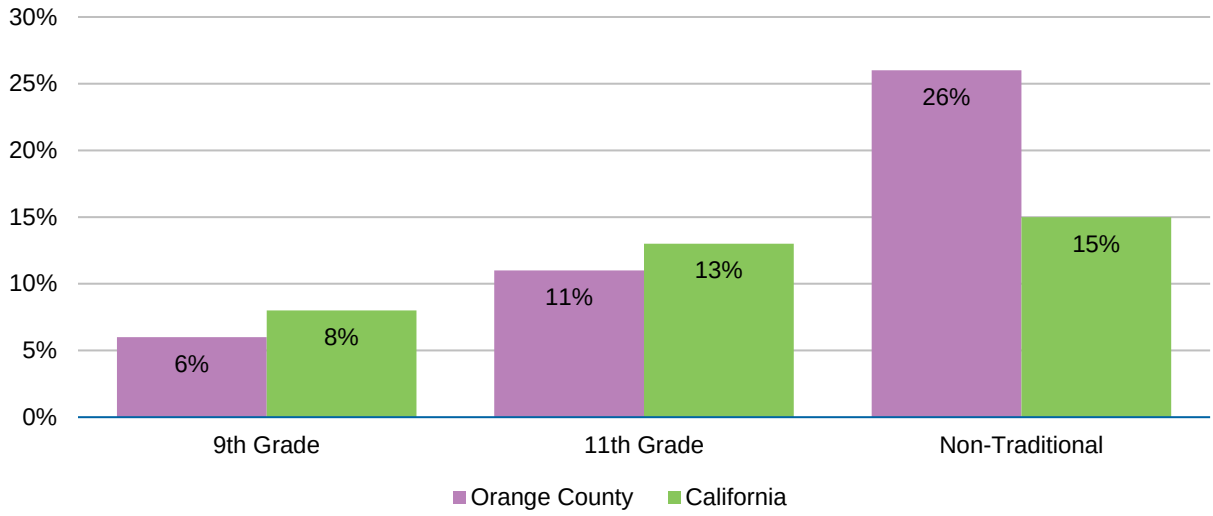
Figure 17: Percent of students who binge drank in the past 30 days



Note: Estimated percentage of public-school students in grades 7, 9, 11, and non-traditional programs who have consumed five or more drinks of alcohol within a couple of hours in the previous 30 days.
Source: CHKS, 2027-2019.

According to the CHKS, Orange County 9th and 11th grade students were less likely to report ever having driven a car when they had been using alcohol or drugs or ridden in a car driven by someone who had been using alcohol or drugs, compared to California. However, this rate was higher for Orange County youth in non-traditional education programs (26%) compared to California (15%).

Figure 18: Percent of students ever having driven a car when they had been using alcohol or drugs, or ridden in a car driven by someone who had been



Source: CHKS, 2017-2019.

Vaping and Cigarette Use

In Orange County, in 2017-2019, 9% of Grade 9 students, and 13% of Grade 11 students, reported at least one day of e-cigarette use in the past 30 days.[56] These rates were higher compared to California, where 6% of Grade 9 and 11% of Grade 11 students reported at last one day of e-cigarette use in the past 30 days. Vaping is more prevalent than cigarette smoking in both Orange County and California. In 2015-2019, 3% of 9th and 11th grade high school students in Orange County and California reported smoking cigarettes at least one day in the past 30 days. Since 2013-2015, vaping rates in both Orange County and California have decreased.

Drug Overdose and Mortality

According to HCA analysis conducted in 2022, drug and alcohol-related deaths increased notably across the county during the COVID-19 pandemic years of 2020 and 2021.[13] The number of deaths from drugs and alcohol among all ages increased by 32% from 2019 to 2020, and another 3% from 2020 to 2021. The most dramatic changes in Orange County drug and alcohol-related mortality rates were among youth. Between 2019 and 2020, there was an 80% increase, from one death to nine, annually, for youth ages 10-17 years. For young adults 18-24 years, there was a 15% increase from 34 to 85 deaths annually.

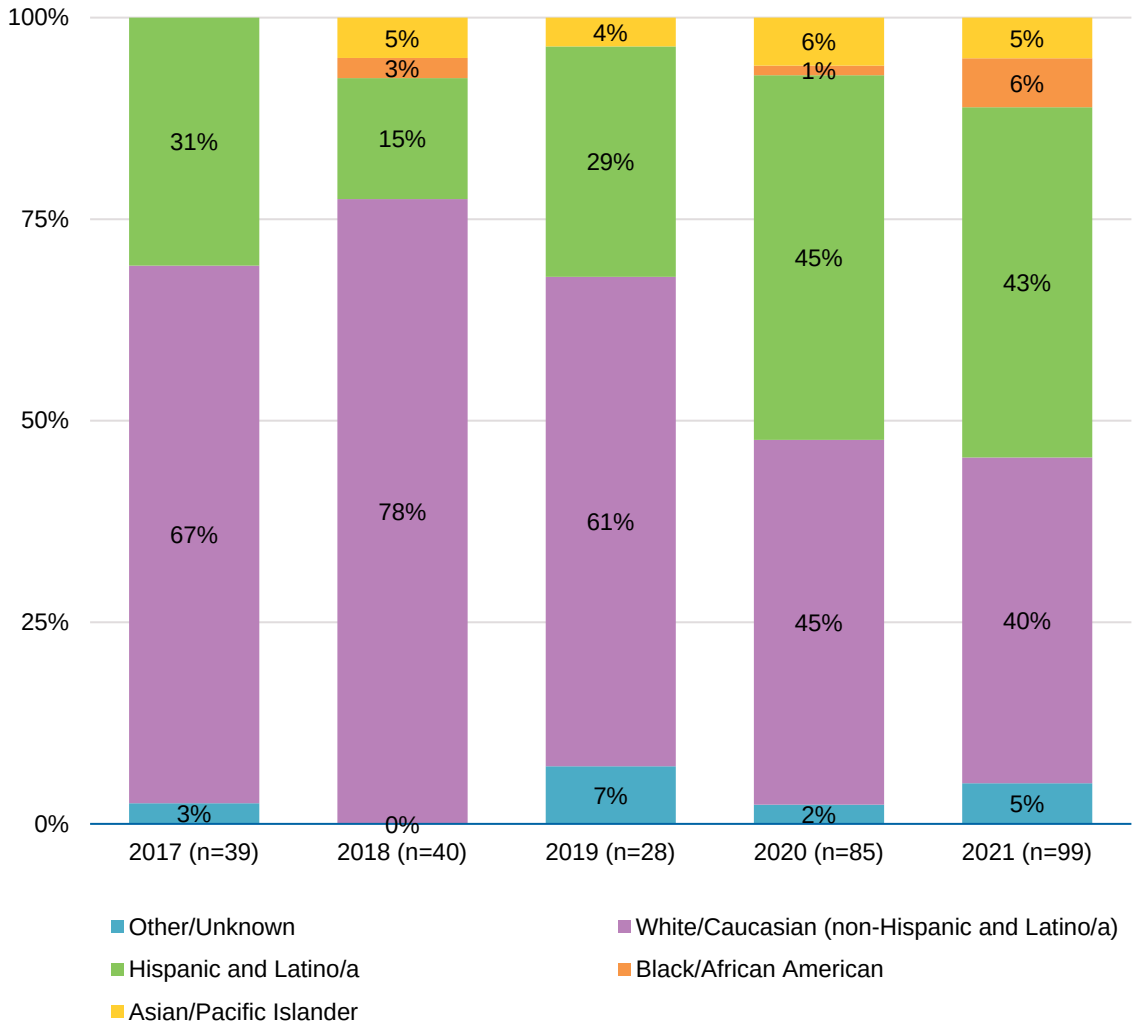
Table 19: Number of deaths from drug and alcohol-related causes in Orange County

Number Of Deaths from Drug and Alcohol-Related Causes in Orange County						Percent Change in Number of Deaths	
Age	2017	2018	2019	2020	2021	2019 to 2020	2020 to 2021
<10 Years	0	2	0	1	0	n/a	n/a
10-17 Years	1	0	1	9	20	80%	122%
18-24 years	47	44	34	85	85	15%	%
25-34 years	90	98	126	190	241	51%	27%
35-44 years	99	107	126	157	286	25%	82%
45-54 years	154	160	170	207	276	22%	33%
55-64 years	194	218	195	235	288	21%	23%
65-74 years	97	88	89	114	111	28%	-3%
75-84 years	29	37	30	26	32	-13%	23%
85+ years	11	10	11	11	7	%	-36%
Total OC Residents	722	764	782	1,035	1,346	32%	3%

Source: HCA. (2022). Drug and Alcohol Deaths Among Youths and Young Adults: The Impact of Synthetic Opioids During the Pandemic.

The HCA analysis found that while White/Caucasian youths (non-Hispanic or Latino/a) had the highest proportion of overdose deaths in 2017, Hispanic or Latino/a youth had the highest proportion of overdose deaths in 2021.

Figure 19: Percent of opioid-related overdose deaths among youth and young adults, 2017 to 2021, by race and ethnicity



Source: HCA. (2022). Drug and Alcohol Deaths Among Youths and Young Adults: The Impact of Synthetic Opioids During the Pandemic.

Among youth ages 10-24 years, the most frequent type of drug and alcohol substances present at the time of death were opioids/opiates. Among youth ages 10-17 years, opioids were noted in seven deaths (78% of deaths) in 2020, and in 2021 that number rose to 19 (95%).[13] Other substances present were alcohol, cannabis, sedatives, stimulants, and cocaine. None of these other (non-opioid) substances, however, was present in more than five deaths in either year. Note that one death can be counted towards two or more substances because multiple substances can be present at the time of death.

Among young adults ages 18-24 years, between 2017 and 2019, opioids were present in approximately 8% to 9% of drug and alcohol-related deaths.13 In 2020, opioids were noted in 89% of deaths, rising even higher to 94% in 2021.[13] The presence of sedatives and stimulants

was also common, with 37% of deaths in 2020 involving sedatives, and 26% involving stimulants in that same year. Other drugs and substances, including cocaine, cannabis, and alcohol, were each present in approximately 25% of deaths or fewer for both 2020 and 2021.

Most opioid-related overdose deaths among youth and young adults were accidental. 2021 demonstrated the highest number of opioid-related overdose deaths for individuals under 25 years (n=99), of which 99% were accidental (n=98) and 1% was intentional (n=1).[13]

Table 20: Percent of opioid-related overdose deaths among youth and young adults by intent, 2017 to 2021

Intent	2017	2018	2019	2020	2021	2017-2021 Total
Accidental	94.9%	97.5%	92.9%	92.9%	99.0%	95.9%
Unintentional	5.1%	0.0%	3.6%	3.5%	1.0%	2.4%
Undetermined	0.0%	2.5%	3.6%	3.6%	0.0%	1.7%

Source: HCA. (2022). Drug and Alcohol Deaths Among Youths and Young Adults: The Impact of Synthetic Opioids During the Pandemic.

The increase in opioid drug-related deaths was driven by synthetic opioids (excluding methadone), which saw nearly a 547% jump from 2017 (n=15) to 2021 (n=97) with the sharpest increase in 2020 (n=79). A specific concern raised in the HCA analysis was fentanyl-involved overdose deaths among youth and young adults. Young adults experienced a 550% increase in fentanyl-involved overdose deaths from 2017 (n=12) to 2021 (n=78). [13] The overall rate for fentanyl-involved overdose deaths increased within the 5-year timeframe from 1.1 per 100,000 persons to 9.4 per 100,000 persons.

Table 21: Types of opioids involved in opioid-related overdose deaths among youth and young adults, 2017 to 2021

Types of Opioids	2017	2018	2019	2020	2021
Heroin	15	13	4	3	2
Natural and Semisynthetic Opioids	17	11	4	6	7
Methadone	1	0	0	5	1
Synthetic Opioids excluding Methadone	15	20	24	79	97
Fentanyl-involved overdose deaths	12	19	19	70	78

Source: HCA. (2022). Drug and Alcohol Deaths Among Youths and Young Adults: The Impact of Synthetic Opioids During the Pandemic.

Adults who died of an overdose were most frequently between ages 25-54 years and in their child-rearing years. In Orange County, in 2021, 6% (n=803) of drug and alcohol related deaths were among adults ages 25-54 years.13 Substance use in the household is considered an adverse childhood experience and associated with health risks and disease for children in these household later in life. The loss of a parent from drug and alcohol use has a profound effect on children. A recent longitudinal study found that bereavement by sudden parental death was

associated with an increased incidence of depression, primarily during the first two years, along with post-traumatic stress disorder and functional impairment.[14]

Although Orange County has experienced one of the lowest all-drug death rates per 100,000 residents in California, the rate increased from 12.2 in 2016 to a high of 19.5 in 2020, a 71.4% increase.[15]

Table 22: Age adjusted drug death rate per 100,000 residents by drug type, 2016 to 2020

Drug Deaths by Type	2016	2017	2018	2019	2020	Percent Change: 2016 to 2020	Percent Change: 2019 to 2020
All Drug Deaths	12.2	10.9	11.9	11.2	19.5	60.2%	74.9%
Heroin	1.4	1.7	1.9	2.2	2.4	68.1%	9.0%
Opioid	8.5	7.5	7.5	7.5	15.5	82.4%	106.6%
Psychostimulant	4.0	3.8	5.2	4.6	8.7	114.9%	88.3%

Source: HCA. (2022). Drug and Alcohol Deaths Among Youths and Young Adults: The Impact of Synthetic Opioids During the Pandemic.

Relative to other California counties, Orange County had higher rates of heroin and opioid related deaths.[15]

Table 23: Orange County rank compared to all 61 California counties

Drug Related Death by Type	Orange County Rank Among 61 California Counties				
	2016	2017	2018	2019	2020
All Drug Deaths	37	39	37	50	32
Heroin	16	14	15	20	26
Opioid	17	19	16	27	16
Psychostimulant	31	38	34	44	36

Note: County ranks are based on age adjusted death rates per 100,000. The higher the ranking, the lower the adjusted death rates compared to other California counties. For example, for all drug deaths, Orange County ranked 32 out of 61 counties. This means that 29 counties had lower age adjusted death rates than Orange County. Source: HCA. (2022). Drug and Alcohol Deaths Among Youths and Young Adults: The Impact of Synthetic Opioids During the Pandemic.

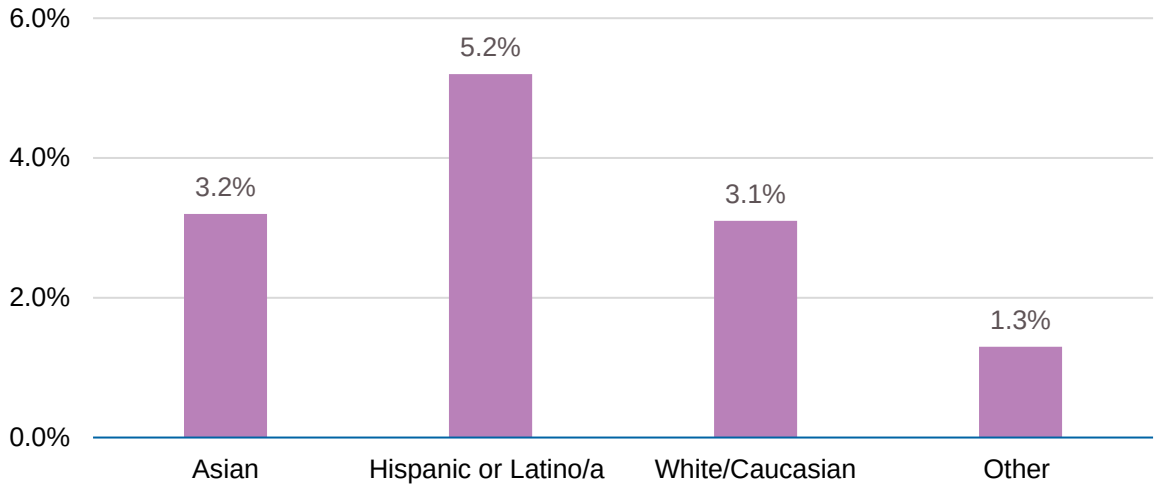
Priority 2: Access to Pediatric Healthcare Services

Access to affordable, quality healthcare is vital to physical, social, and mental health. Access to care allows individuals to enter the healthcare system, find care easily and locally, pay for care, and get their health needs met.

The National Academies of Sciences, Engineering, and Medicine (formerly known as the Institute of Medicine) define access to healthcare as the "timely use of personal health services to achieve the best possible health outcomes."[16] Lack of health insurance, poor access to transportation, and limited healthcare resources (e.g., physician shortages) are examples of barriers to care. Experiencing these barriers may mean inconsistent access to healthcare, longer wait times, and delayed care.

In Orange County, in 2016-2020, 3.3% (24,253) of children were uninsured, representing a drop in uninsured rates by 56.0% since 2010-2014 (7.4% or 53,894). Compared to the year prior, the percentage of uninsured children remained constant (3.3% in 2015-2019).[17, iv] Orange County had the same rate of uninsured children (3.3%) compared to California (3.3%) and a lower rate than the United States (5.2%). As outlined in Figure 22, Hispanic or Latino/a children continued to have higher uninsured rates than other racial/ethnic groups, with 5.2% uninsured in 2019, compared to Asian children (3.2%), White/Caucasian children (3.1%), and Other races (1.3%).[18]

Figure 20: Percent uninsured children in Orange County, 2019



Source: U.S. Census. 5-year estimates 2015-2019. Table B01001.

[iv]Annual variations are not as obvious 5-year estimates and limits the ability to interpret the impact of outstanding circumstances that occurred in a single year. The findings are consistent with the assertions that health insurance coverage was not greatly impacted from 2019 to 2020 and instead remained constant. To learn more, see Johnson, Ben & Hashida, Corey. 7 May 2021. "Impact of COVID-19 on Health Care Access." Legislative Analyst's Office

In addition, the California Health Interview Survey (pooled estimate for 2016-2020) estimates 9.2% of Orange County children did not have a usual source of care to go to when they were sick or needed health advice. Most Orange County children who had access to a usual source of care went to a doctor's office (74.5%), while 14.3% usually went to a clinic or community hospital.[19] The proportion of children who regularly visited an Emergency Department, urgent care center or some other location and those without a usual source of care was 11.3%. Approximately 5.8% of Orange County children experienced a delay or lack of medical care, and 3.3% experienced a delay or lack of needed prescription medications.

During the COVID-19 PHE, states received increased Medicaid funding on the condition that they would postpone disenrollment if the federal PHE remained in effect. This has allowed Orange County residents to maintain stable Medi-Cal coverage during the pandemic. While the end of the federal COVID-19 PHE is uncertain, California will have to redetermine eligibility for millions of Medi-Cal enrollees. Key informants spoke to the need for education by providers, hospitals, and health plans to for families around insurance re-enrollment.

The CHNA top concerns related to access to healthcare was:

1. Need for improved access to pediatric services (including pediatric specialists) from diverse providers who understand the county's racial, cultural, and linguistic needs of children and families
2. Geographic disparity in access to pediatric health care

Family Perspective on Access to Care

When asked to consider access, cost, availability, quality, and options in healthcare, 48% of family survey respondents were either neutral or disagreed with the statement, "I am satisfied with the healthcare system in my community." Note that the survey questions around access to care and barriers was in response to overall pediatric care in Orange County and not specific to CHOC providers.

Experiencing barriers to care may be one reason for dissatisfaction with the healthcare system. Eighty-six percent of the survey respondents indicated they have experienced barriers to care, and this rate was similar across all priority populations.

Among respondents who did experience barriers, the number-one barrier in getting services to support their child's(ren's) healthcare and wellness was long wait times to get appointments (43%), followed by needed evening or weekend appointments (28%), and overly complicated application forms to get health insurance (27%).

These three barriers were also cited as the most common barriers to getting services among the priority populations. However, not finding a healthcare provider that understood, valued, and respected their culture, and not finding providers that looked like them, were elevated to among the top three barriers among BIPOC and LGBTQIA+ survey respondents. For example, among BIPOC survey respondents, the second most common barrier was not finding a healthcare

provider that understood, valued, and respected their culture (31%). For LGBTQIA+ survey respondents, not finding providers that looked like them was ranked among the top three concerns.

Table 24: Barrier(s) experienced in getting services to support child's(ren's) healthcare and wellness, by priority population

Barriers to Getting Services	BIPOC (n=786)	Hispanic or Latino/a (n=240)	LGTBQIA+ (n=148)	Families of CSHCN (n=521)	All Respondents (n=786)
Long wait times to get appointment	37%	43%	22%	43%	43%
Needed evening or weekend appointments	27%	30%	13%	25%	28%
Application forms to get health insurance are too complicated	30%	31%	18%	26%	27%
Could not find a healthcare provider that understood, valued, and respected my culture	31%	23%	30%	24%	22%
Could not find providers that looked like me	15%	9%	21%	12%	11%

Note: Green fill denotes the top three barriers selected by each priority population. Source: CHNA Community Health Survey, 2022.

In focus groups and key informant interviews, the number-one barrier to care mentioned was healthcare staffing shortages, followed by long wait times for an appointment. Other concerns stated were short encounters, transportation barriers, fear of discrimination, language barriers, lack of childcare, COVID-19 related barriers, navigating and dealing with health insurance, prescription costs, including high copays, and stigma (for mental health services).

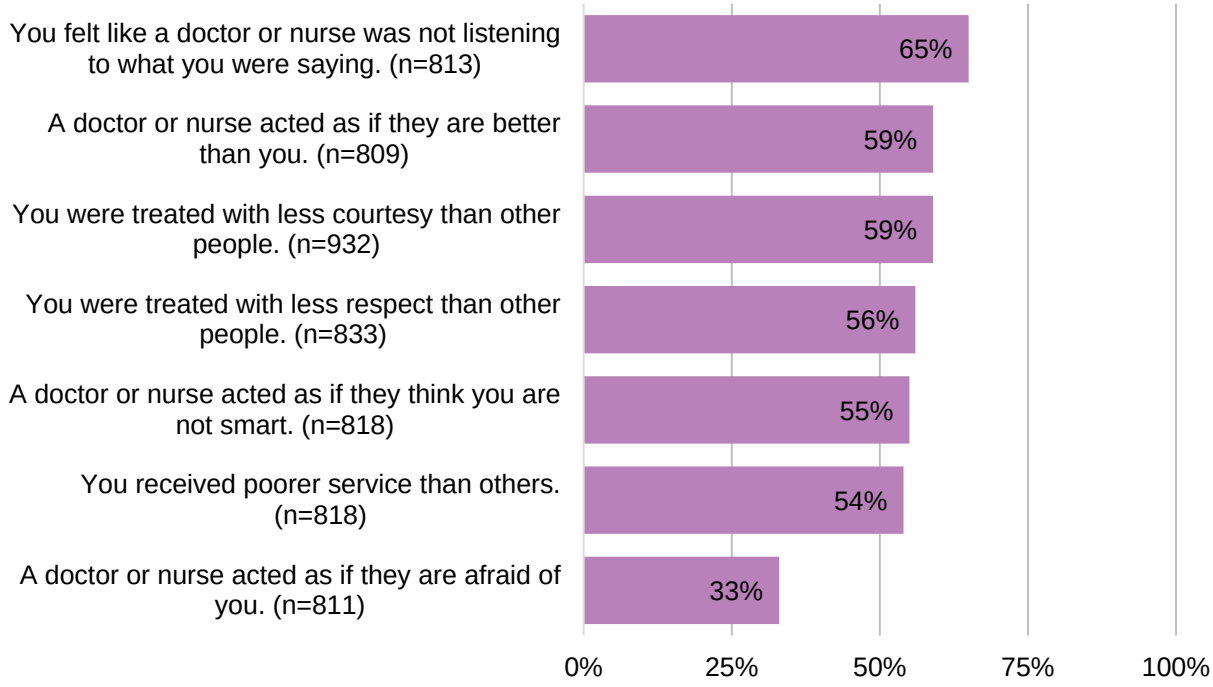
Nearly half (47%) of survey respondents reported avoiding or delaying necessary healthcare services because of fear or discomfort. A person or family may avoid getting healthcare services if they feel their healthcare provider (e.g., doctor, nurse, dentist, pharmacist, midwife, clinical social worker) will not listen to their concerns due to who they are or who their children are. The most common reasons respondents reported avoiding or delaying healthcare was because they were worried that they or their child(ren) would be treated unfairly due to their ethnicity, insurance status, disability, and income.

More than two in three family survey respondents reported they experienced (with any healthcare provider) at least one time when:

- They felt like a doctor or nurse was not listening to what they were saying (65%).
- A doctor or nurse "acted as if they were better than you" (59%).
- They were treated less courteously than others (59%).

Focus group participants were asked to elaborate on the experiences identified in the survey. There was an understanding among participants that the clinicians' workload is likely a major contributing factor in unsatisfactory interactions. Regardless, feelings of being unheard create frustration for families.

Figure 21: How often did any of the following things happen to you while getting healthcare services for you or your child(ren)?

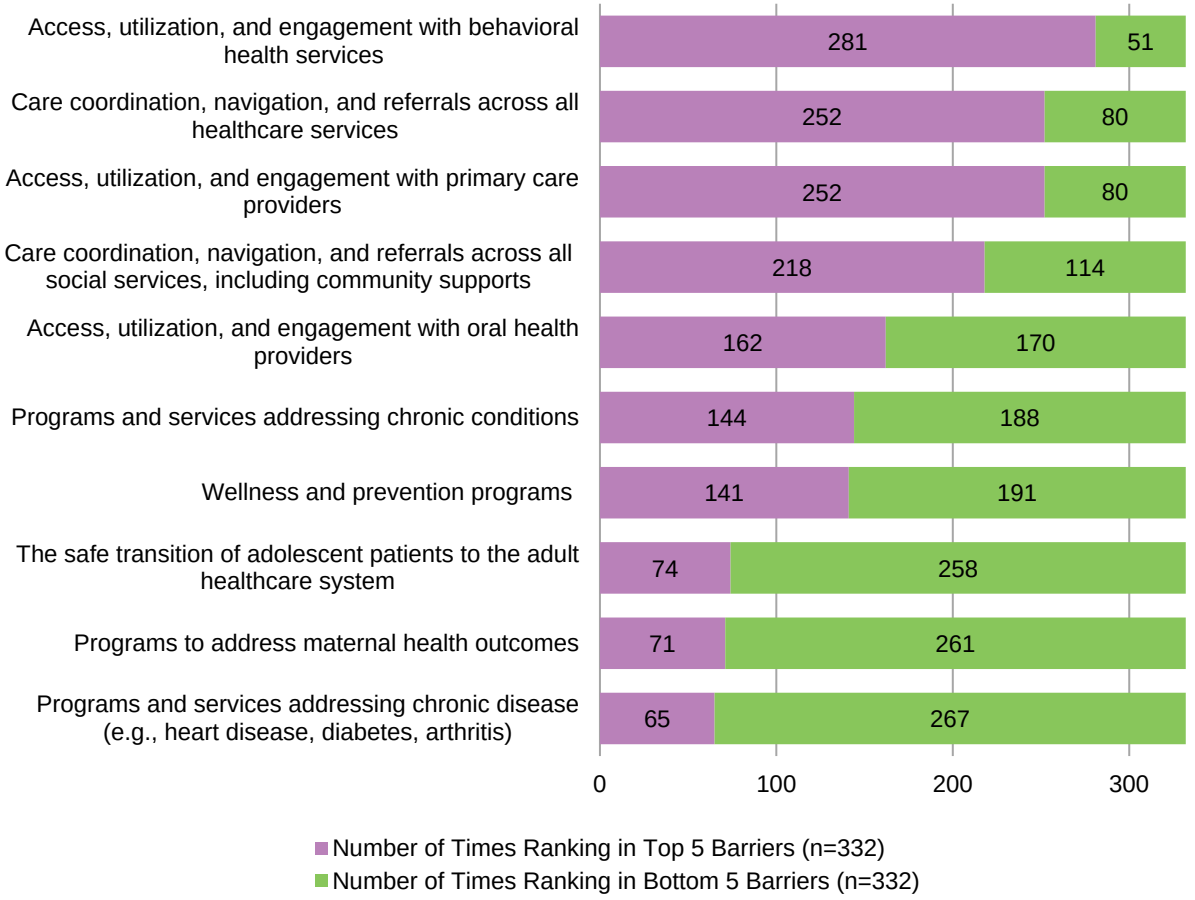


Source: CHNA Community Health Survey, 2022.

Provider Perspective on Access to Care

From the provider perspective, access to behavioral health services and primary care providers, care coordination, navigation, and referrals across all healthcare services were the top three barriers to accessing care for families. Safe transition of adolescent patients to the adult healthcare system, programs to address maternal health outcomes, and programs and services addressing chronic diseases (e.g., heart disease, diabetes, arthritis) were less likely to be ranked as top barriers to accessing care.

Figure 22: Providers ranking of barriers families experience to accessing care



Source: CHNA Community Health Survey, 2022.

Nearly half (41%) of surveyed providers selected “mental health services, such as counseling” to be the number-one service they would like to see in the communities where their patients/clients live, that do not now exist, or that are not available in the way or quantity needed to help people stay healthy. “Programs that help youth develop social, ethical, emotional, physical, and cognitive skills needed during adolescence and to transition into adulthood” was the second most-ranked service needed, followed by wellness services.

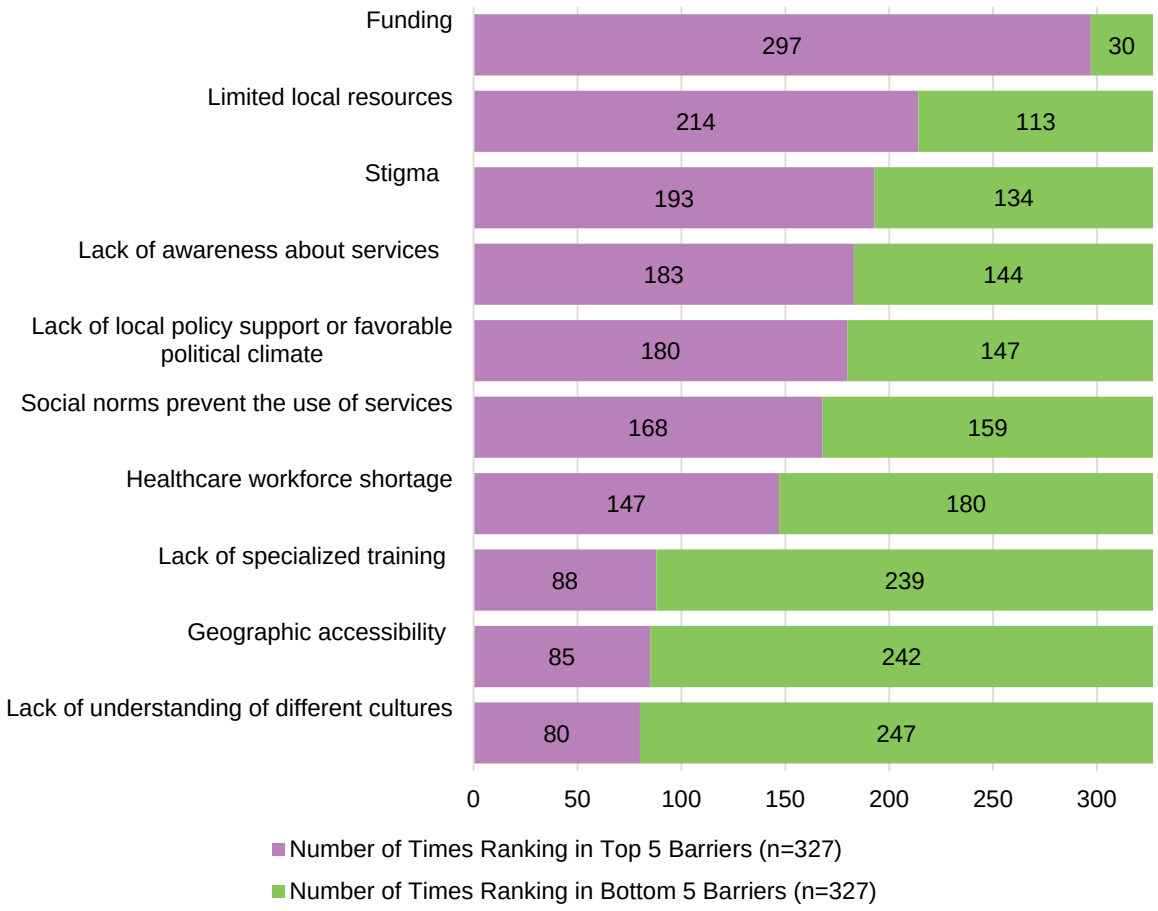
Table 25: Services providers would you like to see in the communities where patients/clients live to help people stay healthy (n=347)

Top 3 Services	Number	Percent
Mental health services, such as counseling	141	41%
Programs that help youth develop social, ethical, emotional, physical, and cognitive skills needed during adolescence and to transition into adulthood	97	28%
Wellness services, such as those to increase healthy eating and physical activity	70	20%

Source: CHNA Community Health Survey, 2022.

The community health survey found that the most significant barrier to having programs and resources in a community that support the health and wellness of children and families was funding. Limited local resources, stigma, lack of awareness about services, and lack of local policy support or favorable political climate were also noted in the top five of the 10 provided common barriers.

Figure 23: Provider identified barriers to having community-based programs and resources that support the health and wellness of children and families



Source: CHNA Community Health Survey, 2022.

Among key informant and focus group provider participants, there was agreement that many barriers make it difficult for families to access care. However, when prompted to think about the most vulnerable children and families engaged with social workers, one issue frequently cited was language barriers. Participants shared that it is not uncommon for families to resist requesting an interpreter because they feel the request may seem ungrateful and disrespectful to the physician. In these situations, participants have observed that the pediatric patient becomes the interpreter for the parents/caregivers. This is not optimal, since a child's vocabulary is limited by their education and life experience, and children lack the maturity, cognitively and emotionally, to manage the stress of accurately providing complex information through interpretation.

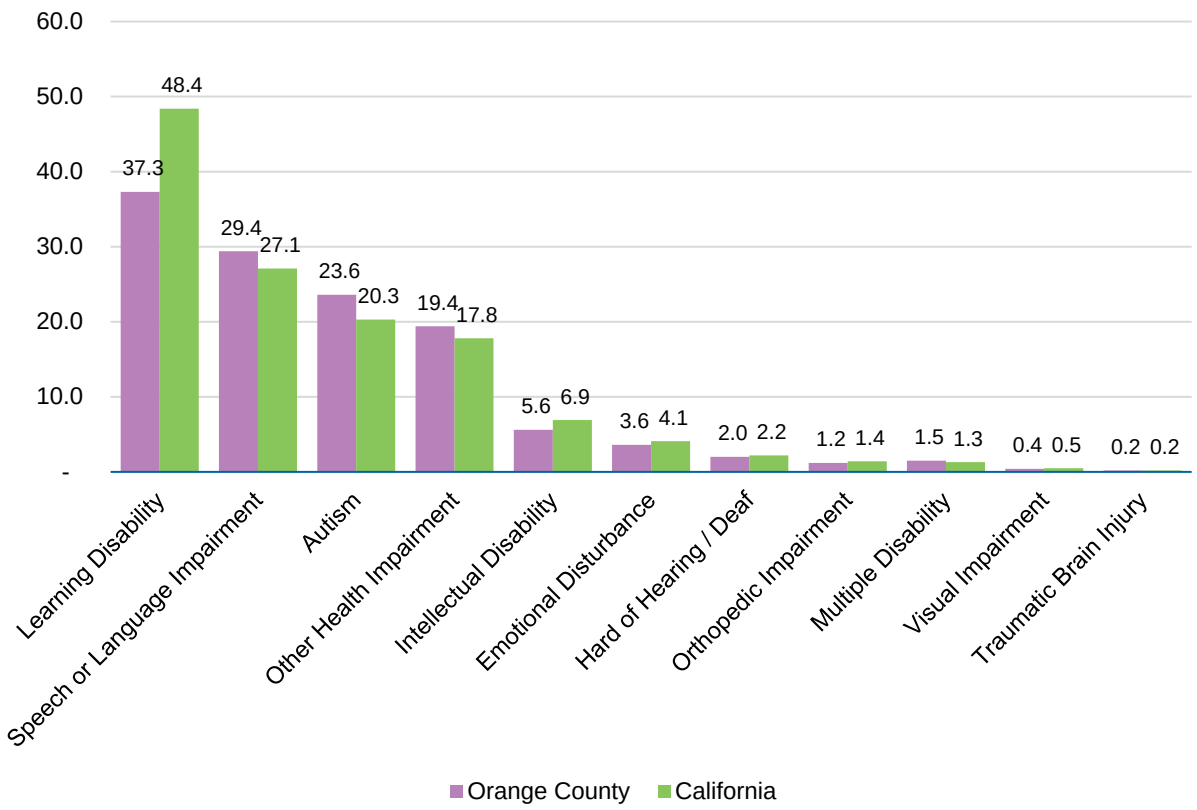
Both families and providers mentioned the struggle to find providers who can take new patients. Families with an established relationship with a clinician often wait months for an appointment. These experiences are shared by many families, regardless of health insurance type. Providers expressed that families may have "the best of the best insurance" and still wait months for an appointment. Wait times are significantly longer when families attempt to access behavioral health and specialty services, such as applied behavior analysis, occupational therapy, and physical therapy.

Access to Care for Children with Special Healthcare Needs and Children Enrolled in Special Education

The barriers noted by community survey respondents, including both providers and families, are often exacerbated or more abundant among families of Children with Special Healthcare Needs (CSHCN). These barriers include long wait times to get appointments, needed evening or weekend appointment, and complicated application forms for insurance coverage and benefits.

In 2016-2019, 13.5% of children (ages 0-17 years) had special healthcare needs in Orange County. This was lower than in California at 14.1%.[20] In 2020, 124.2 per 1,000 Orange County students were enrolled in special education, primarily due to a learning disability (37.3 per 1,000), followed by speech or language impairment (29.4 per 1,000), and autism (23.6 per 1,000). Enrollment in special education for speech or language impairment, autism, and other health impairment was higher in Orange County than in California.

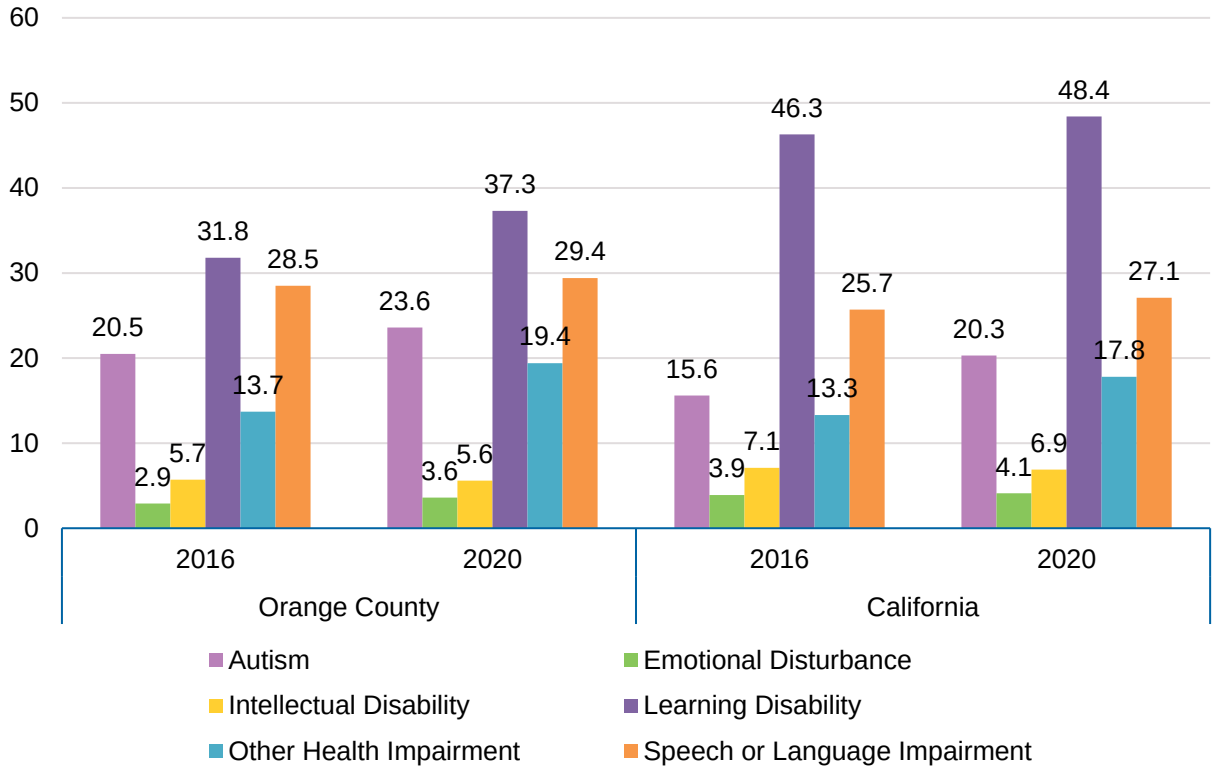
Figure 24: Number of public-school students receiving special education services per 1,000 students, by primary disability type, 2020



Source: As cited by KidsData.org, California Dept. of Education, DataQuest and Special Education Division, 2020.

Enrollment in special education services increased between 2016 and 2020 in both Orange County and California. While California saw a 30% increase in enrollment due to autism, compared to a 15% increase in Orange County,[20] the percent increase in enrollment was higher in Orange County than California for enrollment due to other health impairment, emotional disturbance, and learning disabilities.

Figure 25: Rate of public-school students receiving special education services per 1,000 students, 2016 and 2020



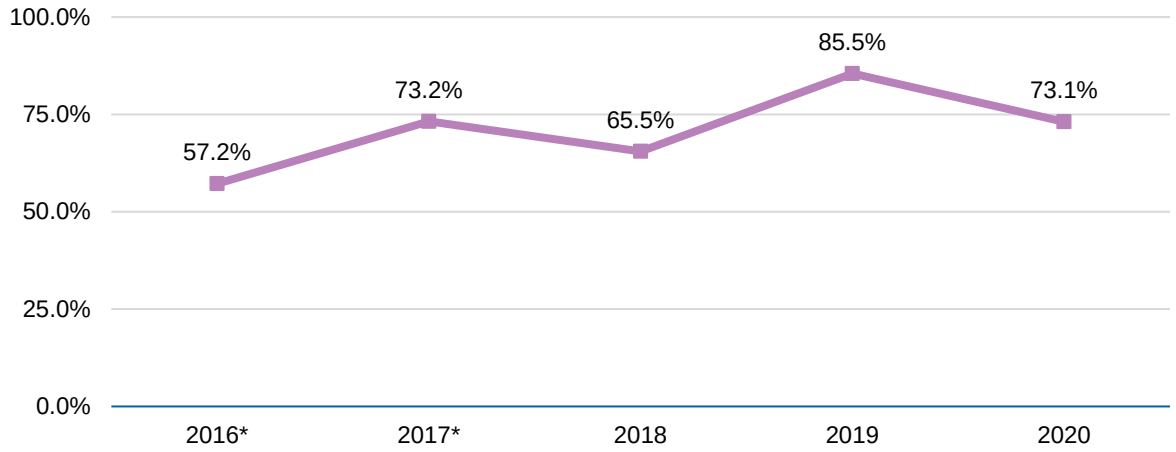
Source: As cited by KidsData.org, California Dept. of Education, DataQuest and Special Education Division, 2020.

A notable resource in Orange County that improved access to care for CSHCN, is the Orange County Children's Screening Registry initiative. With the passage of the California Healthcare Research and Prevention Tobacco Tax Act of 2016 (Proposition 56) in January 2020, California began offering incentives to Medi-Cal providers for completing certain behavioral and development screenings annually for child and adolescent patient populations. A developmental screening is the use of a standardized set of questions to see if a child's motor, language, cognitive, social, and emotional development are on track for their age. The Orange County Children's Screening Registry initiative is in response to Proposition 56.

On average, three new medical practices gained access to the registry per month in 2020. Since then, about one per month have joined. Cumulatively, 32 total practices were added in 2020, eight in 2021, and four in the first quarter of 2022. This is an important indicator of increased access to developmental screening. It should be noted that the Registry data does not represent all pediatricians in Orange County.[21]

Among Orange County children (1 year or older) in 2020, 73.1% of parents reported their child(ren)'s doctor, other health providers, teachers or school counselors had done a developmental screening.[28]

Figure 26: Percent of children who have received a developmental screening, Orange County

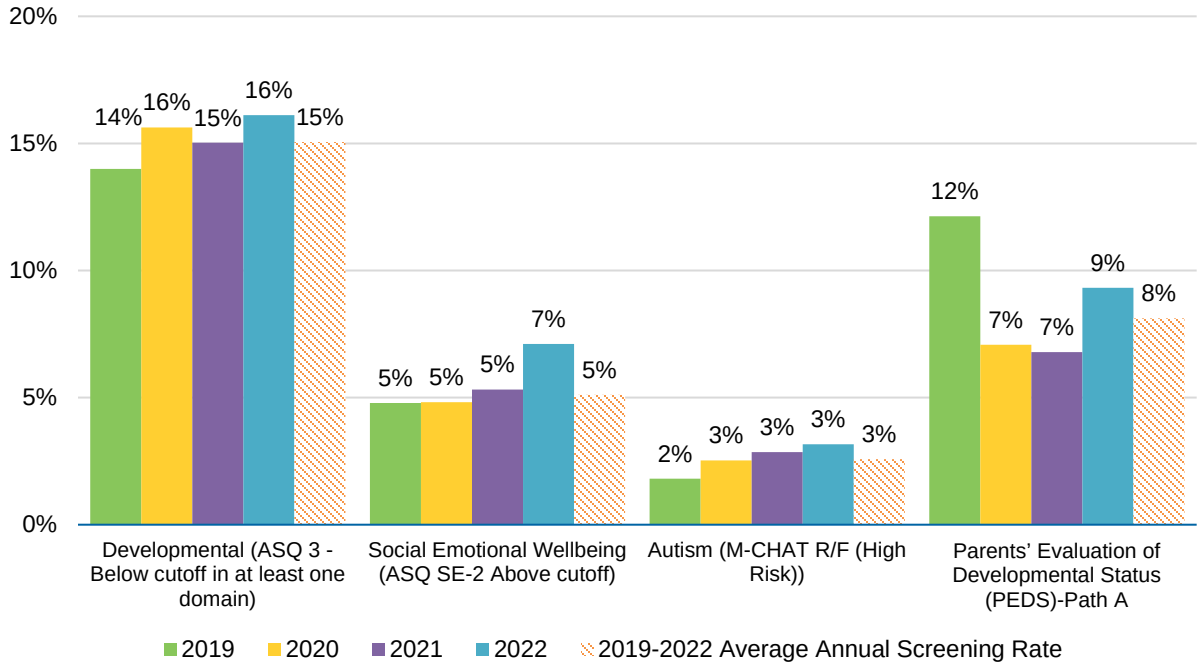


Note: *Statistically unstable. Source: CHIS, 2020.

In Orange County, developmental screens included assessments for developmental delays in communication, gross motor skills, fine motor skills, problem solving, and personal-social (as measured by the Ages & Stages Questionnaires®-3 (ASQ-3); social emotional well-being (as measured by the ASQ SE-2); autism as measured by the Modified Checklist for Autism in Toddlers (M-CHAT™), and the Parents' Evaluation of Developmental Status (PEDS) tool. Developmental delays were the most common concerns identified, followed by social emotional well-being, autism, and a positive score on the PEDS.

The average monthly percent of unique children screening at risk for developmental concerns is highest for developmental delays with a 2019-2022 average screening positivity rate of 15%. On average, 8% of screens using PEDS, and 5% of ASQ SE-2 for social emotional well-being, indicate risk. Compared to screening results in 2020 and 2021, the percentage of screens indicating risk for social emotional well-being and a positive score on the PEDS were higher in 2022.[21]

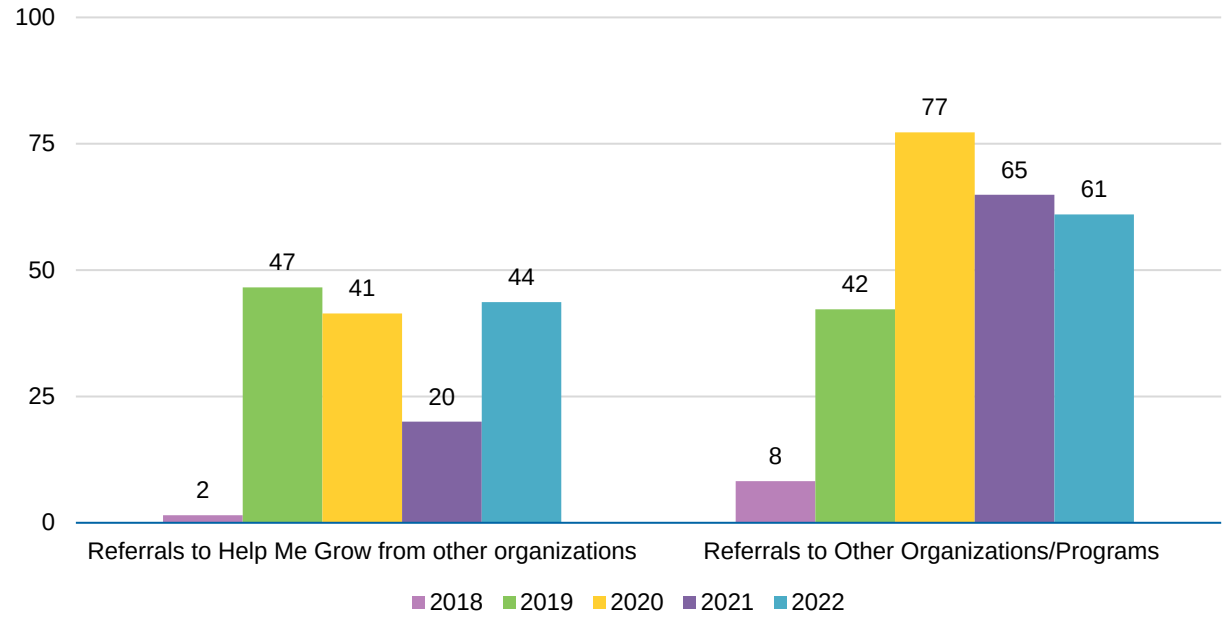
Figure 27: Average monthly percent of unique children screened to be at risk for developmental concerns



Source: Orange County Children's Screening Registry, March 2022.

With implementation of the Orange County Children's Screening Registry, referrals to Help Me Grow, an organization which connects children and families to developmental services, are higher. This is also true for referrals to other organizations/programs, increasing from 41 referrals per month to a high of 77 referrals per month in 2020. Since 2020, referrals to other organizations have decreased. Most referrals were for developmental services, autism services, and therapies. There is limited information available on the outcomes of these referrals and adequacy of services resulting from these referrals.

Figure 28: Average monthly referrals from practices in the Orange County Children's Screening Registry



Source: Orange County Children's Screening Registry, March 2022.

Through both the community health survey and focus groups, families described the challenge of long wait times to get appointments and a lack of healthcare providers and social services in Orange County to meet their child's need. Providers through the community health survey ranked "programs that help youth develop social, ethical, emotional, physical, and cognitive skills needed during adolescence and to transition into adulthood" as the second-most-needed program in the community they serve. Together, this suggests that access to the necessary resources to meet an identified developmental need continues to be a challenge in Orange County.

Health Behaviors and Outcomes

Health issues or concerns identified by the community or in the secondary data, but that did not meet the prioritization criteria, are summarized in this Health Behaviors and Outcomes section. Appendix F provides detailed data tables of this set of health measures.

Maternal, Infant, and Child Health

According to Healthy People 2030, improving the well-being of mothers, infants, and children is an important public health goal for the United States. Monitoring their well-being helps to predict future challenges in community health. Access to maternal and infant healthcare can help mitigate health risks and promote positive outcomes. [v]

Table 26: Maternal and infant health [22]

Births	In 2020, there were 30,862 Orange County births. This number of births reflects a 19.0% drop from 38,121 in 2016. The largest proportion of births were to people ages 30-34 years (35%), followed by 25-20 years (23.4%), 35-30 years (23.0%), and 20-24 years (10.3%). Births to teens ages 15-19 years was 2.2%.
	In 2020, the average age of first birth was 29.5 years which was older than five years ago at 29.8 years in 2016.
Prenatal care	In 2020, Orange County's rate of pregnant people receiving early prenatal care was 88.2%. This rate was returning towards the 10-year high of 88.7% in 2011, and remained higher than California (85.8%) in 2020.
	93.1% of White/Caucasian pregnant people received early prenatal care followed by Other (90.2%), Asian/Pacific Islander (87.1%), Hispanic or Latino/a (85.1%) and Black/African American (82.5%) pregnant people.
	The prenatal care rate for Asian/Pacific Islanders increased 4.2% from 2019 to 2020, while this rate for Black/African American pregnant people decreased by 4.0%.
Low weight births	Of births in 2020, 6.2% (1,900) were low birthweight infants, a decrease from 2019 (6.8%, 2,374). Compared to 2019, the total births decreased 11.7% from 34,963 births.
	By race/ethnicity, the percent of low-birthweight infants within each group were: Black/African American (9.8%), Hispanic or Latino/a (6.6%), Asian/Pacific Islander (6.7%) and White/Caucasian (5.0%) infants. Percent of low weight birth infants decreased across all race/ethnicity groups between 2019 and 2020, except Asian/Pacific Islander which remained constant.

[v] All Maternal, Infant and Child Health data were provided by the Orange County Health Care Agency, Family health Division unless otherwise noted.

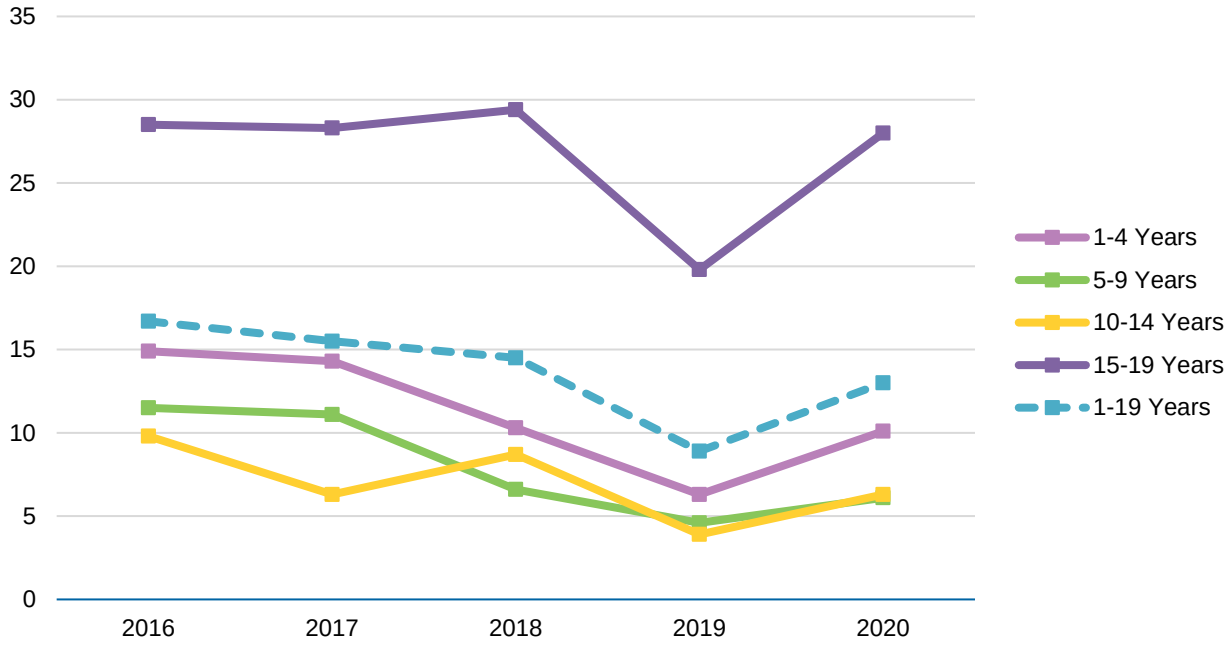
Preterm births	Preterm births accounted for 8.3% of the 30,862 births to Orange County residents in 2020. This percentage was slightly higher than in 2016 at 8.0%. By comparison, the rate was higher in California (8.8%).
	The percentage of preterm births in Orange County was highest among Black/African American infants (12.3%), followed by Hispanic or Latino/a (8.7%), White/Caucasian (6.8%) and Asian/Pacific Islander (6.6%) infants. The percentages increased in 2020 for Black/African American infants compared to 2019 and decreased for Hispanic or Latino/a and White/Caucasian infants, while remaining constant for Asian/Pacific Islander infants.
Breastfeeding	In 2020, 67.6% of Orange County women were exclusively breastfeeding at time of hospital discharge compared to 69.7% of women in California.
	Exclusive breastfeeding at time of discharge was highest among White/Caucasian women and American Indian women at 82.4%, followed by multiracial (79.3%), Black (65%), Pacific Islander and Hispanic or Latino/a (61.4%), and Asian (58.7%) women.
	Exclusive breastfeeding three months after delivery decreased in 2019-2020 to 53.6%, after a nine year high of 58.7% in 2017/18.
Child immunization	In 2021, 96.1% of Orange County children in childcare centers had up-to-date immunizations (4:3:1 schedule) at their time of enrollment, compared to 87.6% in 2013.
	In 2021, 96.3% of Orange County kindergartners had up-to-date immunizations, an 8.6% increase from the 10-year low of 88.7% in 2013.
	Savanna School District had the lowest percentage of kindergartners with up-to-date immunization levels at 91.4% in 2021, followed by Capistrano School District (93.2%). Los Alamitos School District had the highest percentage of kindergartners with up-to-date immunization levels at 99.4%.
Maternal mortality	In 2020, maternal mortality per 100,000 live births in Orange County was 6.5 (2 deaths) compared to 11.4 (4 deaths) in 2019.
	In 2018, there were 17 maternal deaths for every 100,000 live births in the United States — a ratio more than double that of most other high-income countries. In contrast, the maternal mortality ratio was three per 100,000 or fewer in the Netherlands, Norway, and New Zealand.[23]
Infant mortality	In 2020, there were 77 infant deaths in Orange County. The infant mortality rate was 2.8 deaths per 1,000 births in 2020 and had remained stable since 2016 at 2.7. This rate was lower than California's rate of 3.7 per 1,000 births.
	Infant mortality rates (per 1,000 live births) were highest among Hispanic or Latino/a (3.7) infants, followed by White/Caucasian (2.3) and Asian/Pacific Islander (1.0) infants.

Injury and Death

Injuries, both unintentional and intentional, were ranked by survey respondents as health problems significantly impacting overall health of children and families. Specifically, injuries (physical or emotional) from domestic violence or abuse were ranked 5th, fire-arm related injuries ranked 9th, unintentional injuries ranked 11th, and suicide ranked 12th.

There were 121 deaths for children ages 1-19 years in Orange County in 2020.[vi] The mortality rate was 13.0 deaths per 100,000 children ages 1-19 years in 2020. Teens (15-19 years) have the highest mortality rate at 28.0 per 100,000 youth. Mortality rates increased between 2019 and 2020 for all age groups after a four-year decline between 2016 and 2019.

Figure 29: Overall death rate per 100,000 youth (1-19 years) in Orange County, 2016 to 2020



Source: HCA, 2020.

[vi]All preventable injury and death data were provided by the Orange County Health Care Agency, unless otherwise noted.

Table 27: Injuries and deaths[24]

Unintentional injury death	Orange County's injury death rate for youth increased 20% from a rate of 8.0 per 100,000 youth ages 1-19 years in 2011 to 9.6 per 100,000 youth in 2020. This was lower than California's rate of 14.7 in 2020.
	The unintentional injury death rate (e.g., accidental poisoning, motor vehicle accident, or drowning) increased 31.9% from a rate of 4.7 per 100,000 youth ages 1-9 years in 2011 to 6.2 per 100,000 youth in 2020.
	Over half (58.9%) of all youth deaths were injury-related in 2020, which was a significant increase from 2019 (42.9%).
	2020 had a larger portion of unintentional poisonings (19.0%) among all youth deaths compared to 2019 (3.8%).
Gun-related injury	In 2020, the number of youth (ages 0-19 years) killed by guns was five, a 62% decrease from 13 deaths in 2016. In 2020, three deaths were homicide and two deaths were suicide. There were no accidental gun-related deaths among youth in 2020.
Child abuse injuries (physical or emotional)[25]	In 2021, 25,860 youth (0-17 years) were the subject of one or more child abuse allegations in Orange County. Allegations were substantiated for 17.7% (4,572) of these children.
	In 2021, substantiated child abuse allegations occurred at a rate of 6.5 per 1,000 youth 0-17 years in Orange County, which was lower than California's rate (6.3). Substantiated allegations in Orange County decreased 17.7% from 7.9 per 1,000 youth in 2012 compared to a 30.8% decrease from 9.1 per 1,000 youth in 2012 for California.
	Children under six made up the greatest proportion of substantiated child abuse allegations. Children less than one year of age comprised 14.2% of substantiated child abuse allegations, and children one to five years old made up 29.6% of substantiated allegations. Children six to 10 years old made up 25.5%; children 11 to 15 years old represented 23.4%; and youth 16 to 17 years old were 7.4% of substantiated allegations.
	In 2021, most (71.9%) substantiated child abuse allegations were due to general neglect[vii], followed by at-risk/sibling abuse (9.0%), severe neglect (8.1%), sexual abuse (4.4%), physical abuse (3.4%), caretaker absence/incapacity (2.0%), exploitation (0.6%), and emotional abuse (0.5%).[viii]

[vii]General neglect is the negligent failure of a parent/guardian or caretaker to provide adequate food, clothing, shelter, or supervision where no physical injury to the child has occurred.

[viii]A child is counted only once, in category of highest severity.

Chronic Health Conditions

In the United States, more than 4% of school-aged children and adolescents have at least one chronic health condition, such as asthma, obesity, other physical conditions and behavior/learning problems.[26] The healthcare needs of children with chronic illness can be complex and continuous and include both daily management and addressing potential emergencies.

Community health survey respondents ranked cancer, the COVID-19 pandemic, eating disorders, and diabetes within the top 10 health problems that have a significant impact on overall health of children and families. Poor eating habits (such as overreliance on fast food), an important risk factor for some chronic health conditions, was ranked the third-most-risky health behavior.

Table 28: Health risk behaviors for chronic disease[ix, 27]

Obesity	Trends in obesity rates among students in grades 5, 7, and 9 have remained the same between the school years (SY) 2013/14 and 2018/19. Approximately one in three students are considered at risk of obesity (5th grade, 36.6%; 7th grade, 34.9%; and 9th grade, 31.4%).
	Orange County 5th grade students of color are disproportionately impacted by obesity. This is particularly true for Hispanic or Latino/a and Pacific Islander students at rates of 48.5% and 44.5%, respectively, in 2018/19.
Physical activity	In 2018/19 the rate of Orange County students meeting all fitness standards increased with age and were higher than for California as a whole: 28.5% of Orange County 5th grade students were meeting fitness standards, compared to 42.2% of 9th grade students.
	In 2020, 15.5% of Orange County teens spent eight or more hours on sedentary activities on typical weekend days. This was higher than in 2019 at 12.0% and 3.0% in 2016.[x, 28]
Nutrition	In 2020, 36.5% of teens had five or more servings of fruits/vegetables daily, which increased from 21.9% in 2019. Among children, the rate of eating five or more servings of fruits and vegetables (excluding juice and fried potatoes) was higher in 2020 at 40.2%, increasing from 29.8% in 2019.[29]
	The rate of children and teens eating five or more servings of fruits/vegetables daily decreases among children and teens living below poverty. For children, it dropped to 12.6%, and for teens, it dropped to 27.1%.[30]

[ix] All health risk behaviors for chronic disease data are from California Department of Education, DataQuest, unless otherwise noted.

[x] 2016 value of 3.0% is statistically unstable and should be interpreted with caution.

Tobacco and e-cigarette (vaping) use	During 2017-2019, 2.1% of Orange County grade 11 students reported some level of cigarette use during the past 30 days. This rate was like California, at 2.3%. Among grade 11 students, 12.9% had used e-cigarettes in the past 30 days. [31]
Oral health	Among Orange County youth ages 3 to 11 years, in 2020, 67.8% had visited a dentist within the previous 6 months. In 2019, this rate was higher, at 84.0%.[28]

Table 29: Chronic disease prevalence

Asthma	School districts assess the rate of asthma among students. The median rate of students per 1,000 with asthma in Orange County was 75.7. School districts with a rate of 87.5 students with asthma per 1,000 or higher had the highest rates compared to 75% of the other school districts in Orange County. In school year 2020-2021, these school districts were Newport-Mesa, Huntington Beach, Irvine, Capistrano, Fullerton, Los Alamitos, and Lowell Joint. [32]
Diabetes	School districts assess the rate of Type 1 diabetes among students. The median rate of students per 1,000 with diabetes in Orange County was 2.0. School districts with a rate of 2.5 students with diabetes per 1,000 or higher had the highest rates compared to 75% of the other school districts in Orange County. In SY2020-2021, these school districts were OCDE/Special Education, Capistrano, Los Alamitos, Savanna, Irvine, Saddleback Valley, and Fullerton Joint Union.[32]

Teen Sexual Health

WHO defines sexual health as a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. In 2017-2018, 87.1% of California teens had never had sex. This was an increased from 81.7% in 2011-12. Orange County estimates are not available.[33]

Table 30: Teen sexual health[22]

Teen birth[22]	In 2020, 698 Orange County births were to females ages 19 years and younger, a 42.3% decrease from 1,210 births in 2016.
	The teen birth rate in Orange County in 2020 was 6.9 births per 1,000 females ages 15 to 19, a decrease of 36.7% from 10.9 births per 1,000 in 2016.
	At 6.9 births per 1,000 teen (ages 15-19) females, Orange County has a lower teen birth rate than California (11.0).
	In 2020, Hispanic or Latina/o teens had the highest birth rate (13.0 births per 1,000 teen females), followed by Black/African American (8.0), White/Caucasian (2.2), and Asian/Pacific Islander (0.6) teens in Orange County.
	In 2020, the five cities with the highest birth rate per 1,000 teen females were Buena Park (17.2 per 1,000 teens, n=29 births), Stanton (17.0, n=19), Santa Ana (15.5, n=187), Anaheim (11.9, n=145), Placentia (10.8, n=18), and Fullerton (10.3, n=48).
Sexually Transmitted Infections[34]	In 2021, there were 145.8 cases of chlamydia per 100,000 youth ages 10-17 years, which was a 30.0% decrease from a rate of 208.5 per 100,000 youth in 2017. The number of cases in 2021 was 481, down from 697 cases in 2017. Most cases (94.8%) were among youth ages 15-17 years.
	In 2021, there were 34.3 cases of gonorrhea per 100,000 youth ages 10-17 years, which was a 3.2% increase from a rate of 33.2 per 100,000 youth in 2017. There were 113 cases of gonorrhea in 2021, up from 111 in 2017. The vast majority (96.5%) of gonorrhea cases were among youth ages 15-17 years.
	In 2021, there were three cases of syphilis per 100,000 youth ages 10-17 years, which was an increase from a rate of zero in 2017. The number of cases in 2021 was 10, and all were among youth ages 15-17 years.

KEY DRIVERS OF HEALTH

Key Drivers of health

To effectively invest in prevention activities that improve population health, it is necessary to identify and understand which factors or drivers are influencing poor health outcomes in a community.

One of the most influential drivers of health is access to social and economic resources. Economic and social insecurity are associated with poor health, as poverty, unemployment, and lack of education affect access to healthcare services. Employment provides income that increases choices in housing, education, healthcare, childcare, and food. Family and social support can serve as protective factors that counter the effects of limited income and ability to accumulate financial resources.

Research has shown that individuals who have greater social support or who live in neighborhoods with stronger social cohesion live longer, healthier lives than individuals who experience isolation. Without access to economic opportunity and social support within the community, people and families struggle to thrive.

Because of the complexity that accompanies population health – the fact that most health problems are connected to many elements and are actively changing – solutions to these problems often happen through trial and error and vary by community. These factors must be considered when looking at the health data and when considering the strategies for addressing priority health needs.

In recognition that there are many factors that drive health outcomes, the CHNA identified four key drivers of health:

- Healthy and Affordable Foods
- Early Learning Opportunities and Success in School
- Safe Neighborhoods
- Connectedness

Appendix G provides detailed data tables of the measures used to define issues for each driver of health.

Healthy and Affordable Foods

Access to foods that support healthy eating patterns contributes to lifelong health. Unfortunately, there are barriers to, and disparities in, the accessibility and availability of foods that support healthy eating patterns. Low-income and minority communities often lack convenient sources of affordable, healthier foods. When healthy foods are not available, people may settle for foods higher in calories and lower in nutritional value.[35]

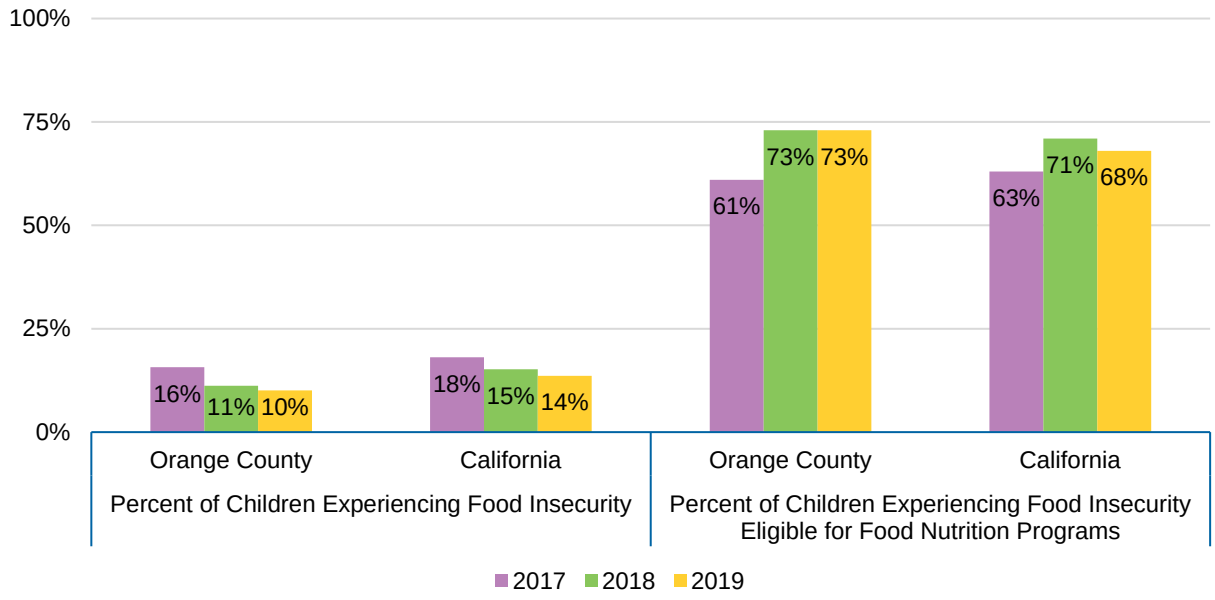
The food issues captured in the community survey, coupled with secondary data obtained for this CHNA, surface two areas of concern:

1. Low participation in food assistance programs
2. Proximity and affordability of food for low-income children and families

Participation in Food Assistance Programs

In 2019, 10% of Orange County children (70,970) experienced food insecurity.[36] Of these children, 73% were income eligible for federal nutrition programs (incomes at or below 18% of poverty).[36]

Figure 30: Percent of children experiencing food insecurity and eligibility for food nutrition programs



Source: USDA, Map the Meal Gap, 2019.

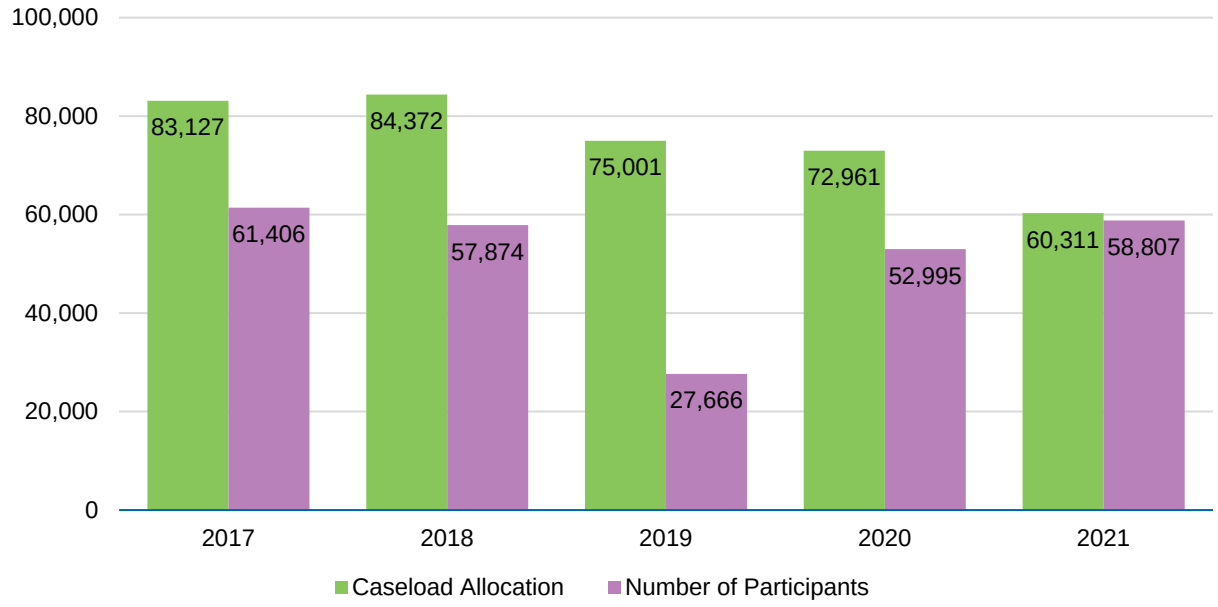
The CalFresh Program, known nationally as the Supplemental Nutrition Assistance Program (SNAP), and the Supplemental Nutrition Program for Women, Infants and Children (WIC), provide nutrition assistance to people in low-income households by increasing their food-buying power. Income-eligible children can receive both forms of nutrition assistance. With these

benefits, families can purchase more nutritious foods, such as fruits, vegetables, and other healthy foods.

In 2019, on average,57.4% of people and children eligible for WIC were receiving that benefit every month nationally, lower than California at 68.9% per month. Both rates have dropped from a high in 2011, when the national rate was 63.5% and the California rate was 82.5%. [37]

There are four WIC agencies serving Orange County. Each agency has a caseload allocation. The percent of the caseload served was 97.5% in September 2021. While the caseload allocation was decreasing, the percent of the caseload served has been improving since 2019. This is one indicator to understand to what extent the percent of people and children eligible for WIC are receiving the benefit.[38]

Figure 31: Number of participants served by the WIC program in the month of September

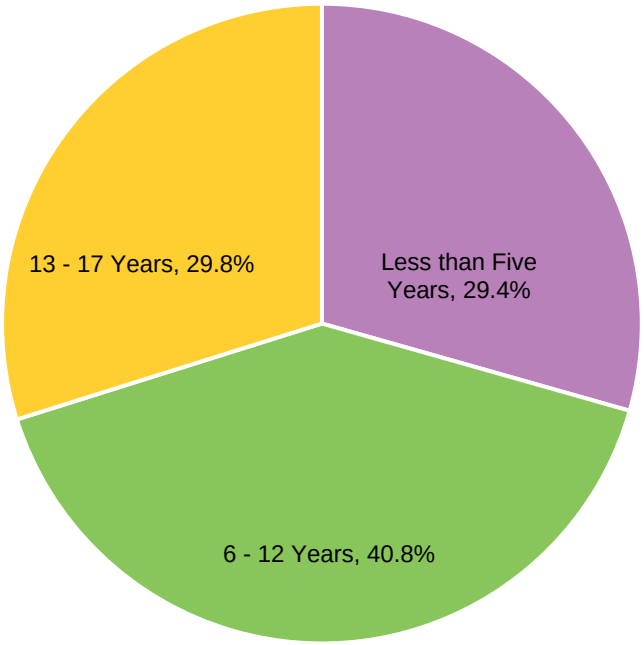


Source: HCA, 2021.

WIC participation in Orange County was increasing since a 10-year low in September 2019, from 27,666 participants to 58,807 participants in September 2021—an increase of 112%. [38] Of these participants in September 2021, 17.0% (10,004) were infants.

Between July 2020 and June 2021, over 91,000 (12.9%) Orange County children (0-17 years) received CalFresh. This was a 35.2% decrease from the 10-year high of 19.9% between July 2014 and June 2015. The percentage of children in California receiving CalFresh was higher at 19.1%. [39] In a single month (January 2022), the greatest proportion of CalFresh beneficiaries under 18 in Orange County were children ages six to 12 years (40.8% or 35,939), followed by 13 to 17 years (29.8% or 26,317) and birth to 5 years (29.4% or 25,919).[39]

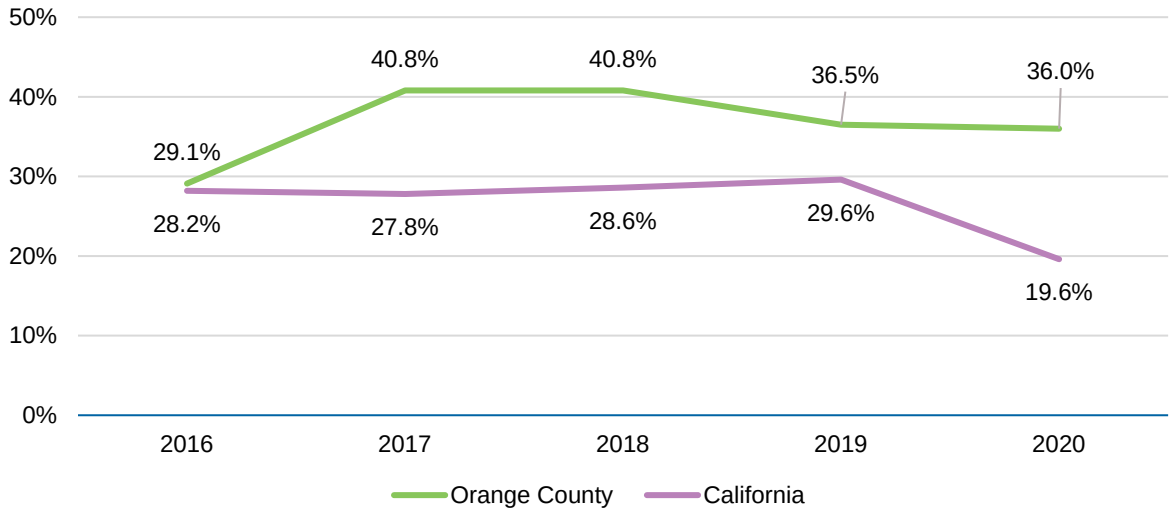
Figure 32: Percent of Orange County children Receiving CalFresh, by age group, June 2020 to July 2021



Source: California Department of Social Services, CalFresh County Data Dashboard, 2021.

There was a larger gap between who was eligible to receive CalFresh and who received that benefit in Orange County than there was in California. In 2020, it was estimated that 36.0% of people in Orange County who were eligible for CalFresh were not receiving that benefit compared to 19.6% in California.[39] This gap had increased since 2016 in Orange County from 29.1% while it was closing in California.

Figure 33: Percent of people in Orange County who are eligible and not receiving CalFresh

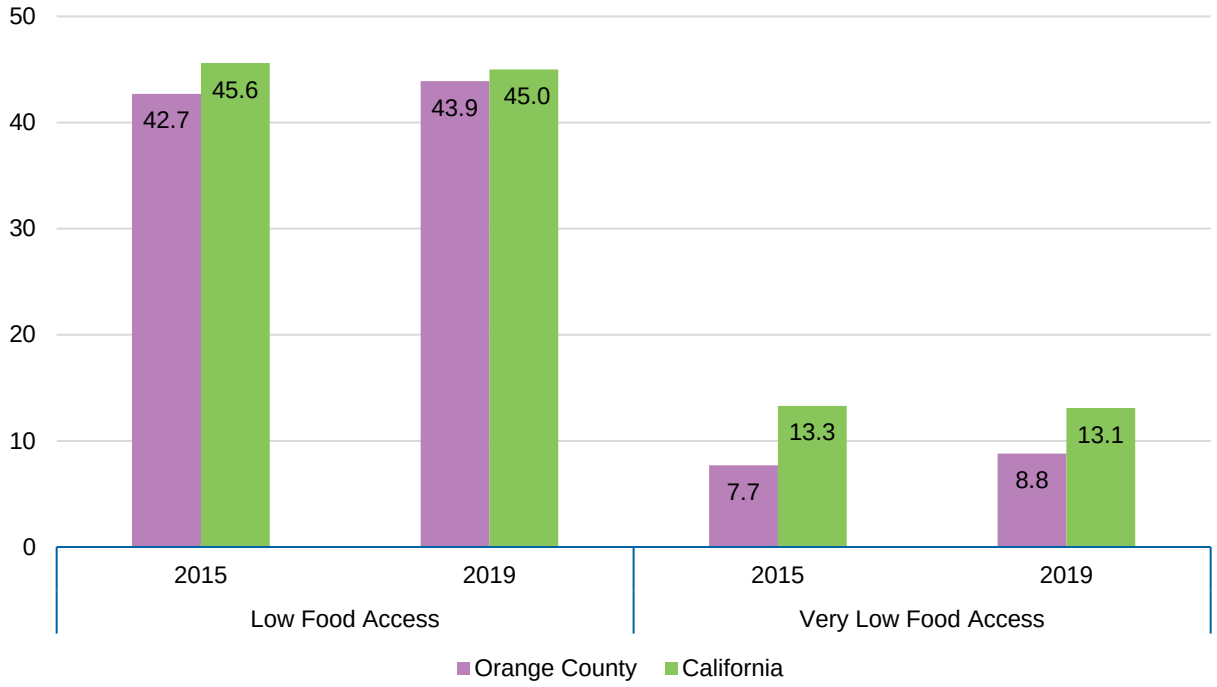


Source: California Department of Social Services, CalFresh County Data Dashboard, 2021.

Proximity and affordability of food for low-income children and families

The percent of residents who have very low access to food in Orange County was 8.8% in 2019, up from 7.7% in 2015.[xi, 40] While the Orange County rate was lower compared to California, the rate in Orange County increased, while the rate in California slightly decreased.

Figure 34: Proximity to food



Source: USDA, Food Access Research Atlas, 2019.

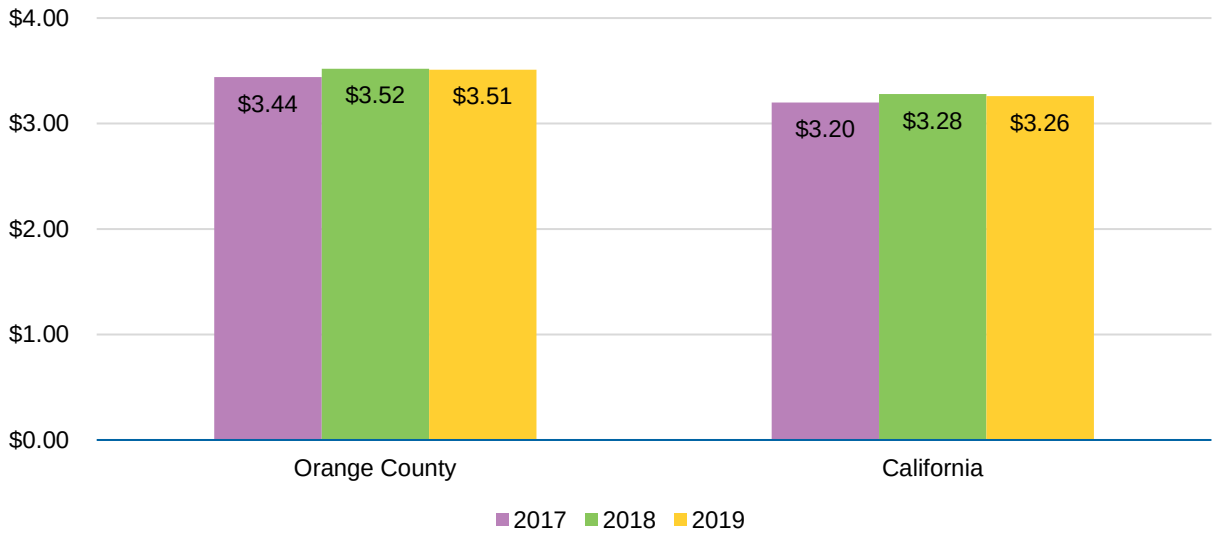
In 2019, the number of Orange County individuals living in a "food desert" and who were also low-income was 33,752, which was an 11% increase from 30,386 in 2015.[xii] Cities with the highest percent of individuals who are low-income and living in a food desert included Rancho Santa Margarita (3.4%), Laguna Beach (3.7%), Villa Park (3.7%), and San Clemente (5.3%).

The average meal cost in Orange County ($3.51) was higher than in California as a whole ($3.26). The average meal cost was generally increasing in both Orange County and California between 2017 and 2019.[36]

[xi] Defined as the percentage of residents who have very low access to food, defined solely by distance: further than 1 mile from the nearest supermarket in an urban area, or further than 20 miles in a rural area.

[xii] Estimated number of residents who experience living in a food desert, defined as being low-income and further than one mile from a supermarket (urban) or twenty miles (rural).

Figure 35: Average meal cost[4036]



Source: USDA, Map the Meal Gap, 2019.

Early Learning Opportunities and Success in School

Access to preschool is an important social driver of health, as it facilitates families' ability to participate in the workforce and for the child to prepare for kindergarten.

"Ready to learn" was a predominant response to the fill-in-the-blank community survey question: "children who are healthy are." Common words or phrases were:

- Excited to learn
- Eager learners
- Ready to learn
- Free to play and learn

A child's long-term academic success begins with their readiness for kindergarten. Children who enter school with basic knowledge of math and reading concepts, as well as communication, language, social competence and emotional maturity, are more likely than their peers without such skills to experience later academic success, attain higher levels of education and secure employment.[41]

This CHNA identified two areas of concern:

1. Low participation in childcare subsidies by eligible families
2. Increased rates of chronic absenteeism

Early Learning Opportunities

Childcare/daycare assistance was the most-selected service needed but not received by 30% of survey respondents. This is not surprising given that two in three (66% or 122,448) Orange County children five years and under have all available parents in the workforce, largely due to the high cost of living.[42] In Orange County, there are approximately two infants/toddlers in Orange County per licensed slot. Even if only one third of infants and toddlers in Orange County required childcare, there would still only be enough licensed capacity for one in seven children.

High-quality care supports children's emotional, social, and cognitive development, but availability and affordability of early learning opportunities is a challenge in Orange County.[42] The average annual cost in Orange County for a family with two young children in full-time care is $26,150, and the share of median family income needed for childcare is 26%. According to First 5 Orange County, 10% of median income is considered "affordable." More than half of Orange County children birth to four years are eligible for state or federal subsidy, based on income (53.0%, n=56,817). However, just 6% of eligible children received these subsidies.[42]

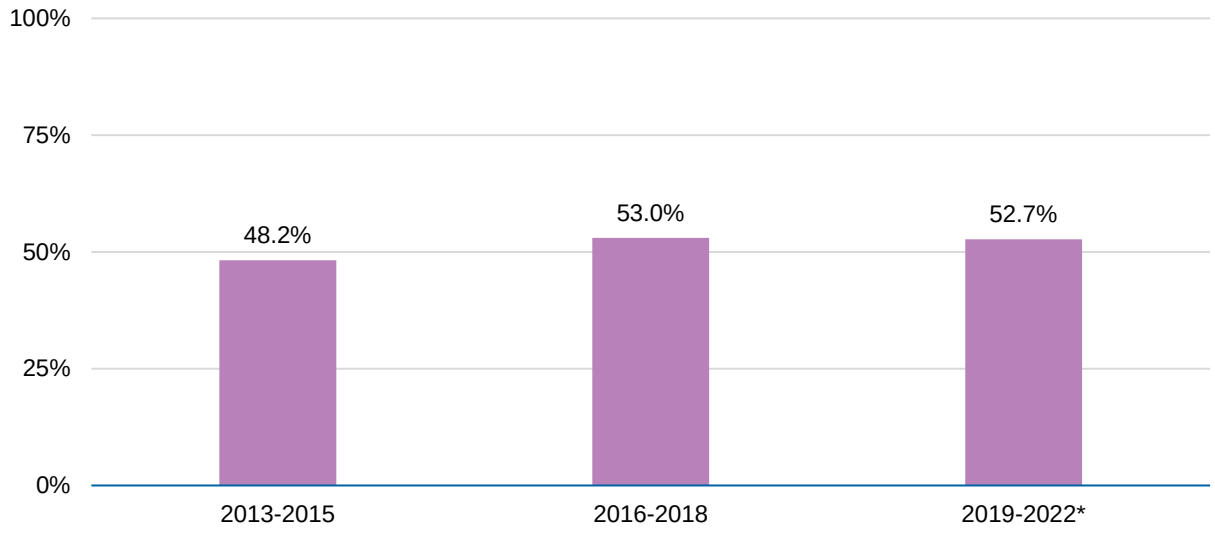
Table 31: Infants/Toddlers served in subsidized childcare in Orange County

Measure	Estimate
Total infants/toddlers served by state and federally-subsidized programs	3,514
Overall % eligible served	6%
% of children for whom a licensed slot is available	Preschool age children (3-4 years) 70% Infants/Toddlers (0-2 years) 5%

Source: First 5 Orange County. (2020, October 7). Orange County Child Care Landscape Analysis: Phase 1 Report Findings.

One of many important factors that influence kindergarten readiness is to what extent the child has early education opportunities. Additional factors include family and community support and environment. In 2022, 52.7% of children in Orange County were developmentally ready for kindergarten, an increase from 48.2% in 2013-2015.[xiii, 43]

Figure 36: Percent of children ready for kindergarten



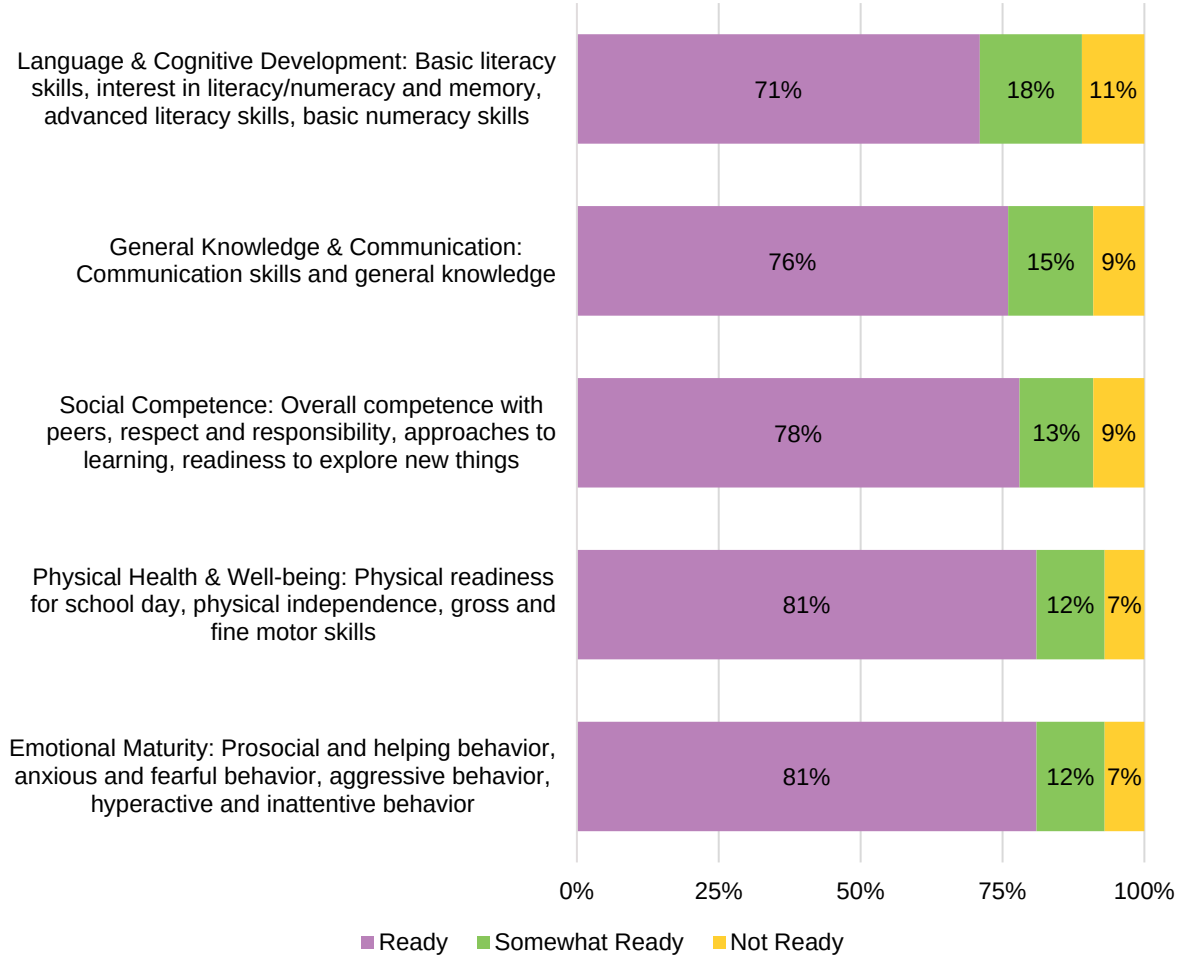
Source: Orange County Early Development Index, 2022.

Children are considered developmentally ready for school if they are on track in all five areas assessed. These areas include language and cognitive development, general knowledge and communication, social competence, physical health and well-being, and emotional maturity.

Among kindergarteners, the areas of greatest vulnerabilities are language and cognitive development (71% on track or ready for kindergarten). Physical health and emotional maturity are where children are most likely to be ready (81%), though one in five students are not.

[xiii] 2019-2022 estimate only includes 2022 one-year estimates.

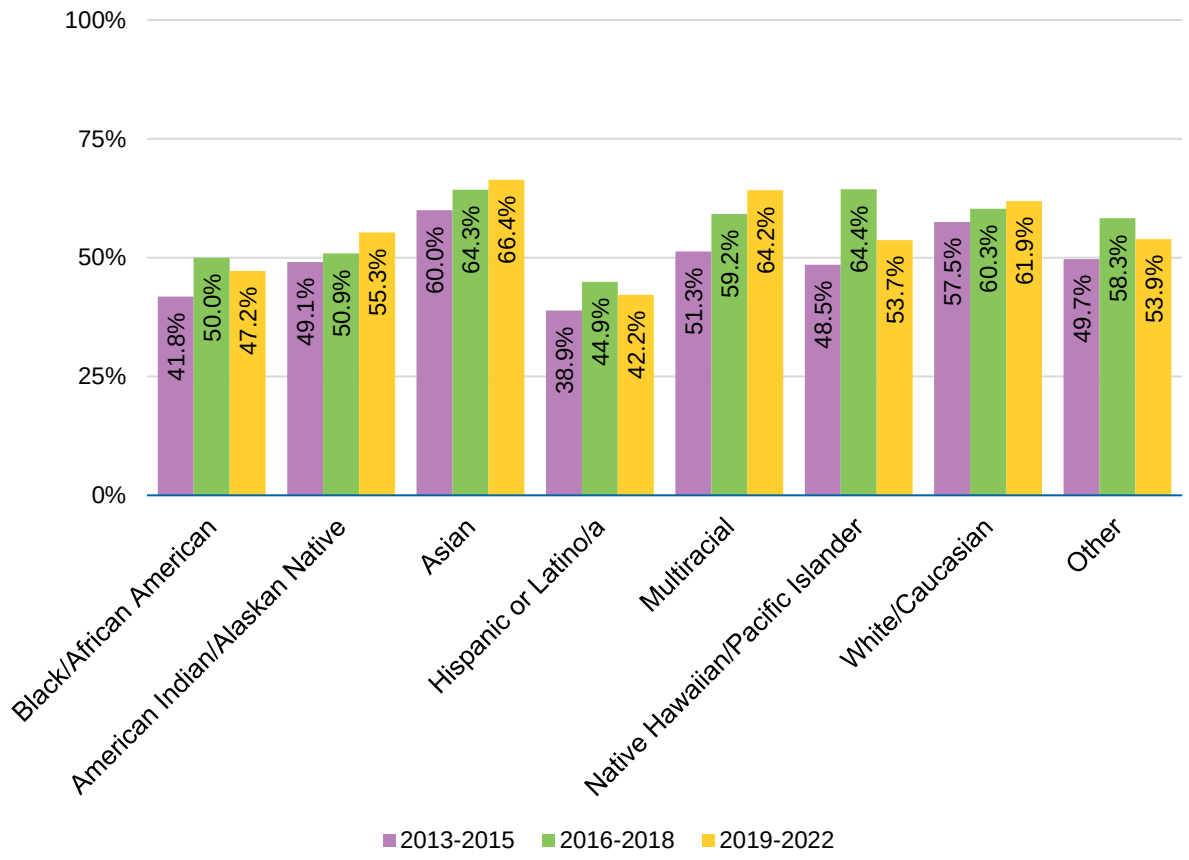
Figure 37: Percent of Orange County children ready for kindergarten by subdomain, 2022



Source: Orange County Early Development Index, 2022.

In 2022, Hispanic and Latino/a and African American/Black students had the lowest rate of readiness for kindergarten (57.8% and 52.8%, respectively). Asian, Multiracial, and White/Caucasian students had the highest rates of readiness (66.4%, 64.2%, and 61.9%, respectively). Between 2015 and 2022, each group's readiness for kindergarten was increasing.[43]

Figure 38: Percentage of Orange County children ready for kindergarten by race and ethnicity, 2015, 2018, and 2022



Source: Orange County Early Development Index, 2022.

Success in School

Third grade academic achievement is an important measure of success in school. For students, third grade is the year that the focus of reading instruction shifts from learning to read, to reading to learn. This is also the year when students start utilizing the decimal system to perform multi-digit number calculations, an important foundation for future success in mathematics.

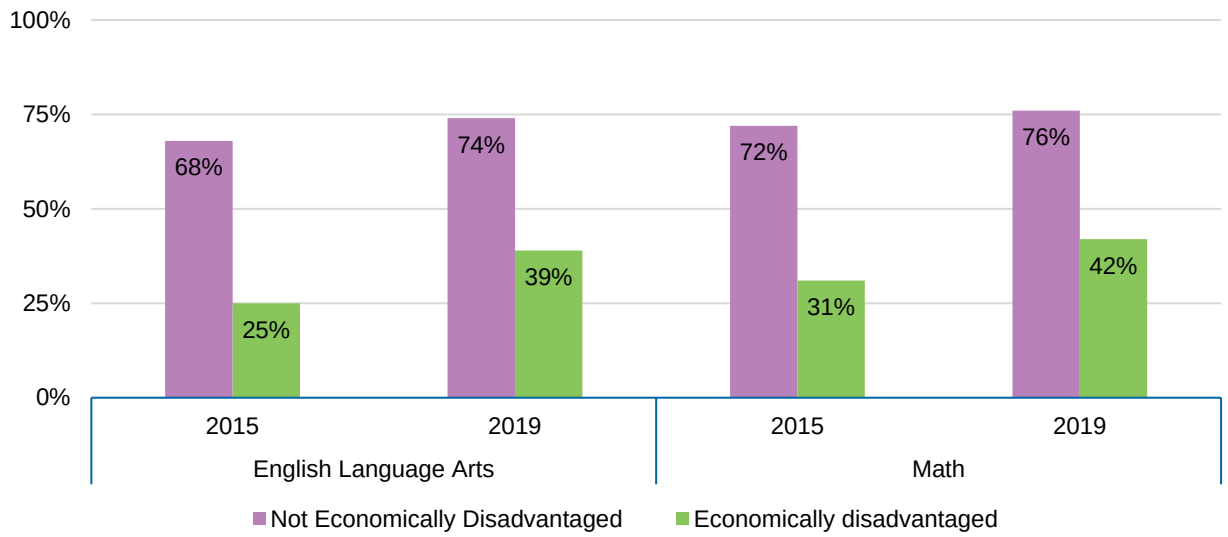
In 2019, nearly three out of five (59%) Orange County third grade students met or exceeded the statewide achievement standard in math, an eight-percentage point increase from 2015 (51%). California was lower at 50%.[44] Also in 2019, over half (56%) of Orange County third grade students met or exceeded the statewide achievement standard for English Language Arts (ELA), a 10-percentage point increase from 2015 (46%) and higher than California at 49%.[44]

Disparities exist in ELA and math achievement by economic status. In 2019, approximately 40% of socioeconomically disadvantaged students in Orange County met or exceeded the statewide achievement standards for ELA (30%) or Math (42%), compared to approximately 75% of non-

socioeconomically disadvantaged students in ELA (74%) and Math (76%).[xiv,44] This disparity was closing between 2015 and 2019.

- For ELA, the percentage of economically disadvantaged students who met or exceeded ELA standards increased by 14 percentage points compared to a six-percentage point increase among students who were not economically disadvantaged.
- For math, the percentage of economically disadvantaged students who met or exceeded math standards increased by 11 percentage points compared to a four-percentage point increase among students who were not economically disadvantaged.

Figure 39: Achievement in mathematics and ELA among third grade Orange County students, by socioeconomic status



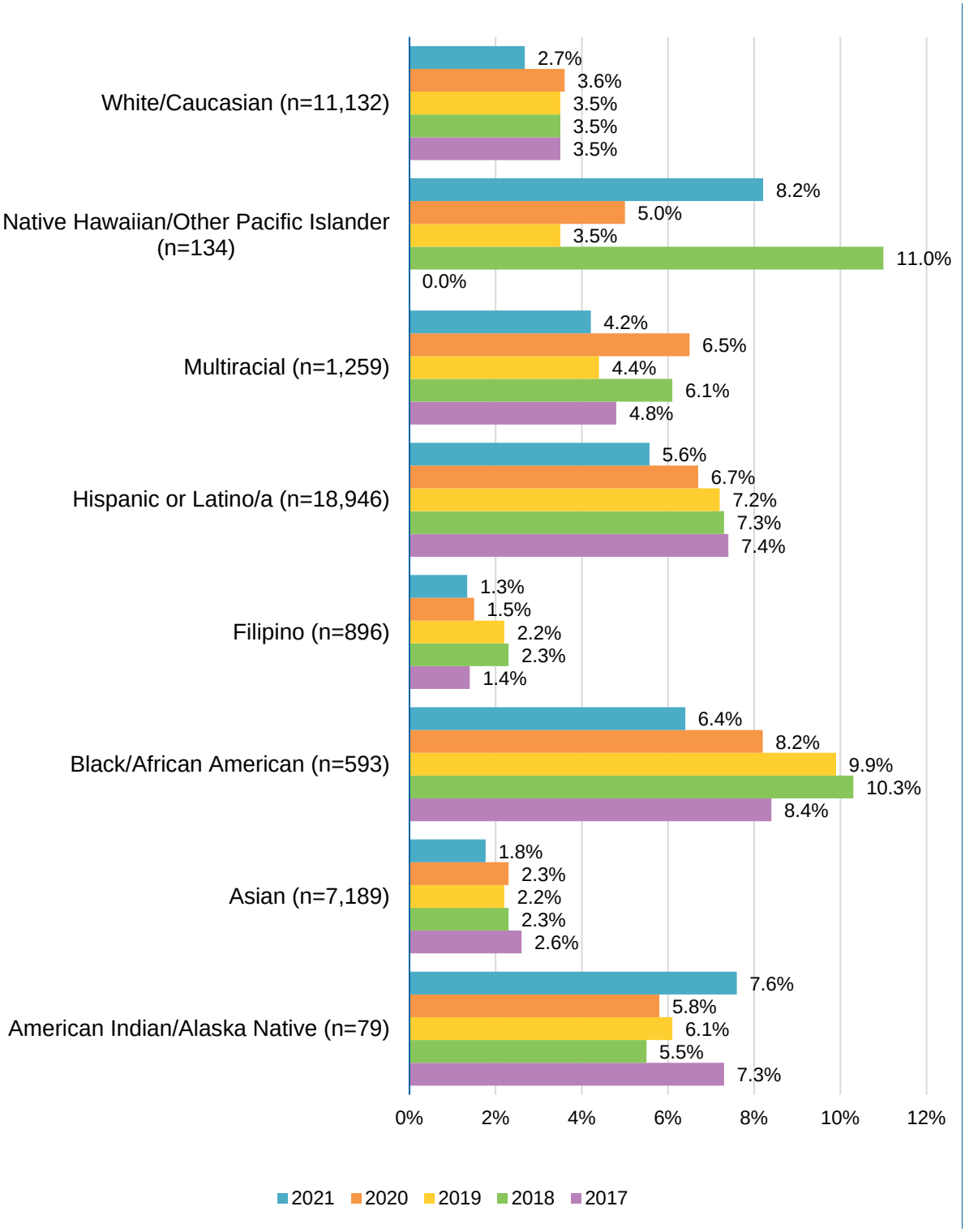
Source: California Assessment of Student Performance and Progress, 2019.

Education provides benefits to both individuals and society. Compared to high school graduates, dropouts earn lower wages, resulting in lower tax contributions and more utilization of public benefit programs. They are also at higher risk for criminal involvement and health problems.[45]

The Orange County cohort high school dropout rate for 2021 was 4.0%, which was lower than California at 9.4%.[46] Since 2017, the dropout rate had decreased in Orange County from 5.3%. The highest rate for the 2021 school year was among Native Hawaiian/Other Pacific Islander students (8.2%), American Indian/Alaska Native (7.6%), and Black/African American (6.4%) students.[46]

[xiv] A socioeconomically disadvantaged student is one whose parents have not received a high school diploma or who is eligible for the free or reduced-price lunch program (now called the National School Lunch Program).

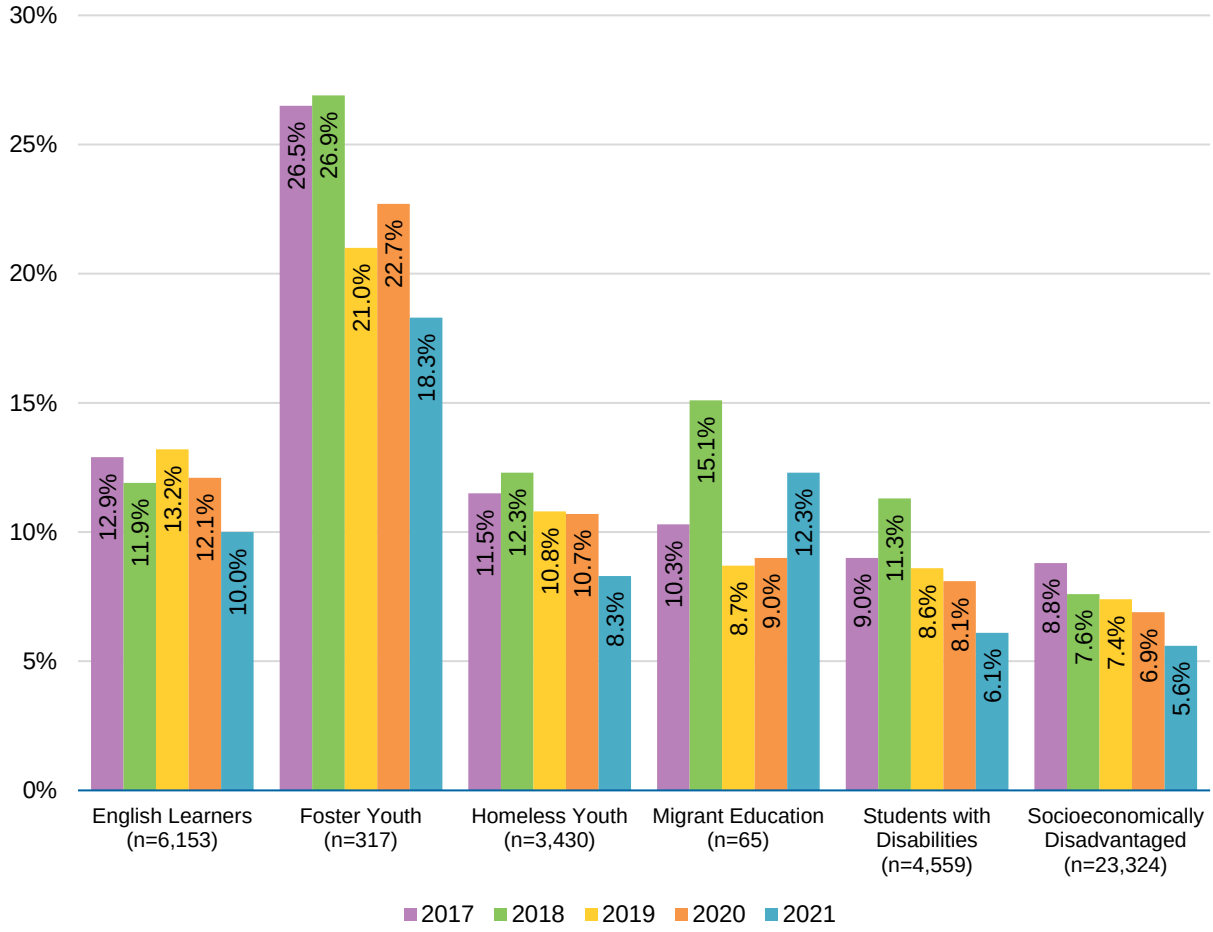
Figure 40: High school dropout rate, by race and ethnicity



Note: The number of cohort students in 2021 is represented by the n value. Source: California Department of Education, DataQuest, 2021.

By program, dropout rates were highest among students enrolled as Foster Youth (18.3%), followed by Migrant Education (12.3%), English Learners (10.0%), Homeless Youth (8.3%), Students with Disabilities (6.1%), and Socioeconomically Disadvantaged (5.6%) students.[xv] While the students in these programs have higher dropout rates than Orange County, the rates have been improving since 2017.

Figure 41: High school dropout rate, by program



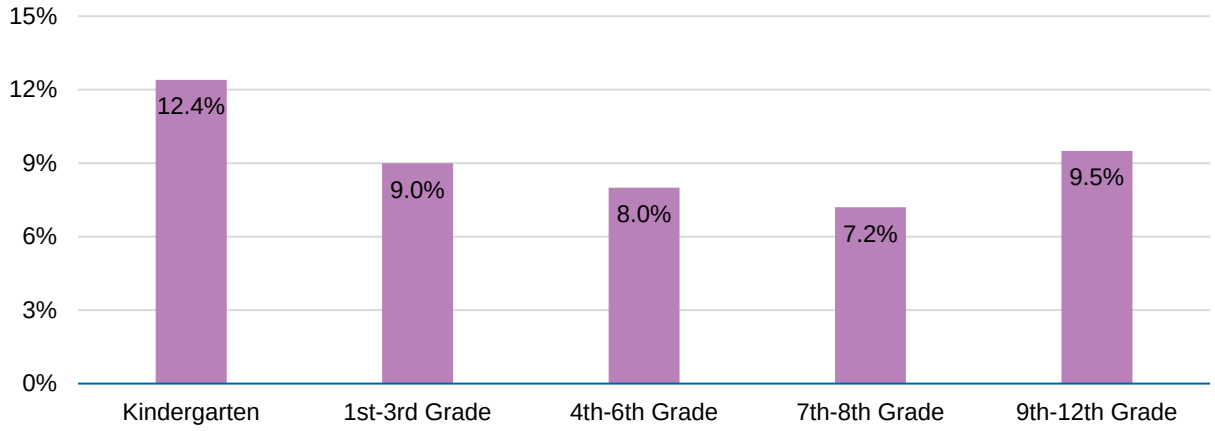
Note: The number of cohort students in 2021 is represented by the n value. Source: California Department of Education, DataQuest, SY 2020-2021.

[xv] English Learner is a student identified as English learner based on the results of the California English Language Development Test or is a reclassified fluent-English-proficient student (RFEP) who has not scored at the proficient level on the California English-Language Arts and Mathematics Standards Tests. Student with Disabilities is a student who receives special education services and has a valid disability code or was previously identified as special education but who is no longer receiving special education services for two years after exiting special education. Migrant is a student who changes schools during the year, often crossing school district and state lines, to follow work in agriculture, fishing, dairies, or the logging industry. Homeless Youth is a student who lacks a fixed, regular and adequate nighttime residence.

An important indicator of school success is chronic absenteeism.[xvi] Chronic absenteeism is defined as missing more than 10% of the school year and is associated with several negative consequences for students. These include lower test scores, increased risk of dropping out, and less access to health screenings and other support services.[47] Research suggests the reasons for chronic absenteeism include poor physical or mental health, limited transportation, difficulties with housing or food, and a lack of safety — which can be particularly acute in disadvantaged communities and areas of poverty.[48] Improving access to healthcare is one important strategy to drive improvements in chronic absenteeism.

In 2021, more than 41,000 (9.0%) Orange County kindergarten through high school students were considered chronically absent.[49] While this rate increased from 2017 (7.7%, n=38,360 students), it remained lower than California at 14.3%. Chronic absenteeism is highest among kindergarteners and high school students.

Figure 42: Percent of Orange County students chronically absent, by grade level, SY 2020-2021

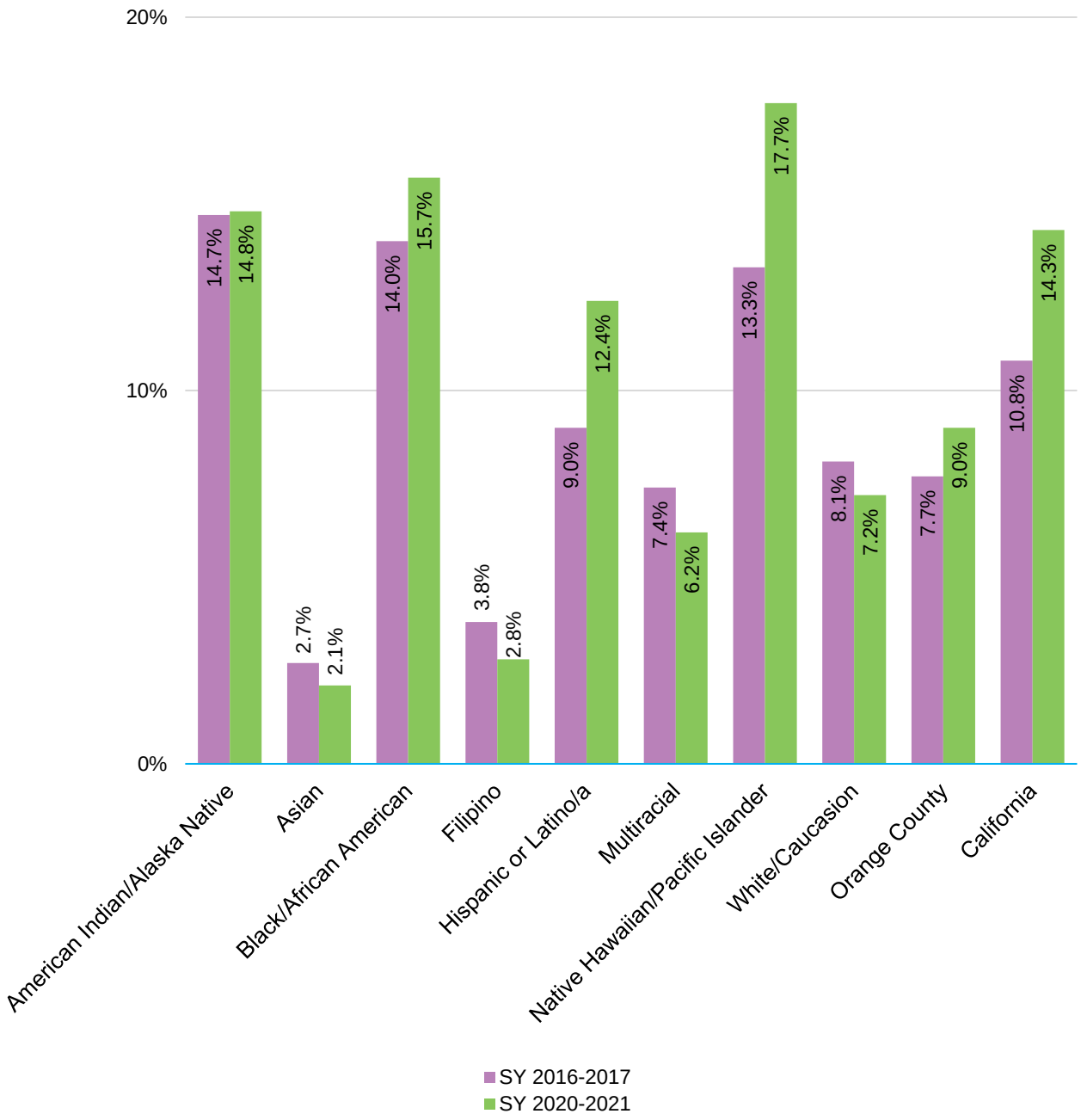


Source: California Department of Education, DataQuest, SY 2020-2021.

Among different race and ethnicity groups, Pacific Islander and Black/African American students were most likely to be chronically absent (17.7% and 15.7%, respectively). At 2.1% and 2.8%, Asian and Filipino students, respectively, were least likely. Since 2017, chronic absenteeism has increased for Pacific Islander (4.4 percentage points), Hispanic or Latino/a (3.4 percentage points), and Black/African American (1.7% percentage points) students.

[xvi] Defined as the number and percent of students who were absent for 10% or more of the enrolled instructional days, regardless of the reason (excused and unexcused absences). Chronic absenteeism is based on each school districts' days of enrollment, the expected days of attendance and the actual days attended.

Figure 43: Percent of Orange County students chronically absent, by race and ethnicity



Source: California Department of Education, DataQuest, SY 2020-2021.

In the SY 2020-2021, chronic absenteeism rates were highest for foster youth (30.7%), followed by insecurely housed youth (21.6%), socioeconomically disadvantaged youth (16.4%), students with disabilities (13.0%), English learners (13.0%), and students in migrant education (10.6%) programs.[46]

Safe Neighborhoods

The physical and social characteristics of neighborhoods impact health outcomes. A neighborhood is the built environment where we live, work, and/or play. It includes our homes, buildings, streets, and open spaces.[50] A neighborhood influences a person's ability to make positive choices for their health. This may consist of being physically active, eating a healthy diet, and having cultural foods available that may represent a region, such as kimchi, seaweed, and dim sum from Asia, or represent a colonial past, such as the fusion of West African and East Indian food traditions throughout the Caribbean.[51] Neighborhoods also influence access to support systems for connection, inclusion, and resources.

Personal and community safety was a concern among survey respondents.

- One in three survey respondents rated "low crime and safe neighborhoods" as the second most essential characteristic of a happy, healthy, and thriving community for children and families.
- "Injuries (physical or emotional) from domestic violence or abuse" was ranked a "top health problem most damaging to children's health" by one in five survey respondents.
- Three in 10 survey respondents ranked bullying, including cyberbullying, as the number-one "harmful behavior, factor, and condition contributing to injuries, violence, and poor health outcomes."
- More than one in five survey respondents ranked community violence (e.g., gang violence, homicide) as the second "most harmful behavior, factor, and condition contributing to injuries, violence, and poor health outcomes."

While more than half of all respondents agreed with "the community is a safe place to live," just 45% of LGBTQIA+ respondents agreed. Generally, LGBTQIA+, Hispanic or Latino/a, BIPOC, and families of CSHCN respondents were less likely to be satisfied with their community compared to all respondents.

Table 32: Neighborhood strengths

Neighborhood Strengths	Percent of respondents who agree or are neutral with statements about the quality of life in Orange County				
	All Respondents	BIPOC	Hispanic or Latino/a	LGBTQIA+	Families of CSHCN
This community is a safe place to live	59%	56%	54%	45%	56%
This community is a good place to raise children	58%	53%	52%	43%	57%

Source: CHNA Community Health Survey, 2022.

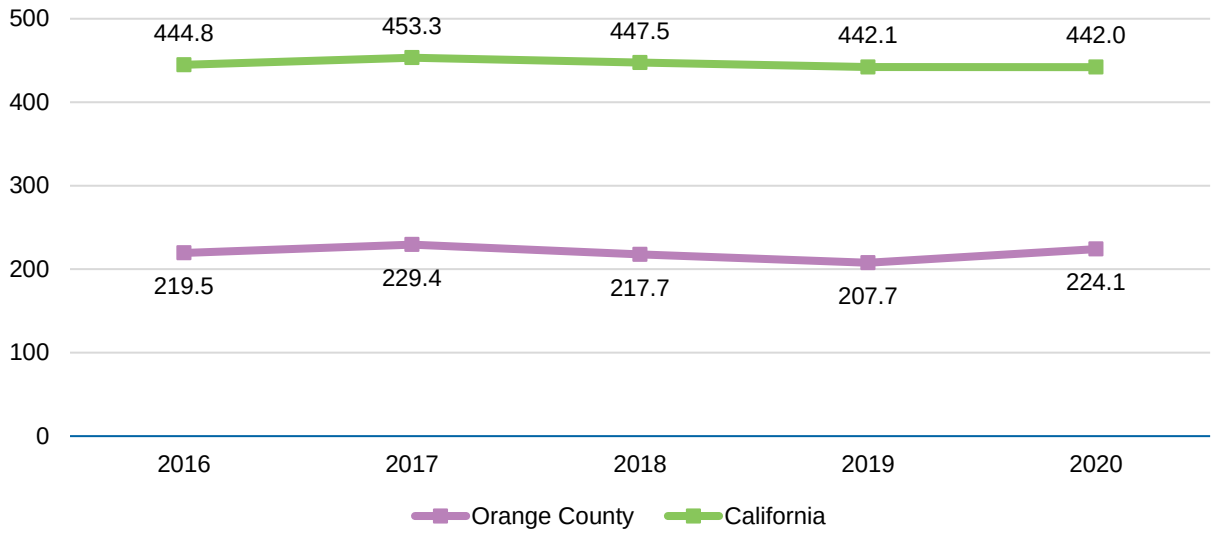
This CHNA identified two areas of concern:

1. Decreased sense of being safe at school among students
2. Increased community violence

Community Safety

The reported violent crime rate in Orange County, at 224.1 per 100,000 residents in 2020, was lower than California.[xvii, 52] While Orange County's violent crime rate per 100,000 declined between 2017 and 2019, it increased in 2020 and was higher than the rate of 219.5 per 100,000 in 2016.

Figure 44: Crime rate per 100,000 related to violence (yearly rate)



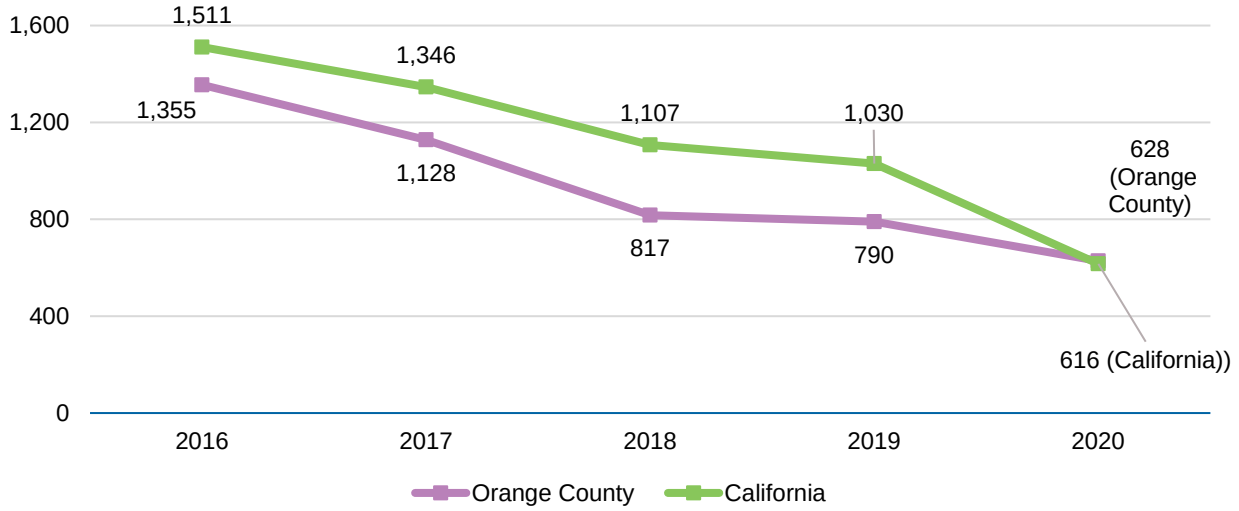
Source: Federal Bureau of Investigation, Crime Data Explorer, 2020.

While the violent crime rate had increased, the juvenile arrest rate per 100,000 youth decreased between 2016 and 2020. Committing a delinquent or criminal act and status offenses (actions that are illegal only because of a youth's age—such as truancy, underage drinking, and running away from home) are reasons why some children and youth become involved with the juvenile justice system. Early interactions with the juvenile justice system are important opportunities to intervene and prevent further criminal activity into adulthood.[53]

Orange County's juvenile arrest rate in 2020 was 628 per 100,000 youth under 18 years, a decrease of 53.7% from 2016.[54] This rate was higher than California at 616 per 100,000 youth, which had a steeper decrease of 59.2% from 2016.

[xvii] Includes homicide, criminal sexual assault, robbery, aggravated assault, and aggravated battery

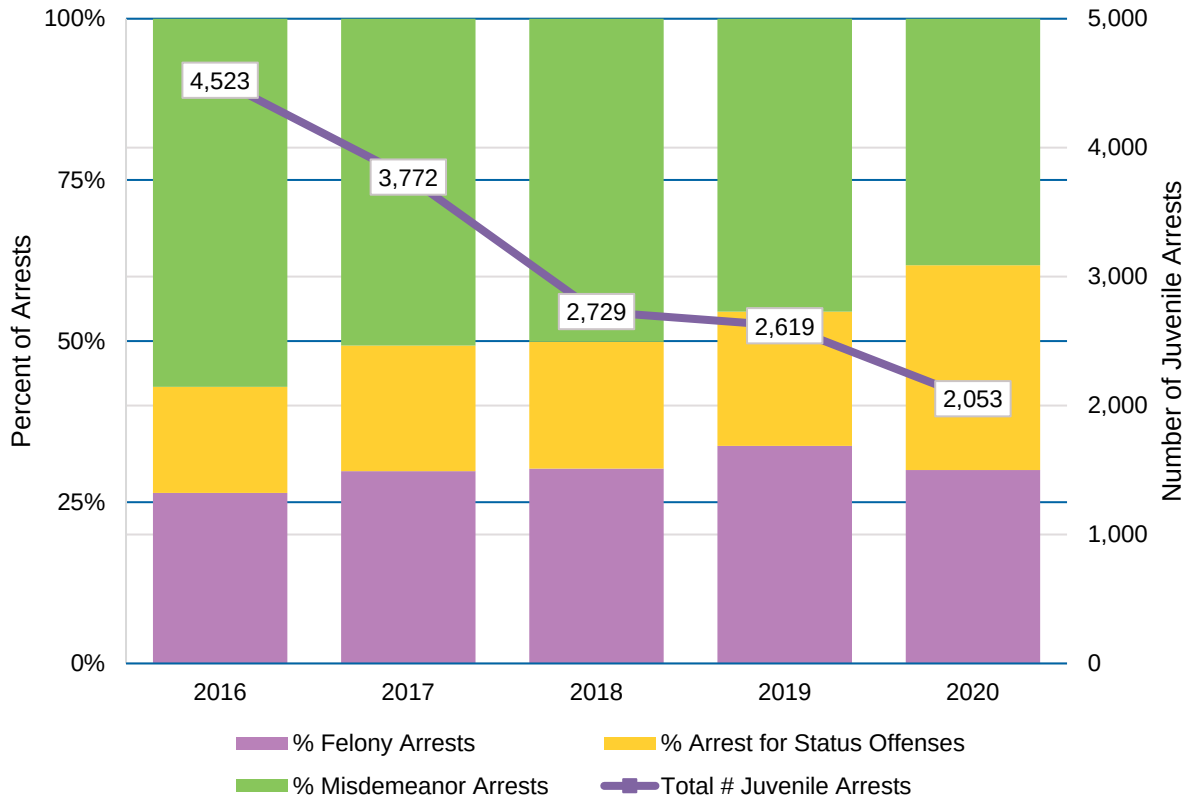
Figure 45: Juvenile arrest rate per 100,000 youth under 18 years old



Source: California Department of Justice Demographic Research Unit, Criminal Justice Statistics Center, 2020.

Between 2016 and 2020, there was a 64.6% decrease in the total number of juvenile arrests in Orange County, dropping from 4,523 arrests to 2,053 arrests.[54] Juvenile arrests for misdemeanors as a proportion of total arrests decreased since 2016, while felony arrests and status offenses as a proportion of total arrests increased. This suggests that the severity of the crime was increasing among juveniles.

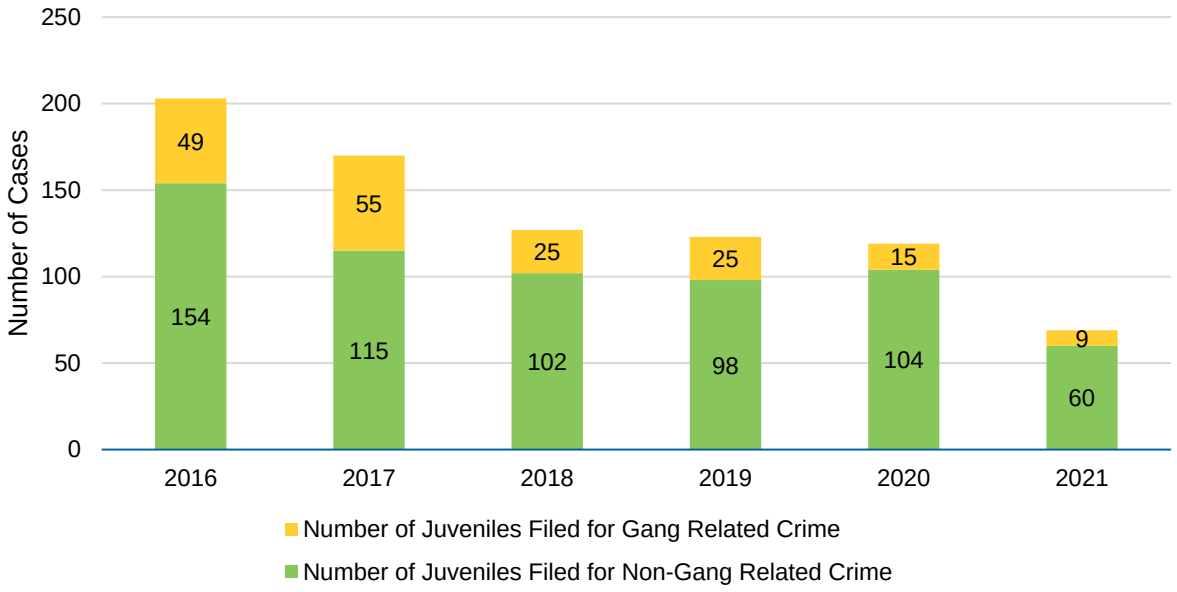
Figure 46: Change in the type of juvenile arrests in Orange County



Source: California Department of Justice Demographic Research Unit, Criminal Justice Statistics Center, 2020.

Compared to other youth offenders, gang members are more extensively involved in serious and violent criminal behavior. While the number of juvenile cases in Orange County decreased 66.0%, from 203 in 2016 to 69 in 2021, the proportion of juvenile prosecutions that were gang-related was higher in 2021 at 6.0% compared to 4.3% in 2016.

Figure 47: Number of gang-related cases and prosecutions and rate per 100,000 youth with gang-related prosecutions in Orange County



Source: Orange County District Attorney's Office, 2021.

The rate of juvenile gang-related prosecutions declined from 21.2 per 100,000 youth (0-17 years) in 2016 to 8.5 per 100,000 in 2021. In 2021, Hispanic or Latino/a youth represented the highest percentage of juvenile gang-related prosecutions (93.0%), followed by Other/Unspecified (5.0%), and White/Caucasian (1.7%) youth.

Hate Crime

In California, a hate crime is defined by the Attorney General as a criminal act committed, in whole or in part, because of one or more of the following actual or perceived characteristics of the victim: disability, gender, nationality, race or ethnicity, religion, sexual orientation, or association of a person or group of persons with one or more of the preceding actual or perceived characteristics. A hate incident is a behavior motivated by hate or bias toward a person's actual or perceived disability, gender identity, nationality, race or ethnicity, religion, or sexual orientation, but is not criminal in nature. If this type of behavior escalates to threats being made or carried out against a person or property, or becomes an incitement to commit violence, it would be classified as a hate crime.[55]

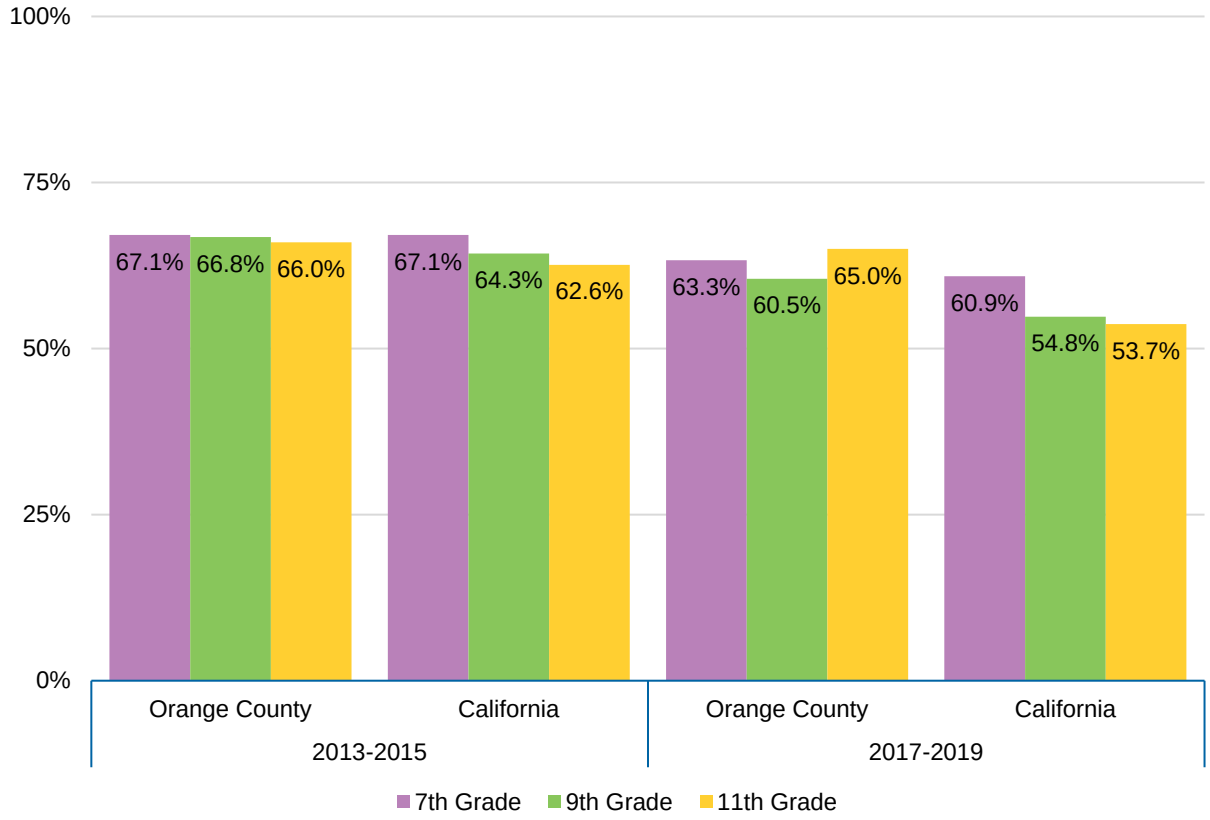
Orange County experienced 112 reported hate crimes in 2020, a 35% increase from 2019. In the last five years, hate crimes have risen steadily, with the largest jump occurring between 2016 to 2020. In 2020 alone, there was an alarming 69% increase in the total number of hate incidents reported. Among the 263 reported cases, there was a 114% increase in anti-Semitic hate incidents, a 180% increase in incidents motivated by anti-Asian hate, and a 23% increase in incidents motivated by anti-Black/African American hate.[55] It is important to note these crimes were instigated by people of all ages and was against all ages (not just instigated by juveniles).

Perceived School Safety

Indicators of school safety are based on student reports regarding their perceived level of safety when at school. In the CHKS, students identify their level of safety from very safe, safe, neither safe nor unsafe, unsafe, and very unsafe.

The percentage of children who reported that their school was safe or very safe ranged from a low of 60.5% of students in 9th grade to a high of 65.0% of 11th grade students.[56] Perceived rates of school safety were higher in Orange County as compared to California in 2017-2019. However, the perceived rates of school safety decreased between 2013-2015 and 2017-2019. Across grades 7th, 9th, and 11th, students were less likely to feel safe at school in 2017-2019.

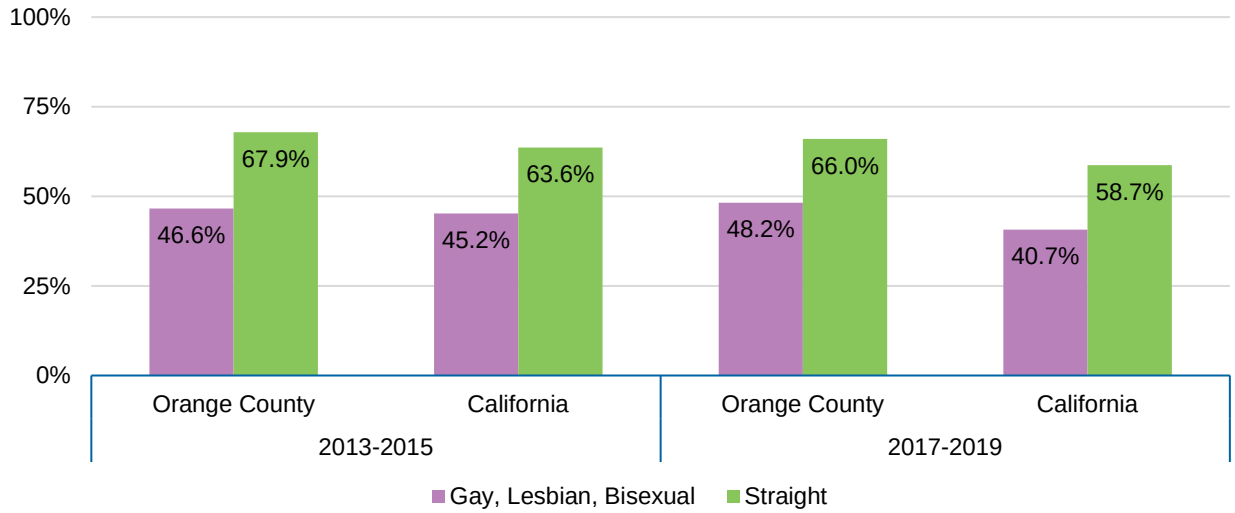
Figure 48: School perceived as safe or very safe



Source: CHKS, 2017-2019.

There are two noticeable disparities in rates of perceived school safety. Between 2017-2019, only 48.2% of Orange County's gay, lesbian, and bisexual students reported feeling their school was safe or very safe, compared to 66.0% of straight students. This disparity is reflected in the California-level data as well; however, in Orange County the feeling of safety was increasing between 2013-2015 and 2017-2019 among gay, lesbian, bisexual students.

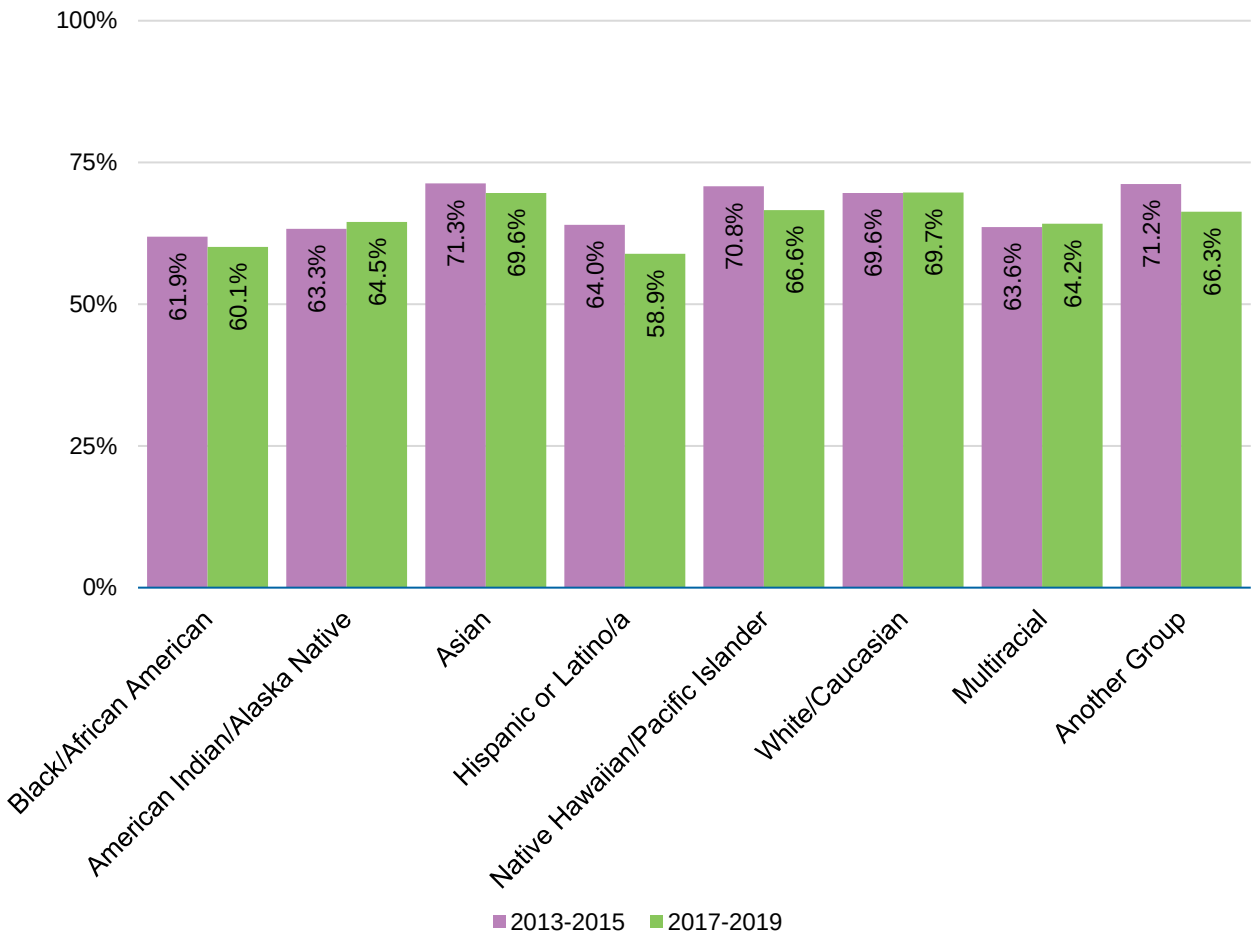
Figure 49: Percent of students who reported feeling safe or very safe at school, by sexual orientation



Source: CHKS, 2017-2019.

Native Hawaiian/Pacific Islander, Black/African American, Asian, Hispanic or Latino/a, and Another Group students were less likely to report feeling safe or very safe at school in 2017-2019 compared to 2013-2015. [56]

Figure 50: Percent of students who reported feeling safe or very safe at school, by race and ethnicity



Source: CHKS, 2017-2019.

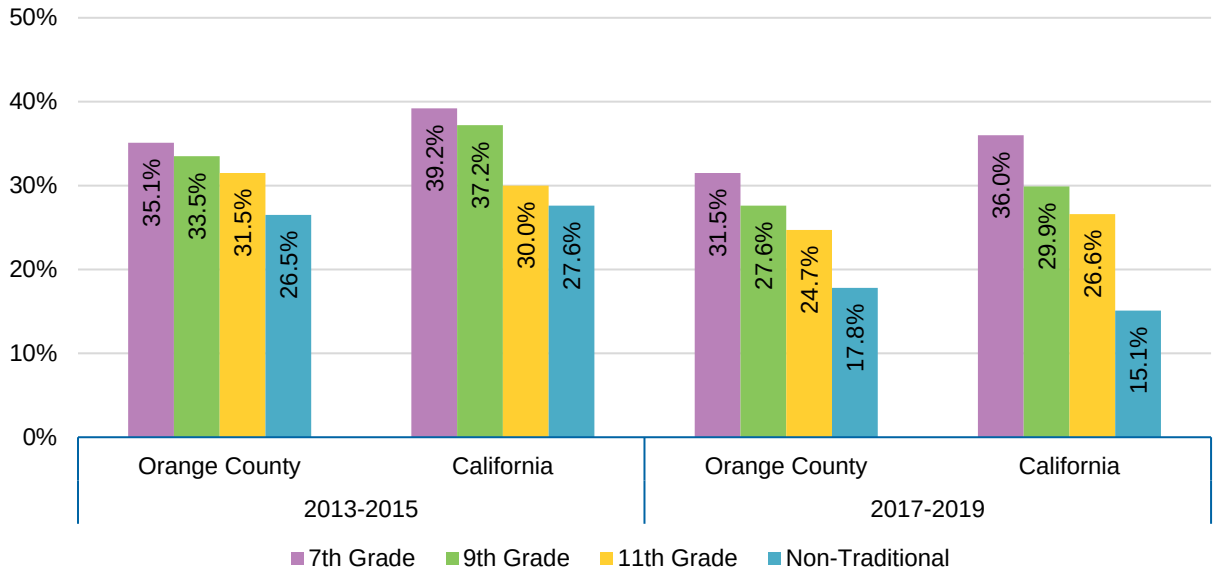
Bullying

Bullying is any type of repeated, aggressive behavior that one person (or a group of people) directs at someone else with the goal of causing physical or emotional pain. Bullying behaviors are also purposeful. Accidents happen and they may result in physical harm; however, bullying is not accidental or unintentional. [57]

Bullying has been recognized as a common contributing factor to depression and anxiety in teens and young adults. Teens and young adults who are regularly subjected to ridicule and mistreatment are likely to suffer from low self-esteem, which can lead to depression-like symptoms. Additionally, teens and young adults who are bullied can develop anxiety over having to socialize with peers and excessive worries over how they are perceived by others.[57]

Self-reported rates of bullying were lower in Orange County compared to California and had decreased between 2013-2015 and 2017-2019.[56]

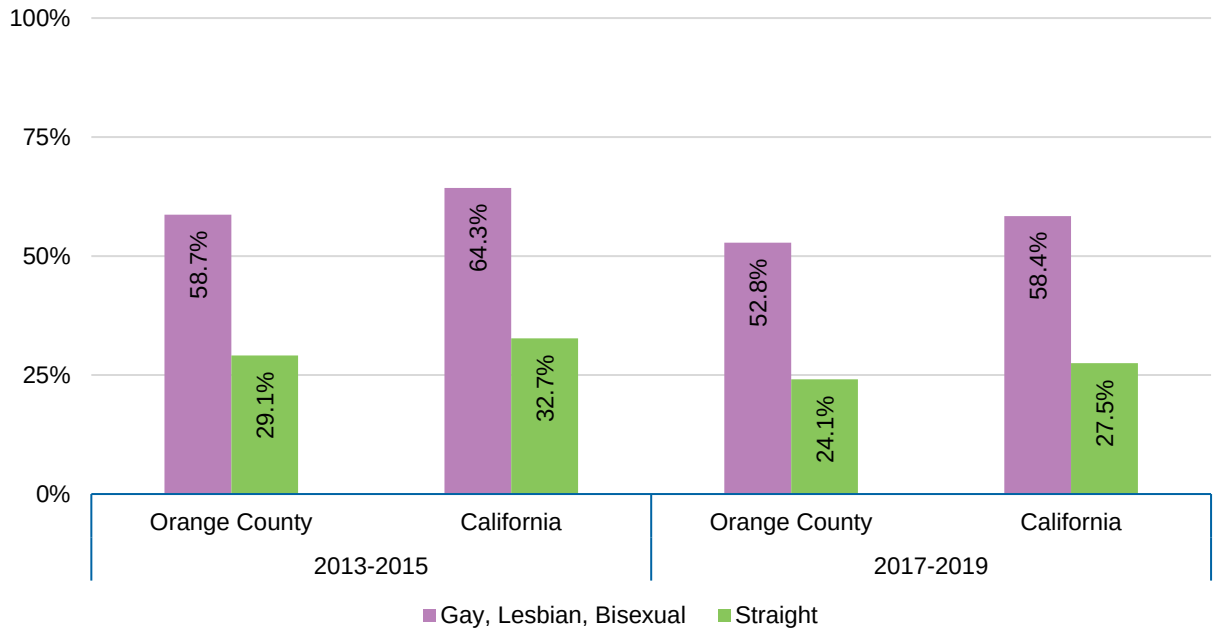
Figure 51: Experienced any harassment or bullying at school at least one time in the past 12 months, by grade level



Source: CHKS, 2017-2019.

Overall, gay, lesbian, and bisexual students report higher rates of bullying compared to their straight counterparts. In 2017-2019, over half (52.8%) of gay, lesbian, and bisexual students in Orange County reported bullying in the past year, as compared to 24.1% of students identifying as straight. Since 2013-2015, these experiences had been decreasing.[56]

Figure 52: Experience any harassment or bullying at school at least one time in the past 12 months



Source: CHKS, 2017-2019.

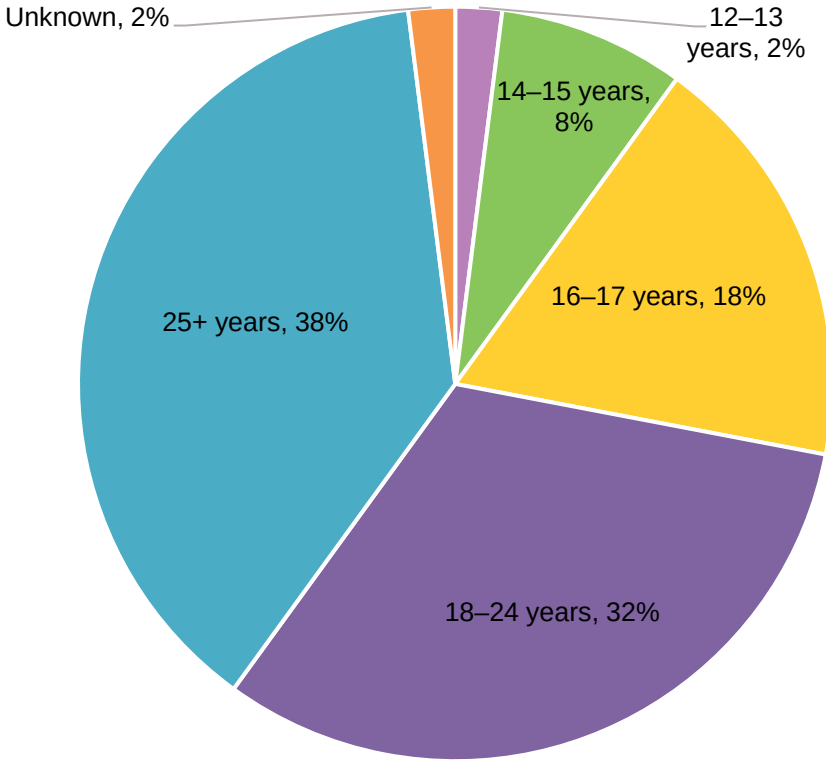
Human Trafficking of Children and Youth in Orange County

Human trafficking, which includes the coercion and exploitation of another person for labor, services, or commercial sex acts, is often an invisible crime impacting children across the state. California has the highest levels of known human trafficking victims in the nation.

In 2003, the Federal Bureau of Investigation's (FBI) Crimes Against Children Unit (CACU) identified 13 United States cities with a high incidence rate of child prostitution and designated these locations as High Intensity Child Prostitution Areas. Three of these cities are in California: San Diego, Los Angeles, and San Francisco. This effort led to the development of human trafficking task forces across the United States, including a task force in Orange County. (U.S. Department of Justice Office of Inspector General, 2009)

According to the 2021 Orange County Human Trafficking Task Force's Human Trafficking Victim Report, between 2019 and 2020, Waymakers and the Salvation Army served a total of 357 trafficking survivors.[58] Of these, 28% were minors.

Figure 53: Percent of human trafficking victims by age, Orange County



Source: Orange County Human Trafficking Taskforce. (2021). 2021 Human Trafficking Victim Report.

Survivors of trafficking are often left to live with health consequences such as untreated chronic disease, sexually transmitted infections, injuries, and mental health disorders.[59] A 2022 study conducted in Orange County titled "Youth Survivor Perspectives on Healthcare and Sex Trafficking", found that youth survivors faced many challenges seeking medical care in the county, including unequal treatment and lack of provider training on how to identify and provide care for trafficking survivors.[60] Recommendations from this study include more extensive provider training and trauma-informed protocols.

A key informant interview noted that most of the organizations responding to child trafficking in Orange County are non-profits, and there is a need for more healthcare professionals to be involved in child trafficking awareness efforts. Additionally, they noted today's concept of human trafficking is remarkably different than 15 years ago. In 2005, California passed the state's first human trafficking laws, which did not broadly define activities that today are understood to be human trafficking. Through a voter initiative (Proposition 35), laws governing human trafficking were expanded to include definitions for acts that qualify as human trafficking, such as coercion and duress.

Proposition 35 describes the signs that a person may be controlled and forced into human trafficking. These signs include a person who shows signs of trauma, fatigue, injury, or other evidence of poor care; is withdrawn, afraid to talk, or their communication is censored by another person; or does not have freedom of movement may be a victim of human trafficking.

Connectedness

Being connected, both socially and in community, has been linked to healthy development and well-being for children.[61] Social connectedness is the measure of how people come together and interact, interrelate, or share resources. It is the sense of belonging with others, and that someone is welcome and accepted as they are.

One in 10 community respondents identified social isolation as a "harmful behavior, factor, and condition contributing to poor health outcomes." More than half (54%) of survey respondents strongly or somewhat agreed with the statement "there are networks of support for individuals and families during times of stress and need." Generally, this was the same for the CHNA's priority populations, except for LGBTQIA+. Less than half (45%) of the LGBTQIA+ respondents *agreed* with this statement.

Table 33: Percent of respondents who agree (strongly, neutral) with statements about the quality of life in Orange County

	Percent of respondents who agree or were neutral with statements about the quality of life in Orange County				
	All Respondents (n=838)	BIPOC (n=242)	Hispanic or Latino/a (n=390)	LGBTQIA+ (n=139)	Families of CSHCN (n=528)
There are networks of support for individuals and families during times of stress and need	54%	53%	54%	45%	50%

Source: CHNA Community Health Survey, 2022.

Community connection helps to build a sense of self, while also teaching children about respect, trust, and community participation. For youth, connections include developing a relationship with a trusted adult, and participating with entities such as schools, community organizations, religious institutions, and sports groups that are safe, stable, and are open to all. In Orange County, in 2015-2019, 4.0% of youth 16-19 years are neither working nor enrolled in school. This has decreased since 2010-14 when it was 6.2%.[62] Rates in Orange County are lower than California and the United States.

This CHNA identified two areas of concerns:

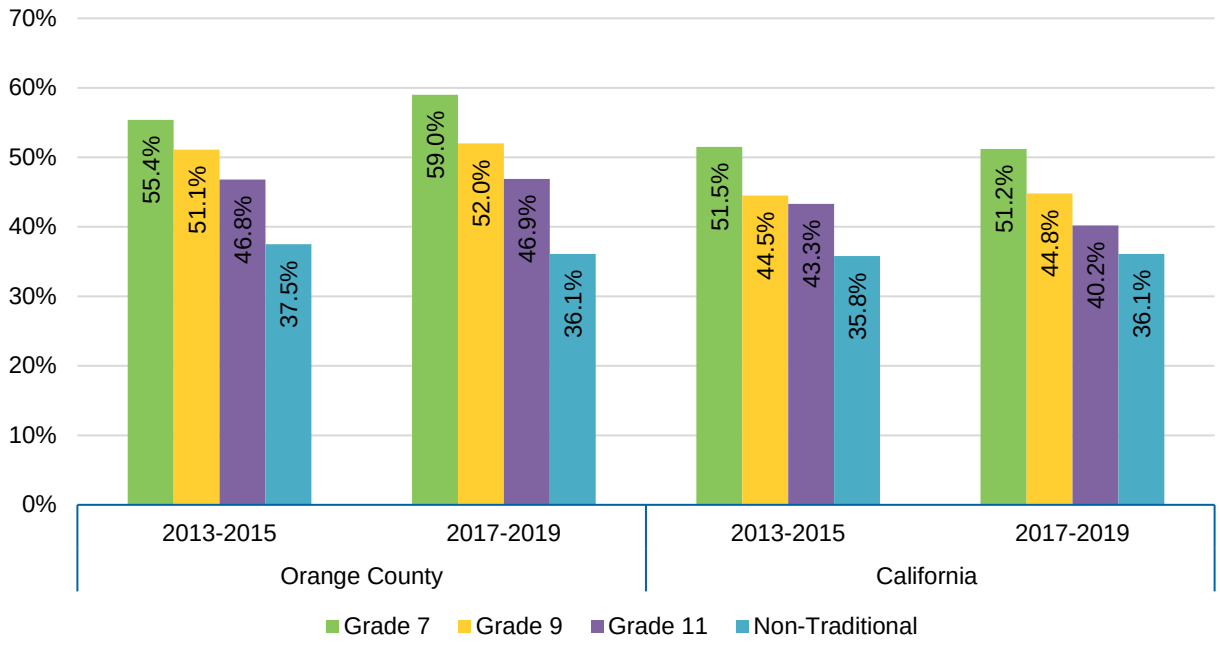
1. Low levels of connectedness at school among vulnerable students, including gay, lesbian, and straight students, and BIPOC students
2. Increased self-reported use of social media and screen time among youth as an important risk factor for youth mental health

School Connectedness

School connectedness is the belief held by students that adults and peers in the school care about their learning as well as about them as individuals. This connection is an important protective factor thought to reduce the likelihood of youth engagement in risky behaviors, including early sexual initiation, alcohol, tobacco, and other drug use, and violence and gang involvement. Connection has shown to improve likelihood of academic achievement, defined by higher grades and test scores, school attendance, and completing school.[63]

School connectedness is measured with five questions about feeling safe, feeling close to people, feeling included at school, being happy at school, and about teachers treating students fairly. Orange County students were more likely to report feeling a high level of school connectedness in 2017-2019 as compared to 2013-2015, and more so than other students in California.[56] During both time periods, high levels of school connectedness decreased with increasing grade levels.

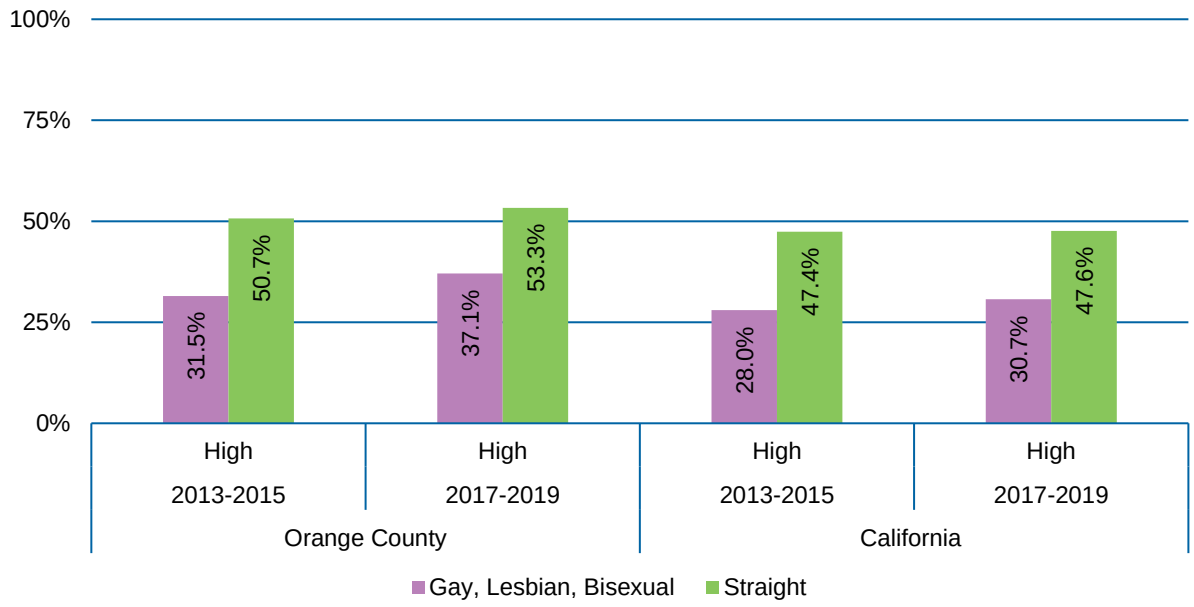
Figure 54: Percent of students with high level of school connectedness, by grade level



Source: CHKS, 2017-2019.

In Orange County, gay, lesbian, and bisexual students reported lower levels of school connectedness (37.1%) compared to straight students (53.3%) in 2019.[56] Both groups experienced an increase in school connectedness between 2013-2015 and 2017-2019.

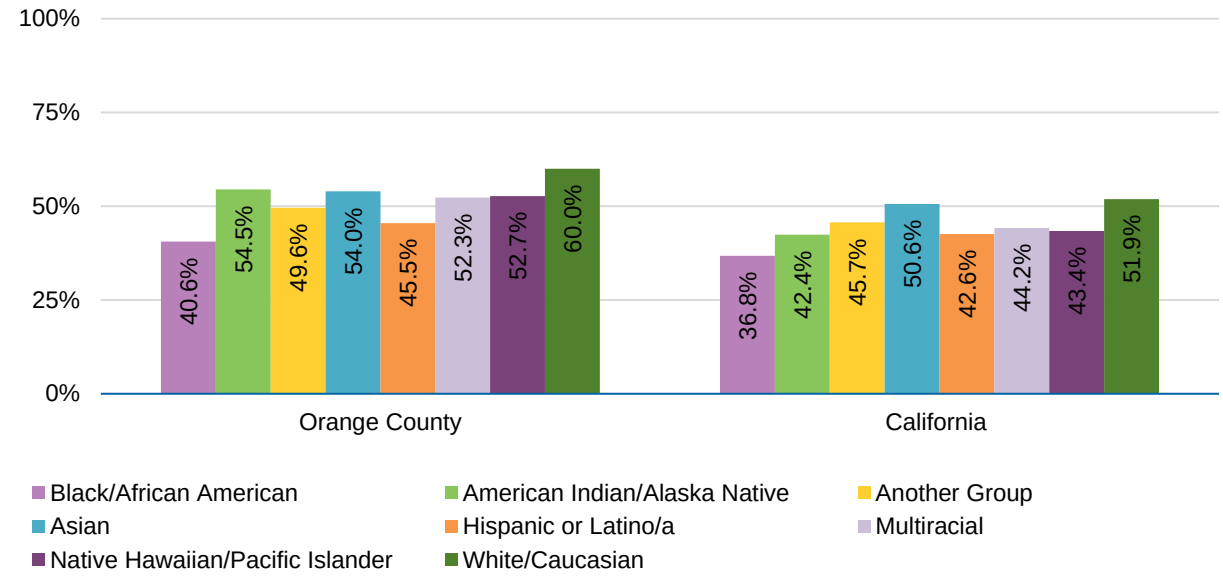
Figure 55: Percent of students with high school connectedness, by sexual orientation



Source: CHKS, 2017-2019.

Overall, BIPOC students are less likely to feel connected to school than their White/Caucasian peers. This is the case in both Orange County and California.

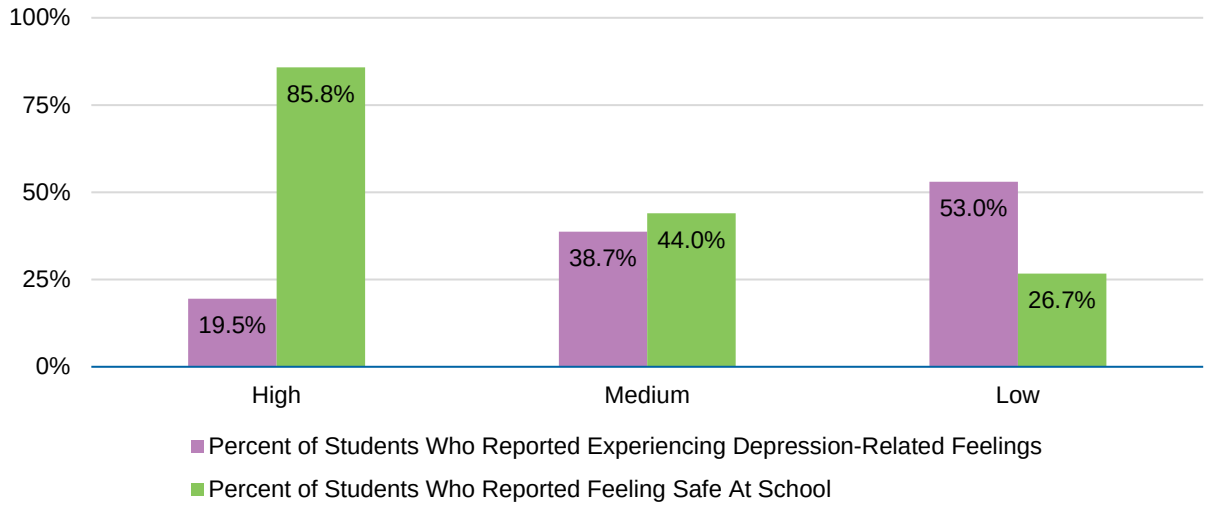
Figure 56: Percent of students with high school connectedness, by race and ethnicity, 2017-2019



Source: CHKS, 2017-2019.

School connectedness is related to health outcomes among students. For example, students with greater school connectedness are less likely to report having depression-related feelings and are more likely to feel safe at school. One in five students (19.5%) with a high level of school connectedness in Orange County experience depression-related feelings compared to one in two students (53.0%) with low levels of school connectedness.56 In 2019, 85.8% of students with high school connectedness also felt safe at schools compared to 26.7% of students with low school connectedness reported feeling safe at school.

Figure 57: Percent of students who reported experiencing depression-related feelings or reported feeling safe at school, by level of school connectedness, Orange County, 2017-2019



Source: CHKS, 2017-2019.

In both Orange County and California, students with lower school connectedness reported higher rates of bullying compared to their well-connected counterparts. For example, from 2017-2019, 42% of students with lower school connectedness reported “some” bullying as compared to 21% of highly connected students.[56]

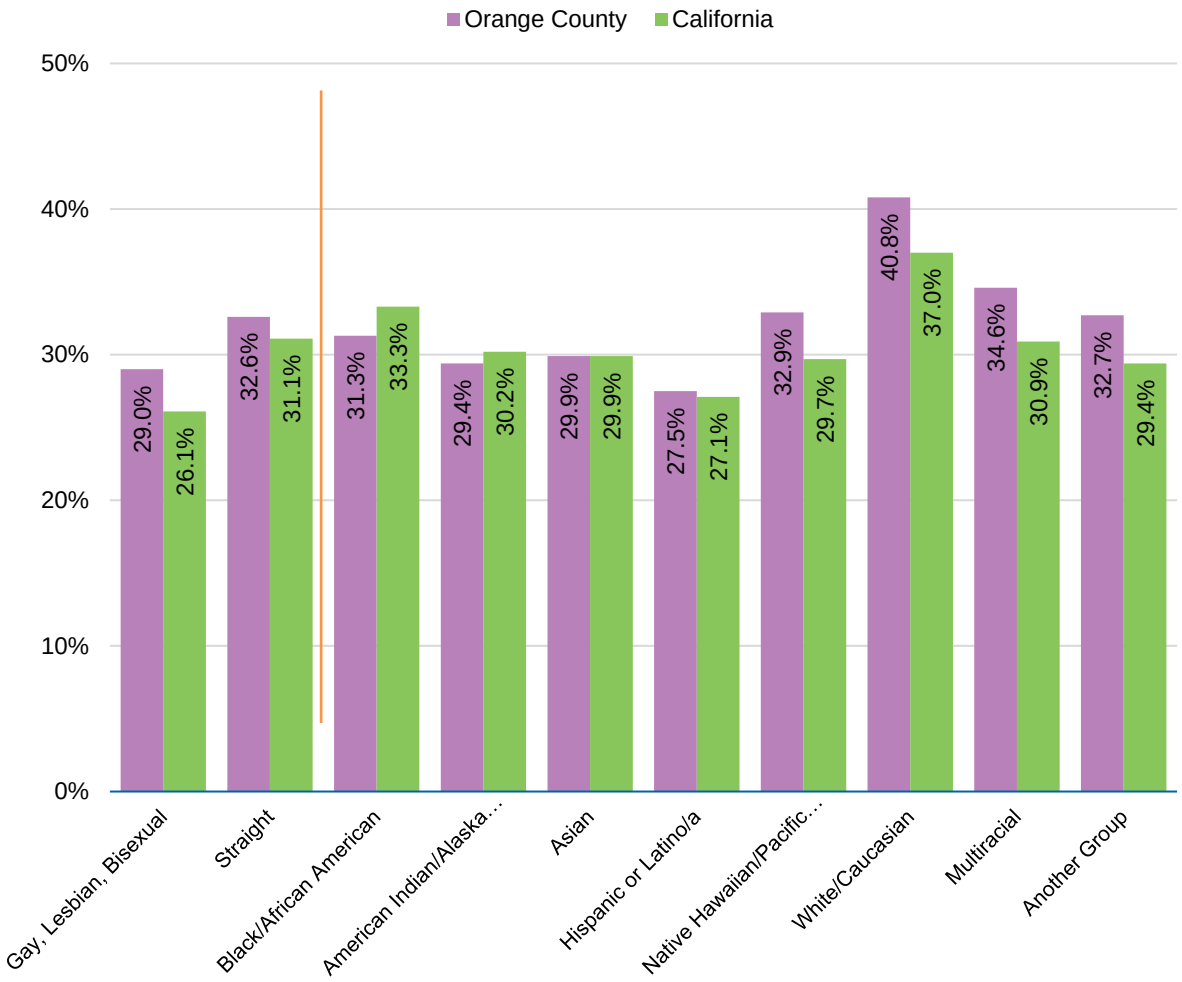
Connectedness with Adults at School

Having one or more caring adult in a child and youth’s life is an important protective factor against negative social and health outcomes. In many cases, these caring adults are the child’s parents; but other relatives, neighbors, friends of parents, teachers, coaches, religious leaders, and others can play this role.

One measure of connectedness is connectedness with an adult at school. The extent to which students have caring relationships with an adult in school is measured by level of agreement with three statements: having a teacher or other adult at school who cares about the student, who notices when the student is not there, and who listens when the student has something to say. Students are less likely to report having high levels of connectedness to an adult as compared to having high levels of connectedness with their school.

Levels of connectedness to adults at school vary by race/ethnicity and sexual orientation. In 2017-2019, 40.8% of White/Caucasian students reported high levels of connectedness compared to 27.5% of Hispanic or Latino/a and 31.3% of Black/African American students.[56] Connectedness to adults at school among gay, lesbian and bisexual students was lower compared to straight students, at 29.0% versus 32.6%, respectively. Trends in Orange County were similar California; however, connectedness was slightly higher in Orange County for some race groups (e.g., Asian, Native Hawaiian/Pacific Islander, Multiracial, and Another Group) while lower for Black/African American students.

Figure 58 Percent of students with high adult connectedness, by sexual orientation or race/ethnicity, 2017-2019



Note: The orange line indicates a separation between sexual orientation and race/ethnicity groups. These two groups are not mutually exclusive. Source: CHKS, 2017-2019.

Social Media and Screen Time

While school is the primary environment where children first develop social skills and experiences, social media and screen time can also impact a child's social connection to others.

This impact can be both positive and negative. Social media plays a major part in our everyday lives, and most young people spend a large part of their day engaging on one or more social media platforms. Social media can have many positive aspects such as:

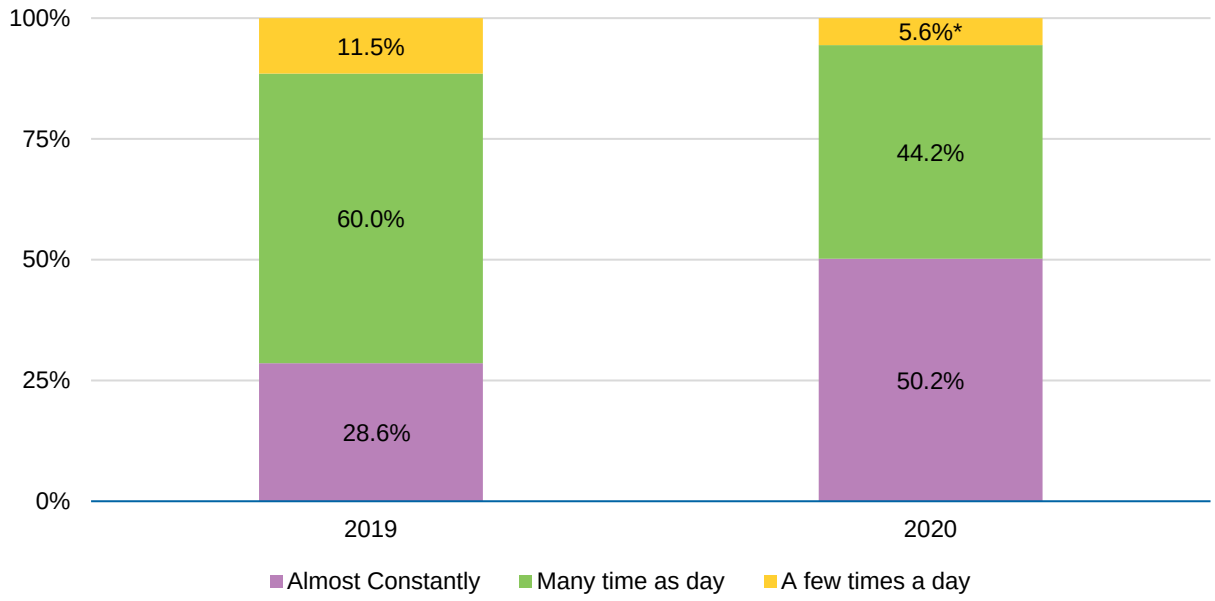
- Helping connect with loved ones who may be scattered around the world
- Connecting with people who have similar interests or passions
- Providing a platform to share stories and experiences
- Connecting with people who are exploring their identities and accessing resources not made available at home or school

With these benefits come risks. Research has linked social media use and depression among youth.[64] It is also a risk factor for experiencing cyberbullying.[65]

Approximately one in seven community health survey respondents (15%) ranked social media, including excessive or inappropriate use, and one in eight (12%) ranked overuse of technology/excessive screen time, among the top three "harmful behaviors, factors, and conditions contributing to injuries, violence, and poor health outcomes for youth."

In 2020, in Orange County, 50.2% of teens (13-17 years) reported they "almost constantly" use the internet. This is compared to 28.6% in 2019.[29]

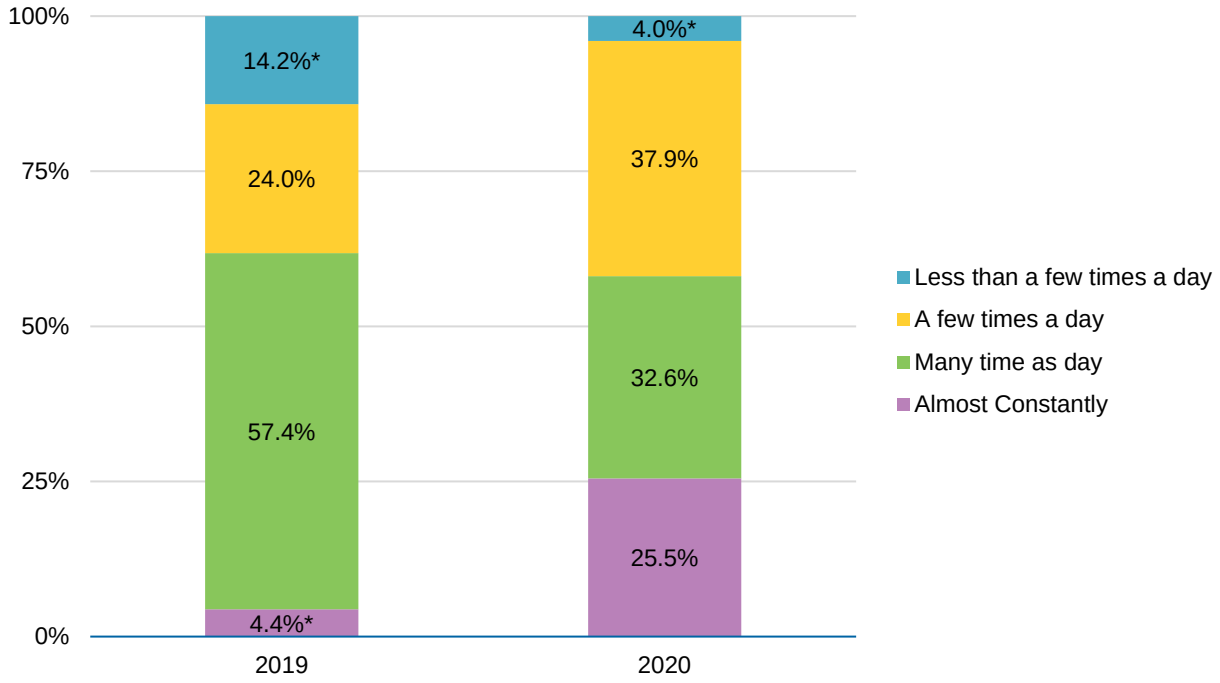
Figure 59: Percent of Orange County teens (13-17 years) by how often they use the internet



Note: *Statistically unstable. Source: CHIS, 2020.

In 2020, in Orange County, one in four teens (25.5%) reported they "almost constantly" used a computer/mobile device for social media, which was a significant increase from 4.4% in 2019.[29]

Figure 60: Percent of Orange County teens (13-17 years) by how often they use a computer or mobile device for social media



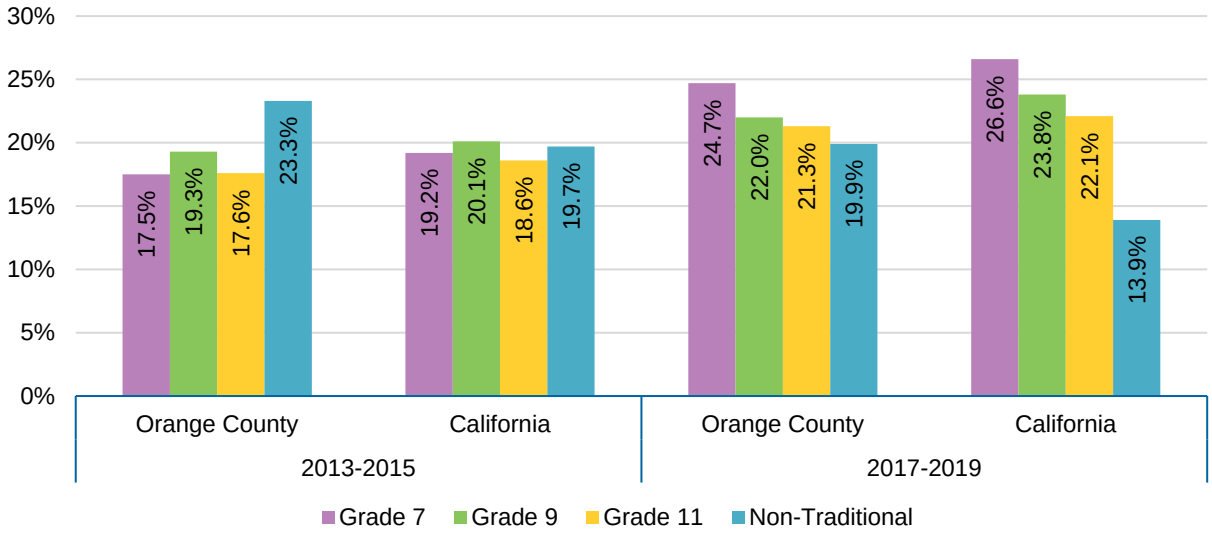
Note: *Statistically unstable. Source: CHIS, 2020.

According to the Centers for Disease Control, approximately 33% of middle school and 30% of high school students have experienced cyberbullying nationally.

A recent study analyzed millions of websites and social platforms early in the COVID-19 pandemic.[66] Between December 1, 2019, and March 25, 2020, the study found a 70% increase in bullying and abusive language among kids and teens on social media and chat forums, a 40% increase in toxicity on gaming platforms, and a 200% spike in traffic to hate sites. Victims of cyberbullying are at risk of depression, anxiety, substance abuse, low self-esteem, poor school performance, and an increased risk of suicidal behavior. Many times, victims of cyberbullying may start to isolate themselves and feel increasingly alone.

Except for students in non-traditional programs, Orange County students in grades 7 through 11 had slightly lower rates of cyberbullying compared to California, although the rates have been increasing.[56] For example, cyberbullying among grade 7 students in Orange County increased from 17.5% in 2013-2015 to 24.7% in 2017-2019.

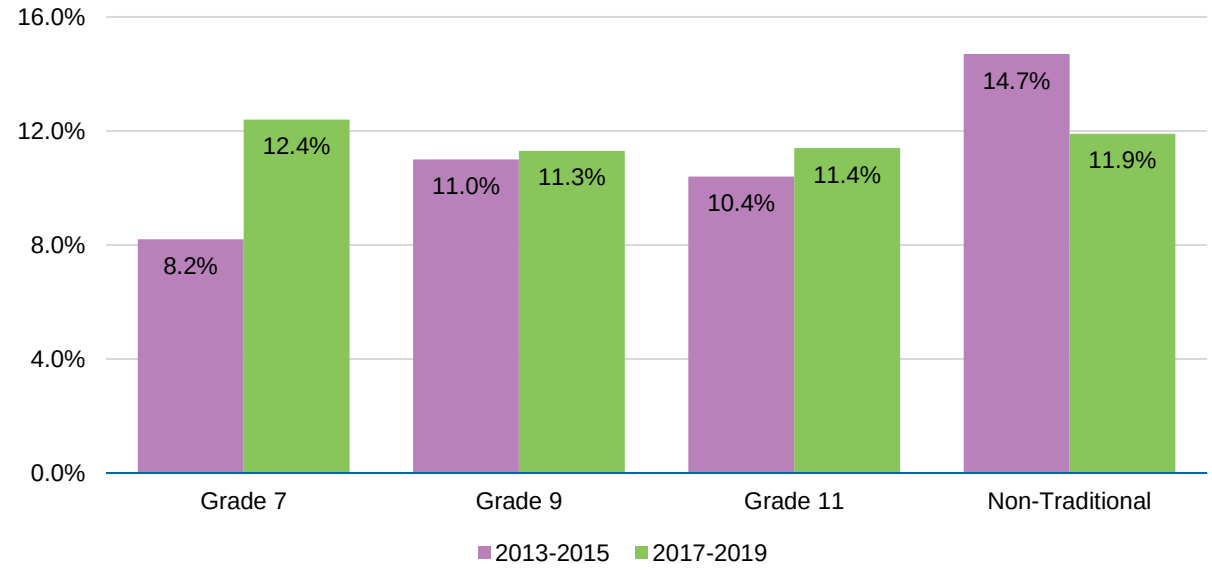
Figure 61: Percent of public-school students who had mean rumors or lies spread about them on the internet by other students at least once in the previous year, by grade level



Source: CHKS, 2017-2019.

In 2017-2019, the percent of public-school students experiencing cyberbullying two or more times in the previous year ranges from 11.3% of grade 9 students to 12.4% among grade 7 students. Experiencing cyberbullying more frequently increased in 2017-2019 compared to 2013-2015 for all grades. However, it decreased among students at non-traditional programs.

Figure 62: Percent of public-school students who had mean rumors or lies spread about them on the internet by other students two or more times in the previous year, Orange County, 2017-2019



Source: CHKS, 2017-2019.

Orange County Demographic Profile

Orange County is included in the Los Angeles-Long Beach-Anaheim Metropolitan Statistical Area, with 34 incorporated cities. Anaheim, Fullerton, Orange, Santa Ana, and Tustin have traditional downtowns dating back to the 19th century, as well as newer commercial development. Coastal towns and attractions like Disneyland bring children and families to the county from around the world. Several universities are also located in Orange County, including the University of California, Irvine (UCI), Chapman University, and California State University Fullerton.

There are significant political, demographic, economic and cultural distinctions between North and South Orange County, divided by the Costa Mesa Freeway.

North Orange County, including Anaheim, Fullerton, and Santa Ana, was the first part of the county to be developed and is culturally closer to Los Angeles County. This region is more diverse and densely populated, and includes more renters, fewer homeowners, and more registered Democrats than Republicans, compared to South Orange County. There are notable exceptions to these general trends, such as the presence of more Republican registered voters in Yorba Linda, and higher-income residents in Anaheim Hills and Villa Park.

South Orange County is more residential, wealthier, more Republican, less racially diverse, and more recently developed. Irvine, the largest city in the region, is an exception to some of these trends, being a major employment center and having an Asian plurality (Irvine's Asian population is predominantly East Asian, compared with Westminster’s which is predominantly Southeast Asian).

Another distinct region of Orange County is the Orange Coast, which includes the six cities bordering the Pacific Ocean. These are (from northwest to southeast): Seal Beach, Huntington Beach, Newport Beach, Laguna Beach, Dana Point and San Clemente.

The demographic characteristics of a population are important in understanding the health risks, challenges, strengths, and opportunities of Orange County. Aspects such as age, race, and ethnicity are closely linked to health outcomes. Socio-economic factors such as income, language, and education are likewise associated with health risk, protective factors, and outcomes. This section reports key Orange County demographics. More detailed demographic tables are provided in Appendix H.

Population Change

Assessing the shifting population is important in identifying potential impacts on healthcare providers, healthcare access, and utilization of community resources.

Births are one driver of population change. The birth rate in Orange County was 46.4 per 1,000 people (ages 15-50 years) in 2016-2020, and lower than California (48.3 per 1,000) and the United States (52.9 per 1,000).[67] Since 2011-2015, the birth rate has dropped from 48.3 per 1,000 people in Orange County. The five-year average number of births in Orange County

dropped 6.4% between 2011-2015 and 2016-2020, from 37,955 births to 35,539. In 2020 alone, there were just 30,862 births in Orange County.[68]

Between 2022 and 2027, the pediatric population is projected to decrease 4.8%. This is higher than the projected 2.9% decrease in California. The adult and older adult population is projected to increase 1.4% in Orange County.[1]

Age

The median age in Orange County was 38.1 years in 2015-2019, which is significantly higher than in 2010-2014 at 36.7 years.[69] In 2022, youth ages birth to 19 years made up 24% of the Orange County population.

Table 34: Orange County growth by age cohort, 2022 and 2027

Population Cohort by Age	Orange County		
	2022	2027	Change
0-4	180,179	181,313	0.6%
5-9	191,814	181,056	-5.6%
10-14	201,796	189,573	-6.1%
15-19	208,321	192,691	-7.5%
All pediatrics (0-19)	782,110	744,633	-4.8%
Total population	3,203,504	3,198,933	-0.1%
Proportion of the population 0-19 years	24%	23%	-1.0%

Source: ESRI, 2022.

Race and Ethnicity

Understanding race and ethnicity composition can help reveal health disparities, including higher rates of chronic disease, healthcare access, premature death, and other factors that affect the health of the community's population. Among California's 58 counties, Orange County ranked 9th in racial and ethnic diversity, based on the United States Census Bureau's Diversity Index. The index measures the probability that two people chosen at random will be from different race and ethnicity groups. Nearly 30% of Orange County's population is foreign-born[70].

Population projections indicate that the overall pediatric population in Orange County is decreasing and becoming more racially and ethnically diverse. This matters because the prevalence of health disparities will increase without a concerted effort to identify and mitigate the factors contributing to disparity.

Table 35: Age cohort 0-19: population change by race, 2022 and 2021 [xviii]

Population cohort: # and % of BIPOC pediatric population	2022		2027		Estimate BIPOC Population Change
	Orange County				
	530,692	68%	526,060	71%	-0.9%
	California				
	7,074,787	70%	7,102,614	73%	0.39%

Source: ESRI, 2022.

Nearly 48% of the pediatric population is Hispanic or Latino/a. This is projected to decrease 4.3% between 2022 and 2027, compared to 1.9% decrease in California.

Table 36: Hispanic or Latino/a pediatric population

	2022		2027		Estimate Hispanic or Latino/a Population Change
Population cohort: # and % of Hispanic or Latino/a pediatric population	Orange County				
	371,539	47.5%	355,651	47.8%	-4.3%
	California				
	5,357,230	53.3%	5,257,359	5,357,230	53.3%

Source: ESRI, 2022.

Children and Youth with Special Healthcare Needs

Nearly one out of every five children in the United States have a special healthcare need. Children and youth with special healthcare needs (CYSHCN), require more care for their physical, developmental, behavioral, or emotional differences than their typically developing peers. [71]

The percentage of Orange County youth with a disability, defined as one or more sensory disabilities or difficulties with everyday tasks, was 5.2%, which was like California at 5.0%. [72]

[xviii] BIPOC includes Black/African American, American Indian/Alaska Native, Asian, Pacific Islander, Other, and Multiple Races.

Table 37: Percent of residents with a disability, defined as one or more sensory disabilities or difficulties with everyday tasks

Age	Orange County	California
Full population	8.6	10.6
Infants (0-4 years)	1.3	0.7
Juveniles (5-17 years)	3.9	4.3
Young adults (18-39 years)	4.1	5.2
Middle-aged adults (40-64 years)	6.6	9.5
Seniors (65 and older)	28.5	33.5
Pediatric population (0-17 years)	5.2	5.0

Source: U.S. Census, 5-year combined estimate 2015-2019, Table S1810.

In SY 2019-2020, 124.2 Orange County students per 1,000 students were enrolled in special education, a 14% increase since SY 2015-2016 with a rate of 109.1 per 1,000 students. [73]

Table 38: Special education enrollment

Special Education Enrollment	SY 2015-2016		SY 2019-2020		Percent Change in the Rate per 1,000
	Number of Students	Rate per 1,000 Students	Number of Students	Rate per 1,000 Students	
Orange County	53,774	109.1	58,823	124.2	14% increase
California	734,422	117.9	804,107	130.3	11% increase

Source: As cited in KidsData.org, California Dept. of Education, DataQuest & Special Education Division, SY 2019-2020.

Household Characteristics

Orange County's population has decreased since 2019 and is projected to decrease another 0.03%, from 3,203,504 in 2022 to 3,198,933 in 2027.[1] Average household size is also decreasing; however, the total number of Orange County households is projected to increase during this same period.

Table 39: Household population

	Orange County			California		
	2019	2022	2027	2019	2022	2027
Household population	3,207,763	3,203,504	3,198,933	38,995,367	38,656,160	39,648,278
Total households	1,060,886	1,082,175	1,084,346	13,339,357	13,570,050	13,566,014
Average household size	3.02	2.91	2.90	3.03	2.86	2.85
Families	756,645	768,051	768,749	9,162,700	9,279,201	9,272,440

Source: ESRI, 2022.

Children's Relationship to Householder

Nearly 84% of children living in Orange County were a biological son or daughter to the householder, followed by 7.7% (54,107) who were grandchildren. There were 1,263 households with a foster child.[74]

Table 40: Children (0-17 years) in households by relationship to householder

Household Relationships	California		Orange County	
	Number	Percent	Number	Percent
Biological son or daughter	7,351,376	81.7%	586,389	83.5%
Grandchild	824,504	9.2%	54,107	7.7%
Other relative	249,001	2.8%	20,917	3.0%
Stepson or stepdaughter	219,939	2.4%	14,737	2.1%
Adopted son or daughter	131,412	1.5%	9,458	1.3%
Other nonrelative	106,740	1.2%	8,605	1.2%
Brother or sister	63,047	0.7%	5,241	0.7%
Foster child	29,616	0.3%	1,263	0.2%
Other roommate or housemate[xix]	20,525	0.2%	1,355	0.2%

Source: U.S. Census, 5-year combined estimate 2015-2019, Table B09018.

Single-Parent Households

Adults and children in single-parent households are at risk for adverse health outcomes, including mental illness (e.g., substance abuse, depression, suicide) and unhealthy behaviors (e.g., smoking, excessive alcohol use, food insecurity). Children in single-parent households are at greater risk of severe morbidity and mortality than their peers in two-parent households.[75] Mortality risk is also higher among single parents.

In 2015-2019, about one in four Orange County households (24.4% or 177,665) with children birth to 17 years were single-parent households. Of these, 17.4% were single-mother/female-caregiver households.[76]

[xix] Other includes roommate or housemate, householder, same-sex husband/wife/spouse, Son-in-law or daughter-in-law, and other.

Table 41: Children (0-17 years) by household type

Single Parent Households	California		Orange County	
	Number	Percent	Number	Percent
Housing	8,996,160	99.8%	702,072	99.8%
Married-couple household	6,162,566	68.3%	527,310	75.0%
Single-mother household	2,005,973	22.2%	122,094	17.4%
Single-father household	778,286	8.6%	49,571	7.0%
Non-married household	49,050	0.5%	3,097	1%
Group quarters	21,293	0.2%	1,416	0.2%

Source: U.S. Census, 5-year combined estimate 2015-2019, Table B09005.

Language Spoken

Limited English proficiency (LEP) is a term used to describe individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English. Two thirds of Orange County households (447,323) with children ages birth to 17 years speak at least one language other than English.[77]

Table 42: Children (0-17 years) by household language

Household Language Spoken	California		Orange County	
	Number	Percent	Number	Percent
English only	3,482,252	38.7%	254,752	36.3%
Spanish	3,977,580	44.2%	285,255	40.6%
Asian and Pacific Islander language	913,033	10.1%	111,952	15.9%
Other Indo-European languages	472,180	5.2%	37,149	5.3%
Other language	151,115	1.7%	12,967	1.8%

Source: U.S. Census, 5-year combined estimate 2015-2019, Table B16004.

Among these households, 10.8% or 48,174 households speak English less than “very well”. This rate is slightly higher compared to California at 9.3%.[77] Language influences access to services and is an increasingly important consideration for service delivery.

Table 43: Children (0-17 years) by household language –ability to speak English less than "very well"

Household English Proficiency	Orange County		California	
	Number	Percent	Number	Percent
Spanish	32,602	11.4%	379,859	9.6%
Asian and Pacific Islander languages	12,421	11.1%	87,703	9.6%
Other language	1,063	8.2%	13,342	8.8%
Other Indo-European languages	2,088	5.6%	31,197	6.6%
Percent of all households who speak a second language who speak English less than “very well”	48,174	10.8%	512,101	9.3%

Source: U.S. Census, 5-year combined estimate 2015-2019, Table B16004.

Poverty

Child poverty has various negative effects on the physical and mental health of children. Poverty is linked to substandard housing, homelessness, inadequate nutrition, food insecurity, inadequate childcare, lack of access to healthcare, and generally unsafe neighborhoods. The implications for children living in poverty include greater risk for poor academic achievement, school dropout, abuse and neglect, behavioral and socioemotional problems, physical health problems and developmental delays.

In Orange County, approximately 17.1% of children (ages 0-17) live in poverty, and 5.6% (37,448) of children live in deep poverty.[78] In April 2021, 245 Orange County children and youth (0-24 years) were considered homeless.[79]

When cost of living and a range of family needs and resources, including social safety net benefits, are factored in, poverty among Orange County’s children jumps to 23.5%, surpassing California’s rate of 18.6%.[80]

Table 44: Orange County children (0-17 years) living in poverty

Children Living in Poverty	Orange County		California	
	Number	Percent	Number	Percent
Poverty (<138% FPL)	113,509	17.1%	1,761,025	21.1%
Deep poverty (<50% FPL)	37,448	5.6%	674,824	8.1%
All children for whom poverty status is determined	664,207		8,327,708	

Source: U.S. Census, 5-year combined estimate 2015-2019, Table C17002.

BIPOC children are disproportionately impacted by poverty. In Orange County, BIPOC children represent 44% of the population under age 18, but 50% of the children living in poverty.[78]

Table 45: Children (0-17 years) by race with household income below FPL by race

Children Living in Poverty, by Race	Orange County		California		Percent of the Population in Orange County
	Number	Percent	Number	Percent	
White/Caucasian alone	35,654	49.9%	626,714	51.1%	56.3%
Some other race alone	18,989	26.6%	290,201	23.7%	16.2%
Asian alone	10,639	14.9%	80,411	6.6%	17.6%
Two or more races	3,948	5.5%	83,890	6.8%	7.8%
Black/African American alone	1,518	2.1%	125,491	10.2%	1.5%
Native Hawaiian and other Pacific Islander alone	439	0.6%	4,634	0.4%	0.3%
American Indian/Alaska Native	299	0.4%	13,978	1.1%	0.4%

Source: U.S. Census, 5-year combined estimate 2015-2019, Table C17002.

Educational Attainment

Educational attainment is one of the most influential drivers of health and known to impact health outcomes, mental health, and care access.[81] As reported in the 2021 America's Health Rankings report, health disparities in mental and behavioral health are evident between those without a high school diploma and those who have graduated college. In 2015-2019, nearly three in 10 (28.7% or 91,226) Orange County households with children (0-17 years) had a householder with a high school diploma or less.[78]

Table 46: Households with children (0-17 years) by householder educational attainment

Householder Educational Attainment	California		Orange County	
	Number	Percent	Number	Percent
Less than 12th grade or no schooling	651,980	16.7%	47,968	15.1%
Regular high school diploma or GED	696,185	17.8%	43,258	13.6%
Some college, but less than 1 year	207,108	5.3%	13,466	4.2%
1 or more years of college credit, no degree	621,774	15.9%	42,317	13.3%
College or graduate degree	1,736,286	44.4%	171,072	53.8%

Source: U.S. Census, 5-year combined estimate 2015-2019, Table B15002.

Assessment of Orange County's Resources Available to Meet the Social and Health Needs of Children and Families

Understanding the resources potentially available to address significant health needs is an important component of a CHNA. This includes a focus on the needs or deficits of the community that should be addressed, and also the strengths and assets that can be used to meet those same community needs and improve quality of community life. The CHNA defines strengths and assets to include both healthcare and social care supports.

Community health survey respondents were asked to what extent they agree "there are enough social services in the community to meet the needs of our children and families" and "there is broad variety of affordable healthcare services in the community." More than half (54%) were neutral or disagreed with each statement, suggesting that these kinds of resources are not adequate and/or families lack awareness of the resources. Community discussions also suggest that awareness or knowledge of resources is a significant barrier. Service providers, who are often the first to identify a need, expressed challenges with making the link to resources for a family or individual.

Table 47: Percent of respondents who age, neutral, or disagree with statements about the quality of life in Orange County

	Agree	Neutral	Disagree
There are enough social services in the community to meet the needs of our children and families (n=828)	46%	40%	14%
There is a broad variety of affordable healthcare services in the community (n=835)	47%	39%	14%

Source: CHNA Community Health Survey, 2022.

Except for the respondents who identify as Hispanic or Latino/a, the CHNA's priority populations were more likely to disagree that there were enough social services and/or a broad variety of affordable healthcare services in their own communities.

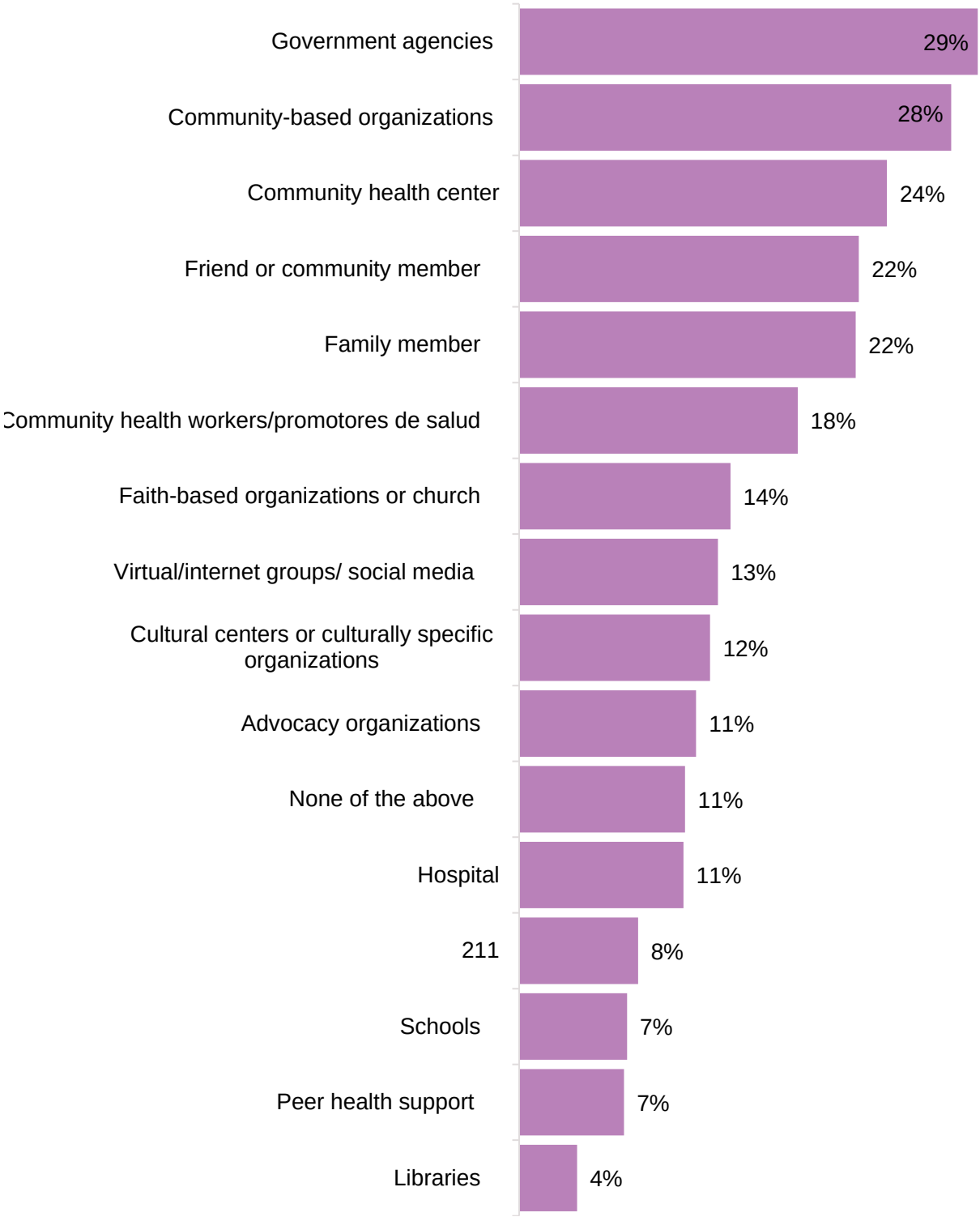
Table 48: Percent of respondents who disagree (neutral, disagree) with statements about the quality of life in Orange County, by priority population

	All Respondents	BIPOC	Hispanic or Latino/a	LGBTQIA+	Families of CSHCN
There are enough social services in the community to meet the needs of our children and families	54% (n=828)	57% (n=238)	50% (n=385)	63% (n=134)	57% (n=522)
There is a broad variety of affordable healthcare services in the community	53% (n=835)	56% (n=241)	53% (n=390)	60% (n=137)	56% (n=526)

Source: CHNA Community Health Survey, 2022.

The capacity assessment starts with mapping community social care assets. Community health survey respondents were asked where they go for social care. The top three places families go include government agencies (29%), community-based organizations (28%), and community health centers (24%). The next-most-selected responses were personal resources, including friends or community members (22%) and family members (22%). From the survey respondent's perspective, these are important assets that exist in the community to address their needs.

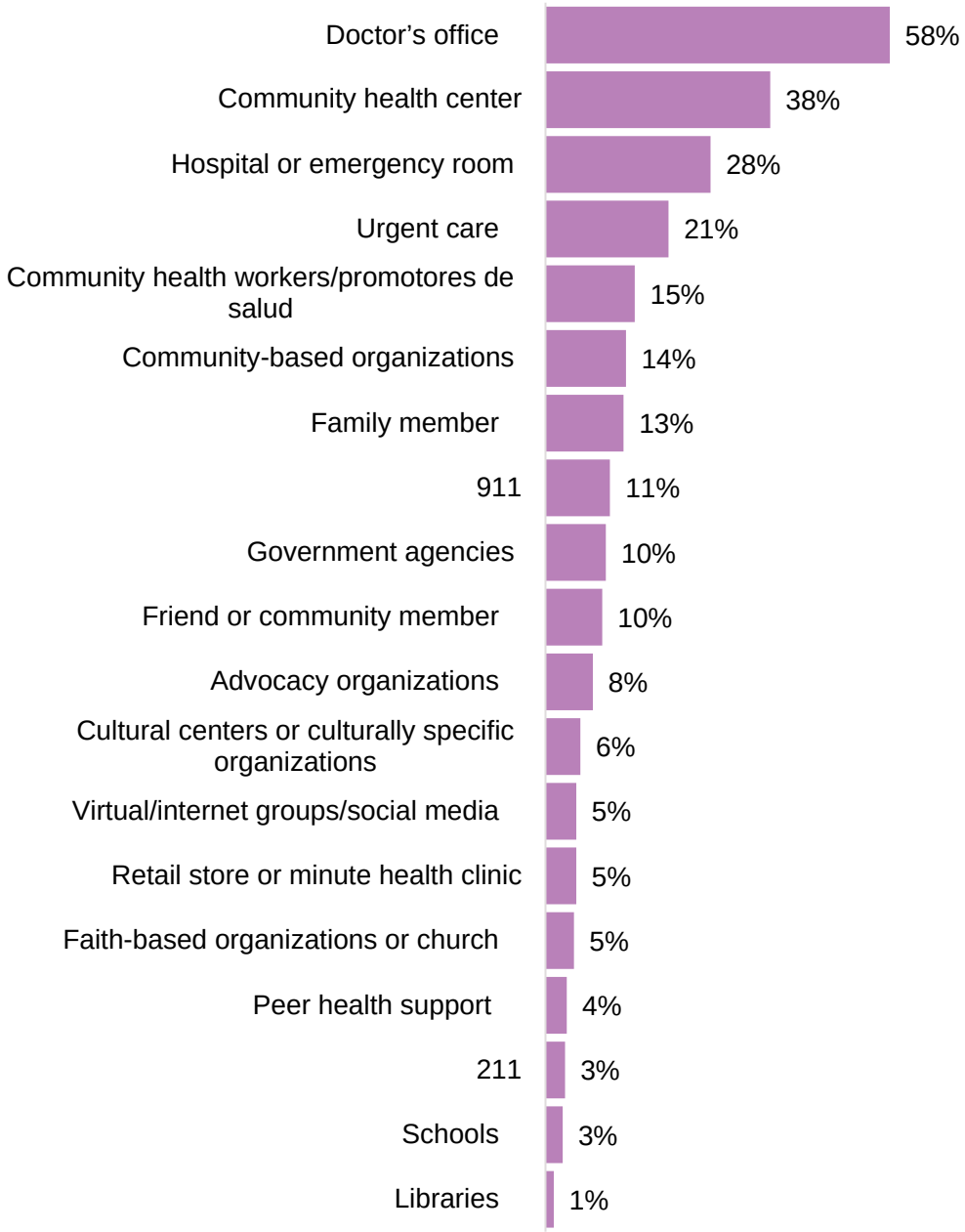
Figure 63: If you need help getting resources such as jobs, food, childcare, or housing, where do you usually go? Select up to three (n=940)



Source: CHNA Community Health Survey, 2022.

Community healthcare assets were identified, in part, by asking community respondents where they usually go when they are sick or need health advice for their child(ren). More than half (58%) of community health survey respondents selected doctor's office, followed by community health center (38%), and hospital or emergency room (28%). One in five families selected urgent care (21%).

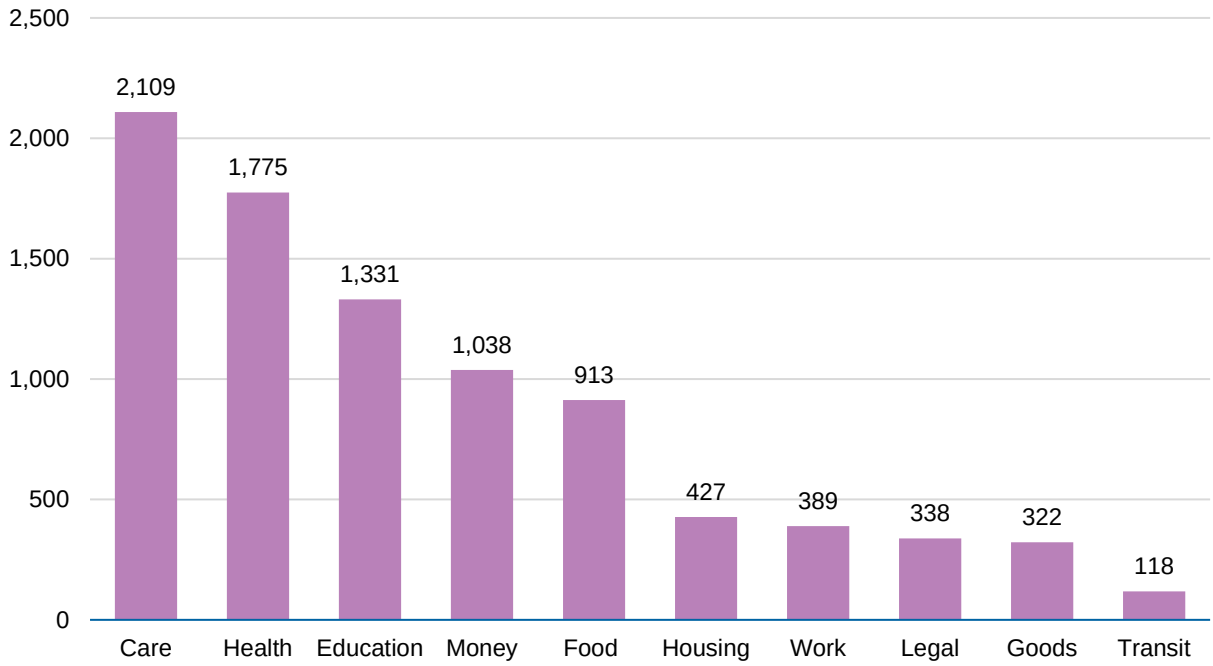
Figure 64 When you are sick or need health advice for your child or children, where do you usually go? (n=965)



Source: CHNA Community Health Survey, 2022.

FindHelp data about program and services offered in Orange County provides an illustration of these services by program type. The most abundant type of programs offered in Orange County can be categorized as Care programs (e.g., animal welfare, community support services, daytime care, end-of-life care, navigating the health and social care system, residential care, support network, physical safety), followed by Health (e.g., dental, vision, medical, health education, mental health, sexual health), and Education (e.g., help pay for school, preschool, screening and exams, and skills and training).[82] Fewer programs are offered under the categories of Transportation (e.g., bus passes), Goods (e.g., clothing, home good, medical supports, personal safety, toys and gifts), and Legal support (e.g., mediation, representation, translation and interpretation). More information is needed to understand to what extent the number of programs offered meets the demand.

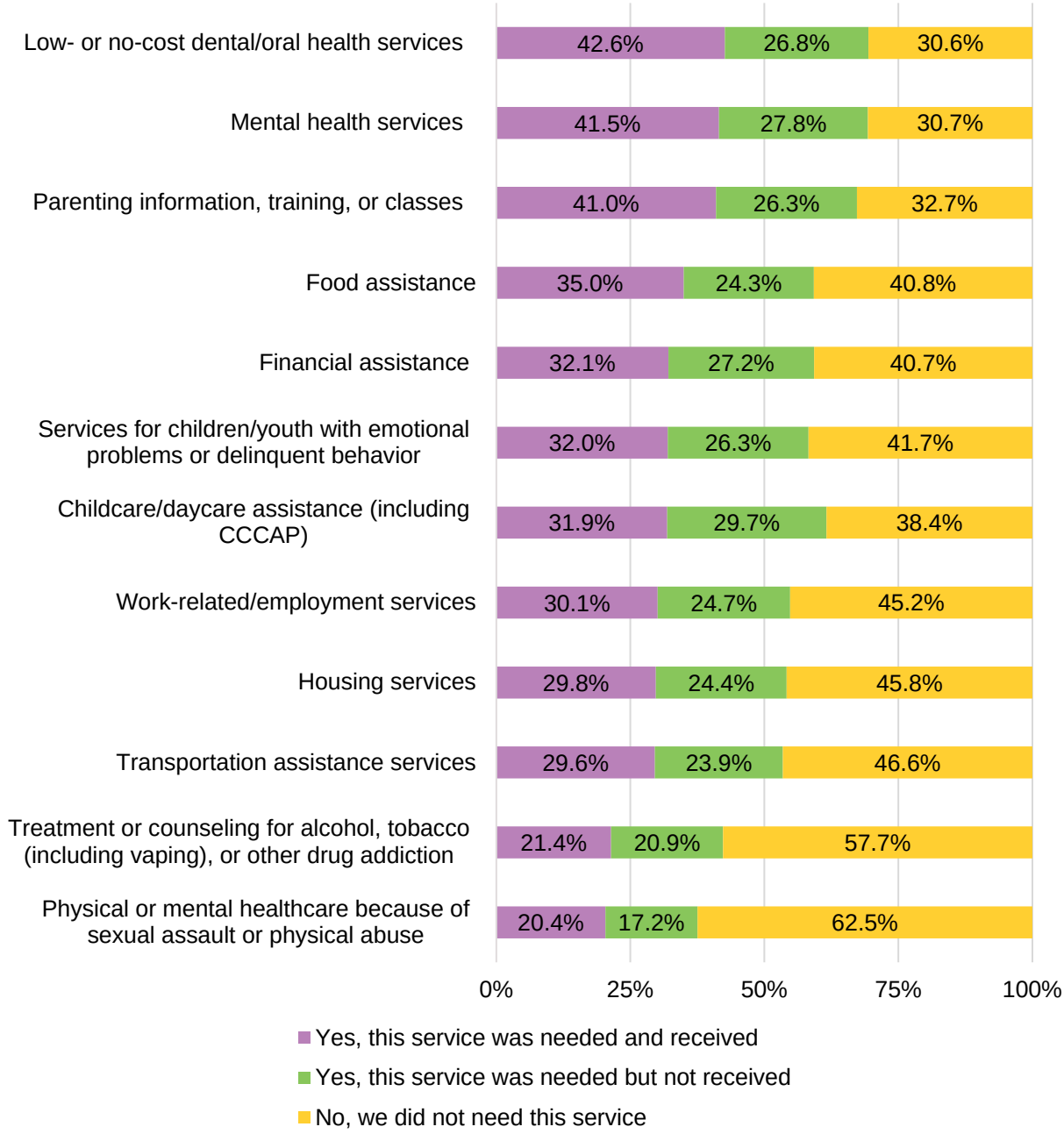
Figure 65: Estimated number of programs by type of program in Orange County



Note: The number of programs were not mutually exclusive. For example, one program may offer more than one type of service. Counts are as of June 8, 2022. Source: Data shared by findhelp on 6/8/2022.

Community health survey respondents were asked to select services they needed but did not receive to assess areas of shortage in both healthcare and social care. Childcare/daycare assistance was the most commonly selected service which was needed but not received, by 29.7% of survey respondents, followed by mental health (27.8%), and financial assistance (e.g., unemployment, CalWORKs/TANF, Social Security) (27.2%).

Figure 66: Percent of survey respondents by type of service needed and/or received



Source: CHNA Community Health Survey, 2022.

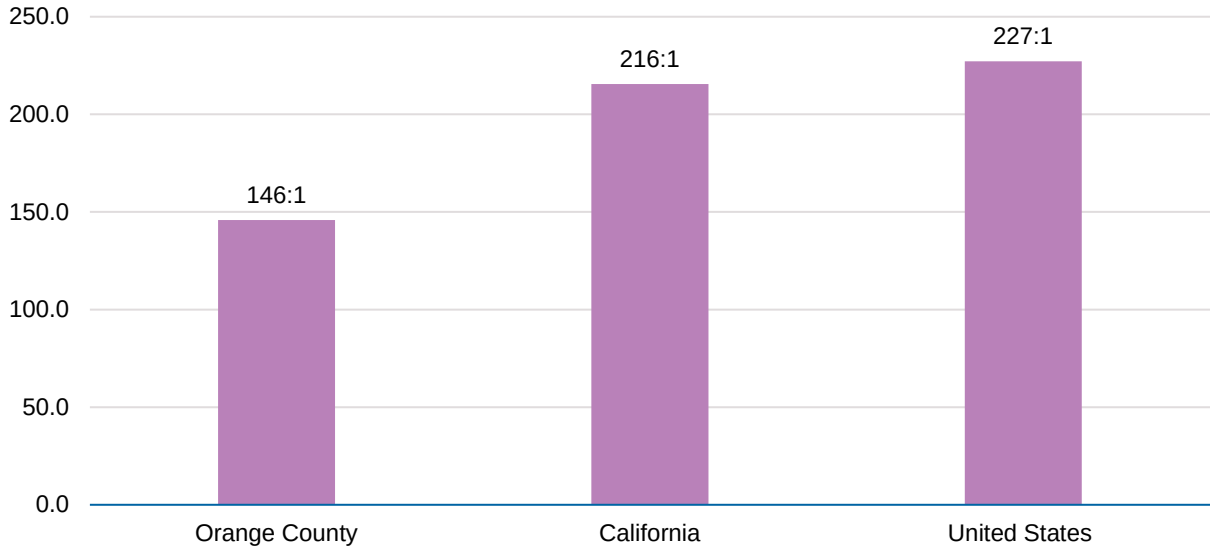
Population to Provider Ratios

The CHNA includes provider-to-population ratios as part of the resource assessment. The ratios provide a baseline on the availability of providers compared to the population size for different services. Although the relationship between the number of health providers in an area and improved health outcomes is supported in literature, the way care is organized and coordinated may be just as important to health outcomes.[83] Population-to-provider ratios for dentists, primary care, and mental healthcare are reported.

Oral Healthcare Provider Ratios

Untreated dental disease can lead to serious health effects including pain, infection, and tooth loss for children and youth.[84] Lack of sufficient dentists in a community is only one barrier to accessing oral healthcare. In 2022, there were 5,362 dentists in Orange County.[85] This equates to a ratio of 146 youth (0-19 years) per dentist (146:1). Overall, in California, the children per dental provider ratio was worse at 216:1. Dentist ratios should be interpreted with caution. There are some dentists who are purely cosmetic and may not take Medi-Cal. There are only 859 dentists noted in the California Medi-Cal Dental Program.

Figure 67: Number of youth per professionally active dentist, 2022



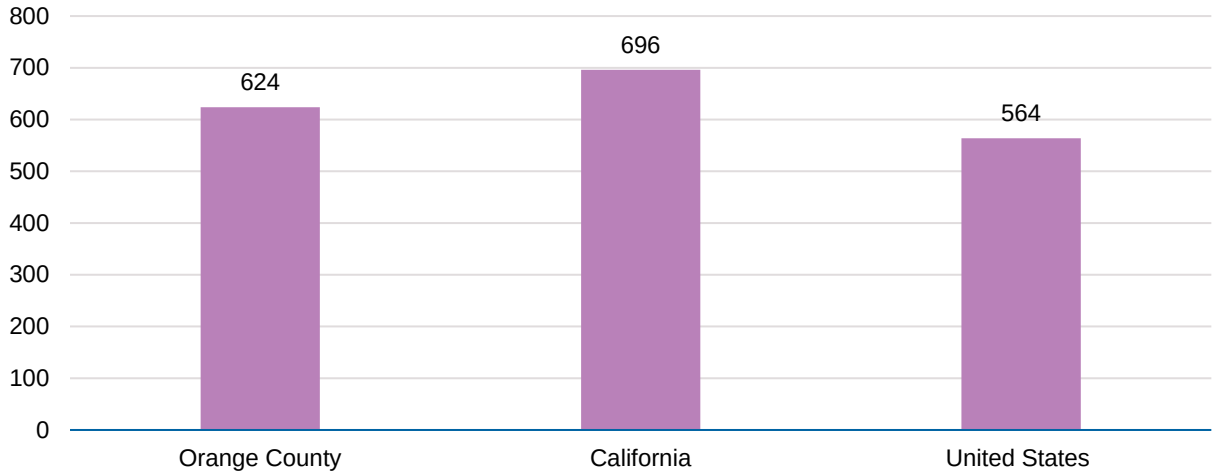
Source: U.S. Health Resources & Services Administration, National Provider Identifier Files, 2022.

Pediatric Primary Care Provider Ratios

A lack of primary care presents barriers to preventative care and good health. The supply and accessibility of primary care physicians, the type and lack of insurance coverage, poverty level, transportation obstacles, and cultural and language competency affect access.

In 2022, Orange County had 1,254 primary care pediatricians.[85] This equates to a ratio of 624 youth (0-19 years) per pediatrician (624:1). Overall, in California, the children per pediatric primary care provider ratio was worse at 696:1 while better in the United States at 564:1.

Figure 68: Number of youth per pediatric physician, 2022



Source: U.S. Health Resources & Services Administration, National Provider Identifier Files, 2022.

Physicians are not the only providers of primary healthcare. Other professionals can serve as sources of routine, preventive care, including nurse practitioners (NP), physician assistants (PA), and clinical nurse specialists. The Health Resources and Services Administration (HRSA) projects that the primary care NP and PA workforces will grow far more rapidly than the physician supply in the next 10 years and could help alleviate shortages as demand increases.[86] In 2020, the ratio of population (all ages) to primary care providers other than physicians was 1,350:1 in Orange County. This ratio ranges from 1,1120:0 to 730:1 in California. In California, the ratio of population to primary care providers other than physicians was lower at 1,370:1.[86]

On average, the number of encounters per primary care physician (PCP) (all ages) was higher in Orange County (1,317 encounters per PCP) than California (963 per PCP).[87] Except for children ages four years and younger, Orange County PCPs serve more youth than PCPs in California. Orange County PCPs are more likely to serve a Native American or Asian patient compared to PCPs in California.

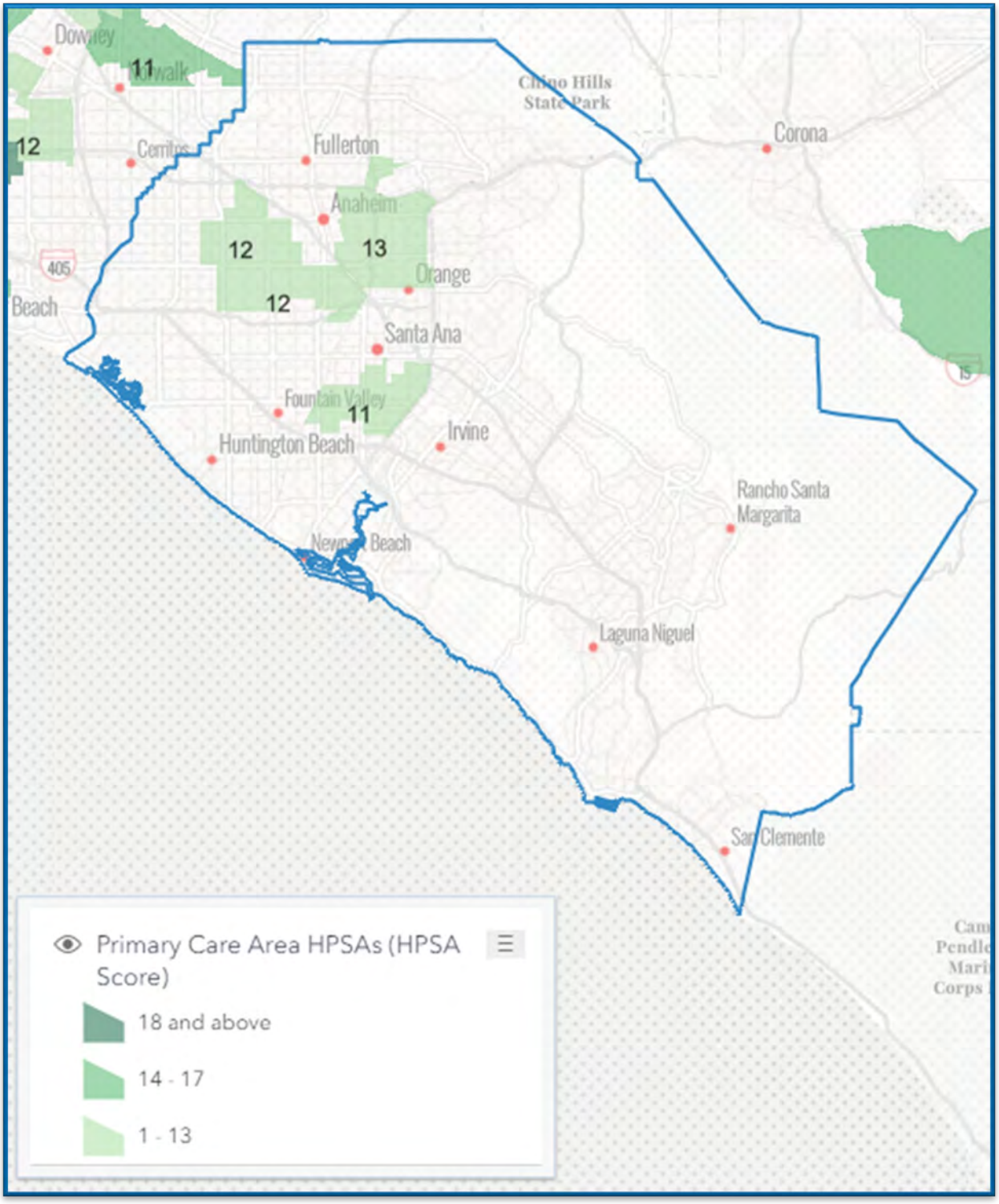
Table 49: Visits rendered per primary care physician, 2021

	Orange County	California
Encounters per Primary Care Provider (All Ages)	1,317	963
Patients by Age per Physician FTE ratio		
Patients <1 Years old	11.76	14.68
Patients 1 to 4 Years old	35.43	39.42
Patients 5 to 12 Years old	87.85	80.17
Patients 13 to 14 Years old	24.61	21.89
Patients 15 to 19 Years old	74.33	59.13
Patients under 19 Years old	287.16	208.05
Patients by Ethnicity per Physician FTE ratio		
Hispanic or Latino/a	100.92	87.35
Non-Hispanic or Latino/a	310.10	268.55
Unknown	587.90	420.92
Patients by Race per Physician FTE ratio		
Black/African American	13.51	11.94
Native American	102.31	62.67
Asian	53.33	18.80
Multiracial	137.11	166.29
White/Caucasian	19.39	43.07
Other	998.93	776.82
Unknown	673.28	474.05

Source: Department of Health Care Access and Information, 2021.

Primary care Health Professional Shortage Areas (HPSAs) do exist in the communities of Anaheim, Garden Grove, Orange, Placentia, Santa Ana, and Stanton, despite the high visits rendered per PCP among children and youth to provider ratios in Orange County.[88]

Figure 69: Primary care area HSPAs



Source: U.S. Health Resources & Services Administration, 2021.

Mental Healthcare Provider Ratios

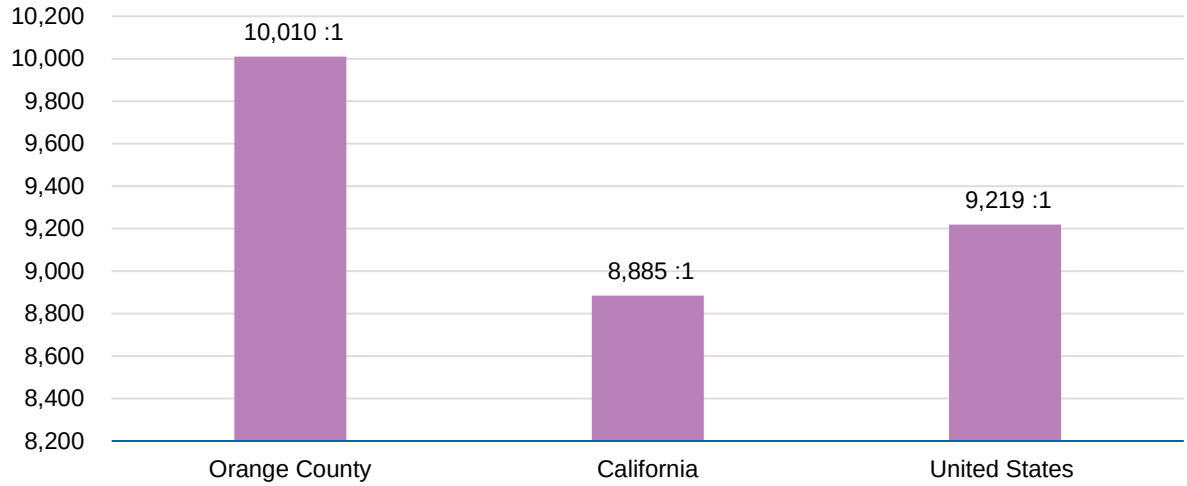
Early diagnosis and appropriate services for children and their families can make a difference in the lives of children with mental disorders.[89] The number of mental health providers in a community is an important indicator of the availability of services, including screening, referrals, and treatment,

Long before COVID-19, children's mental health and access to mental health services were frequent topics of conversation in Orange County, the state, and nationwide. The shortage of providers qualified to provide mental health and/or substance use disorder treatment services to children, youth, and young adults existed before the pandemic and continues to worsen. According to the AACAP Workforce Maps by State, Orange County is deemed to have a severe shortage (14 per 100,000 children) of child, and adolescent psychiatrists, and the average age of these providers is 52 years old.

In 2022, there were 18,198 mental health providers in Orange County. Mental health providers are defined as psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers that treat alcohol and other drug abuse, and advanced practice nurses specializing in mental healthcare.[85] This equates to a ratio of 176 people per mental health provider (176:1). Overall, in California, the number of people per mental health provider ratio was the same at 176:1 and worse than the United States at 263:1.

Not all mental health providers serve children and adolescents. For example, only 4,000 out of more than 100,000 United States clinical psychologists are child and adolescent clinicians, according to APA data.[90] In 2018, there were 78 child psychologists (not including federal physicians) in Orange County.[91] This equates to a ratio of 10,010 children per child psychologist (10,010:1).

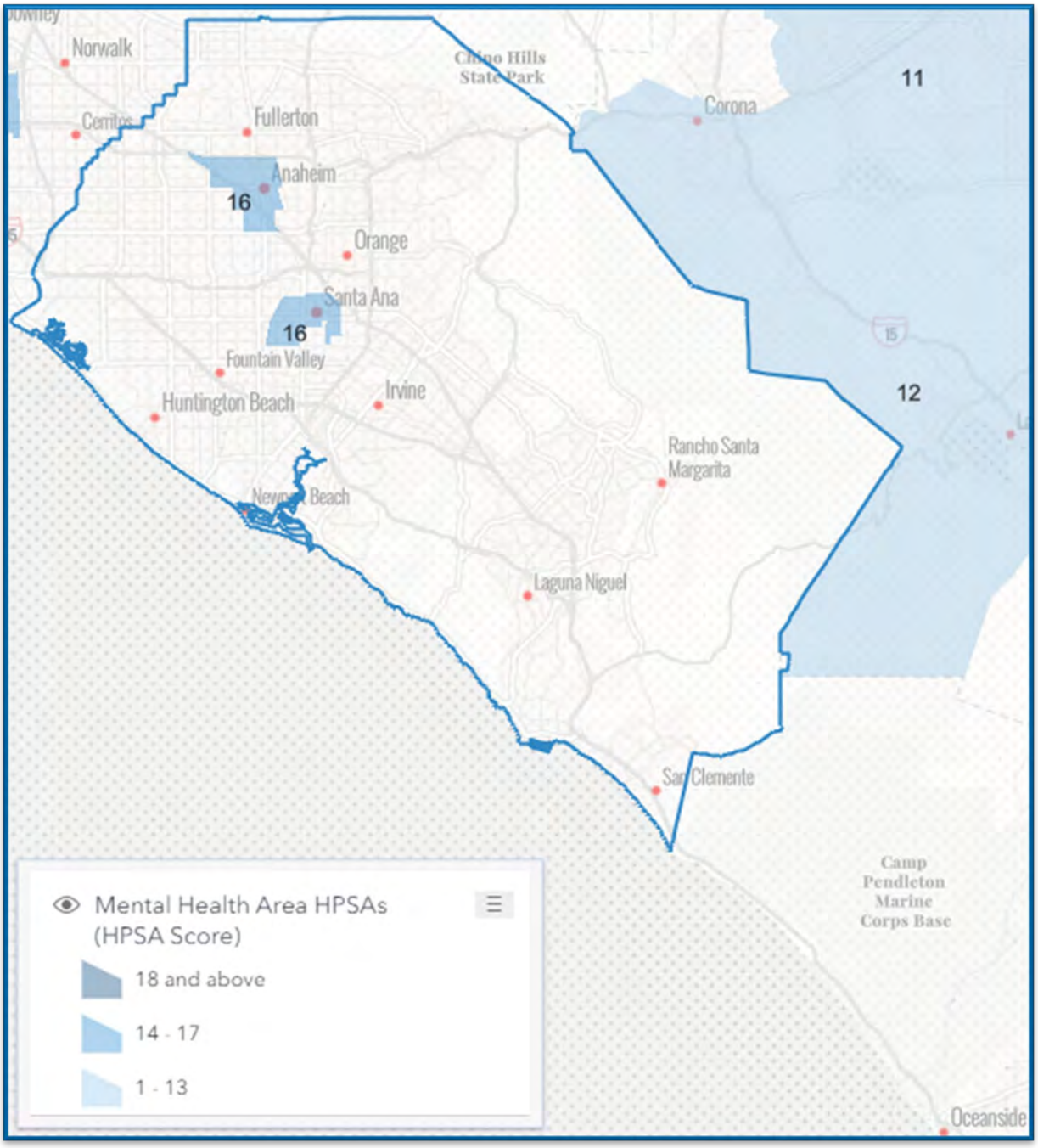
Figure 70 Number of youth per child psychologist, 2018



Note: Youth (0-19 years) population estimates are based on United State Census 2018 single year estimates (Table S0101). Source: U.S. Health Resources & Services Administration, AMA Physician Master file via Area Health Resources File, 2018.

Mental health HPSAs exist in the communities of Santa Ana and Anaheim.[88]

Figure 71 Mental health area HPSAs

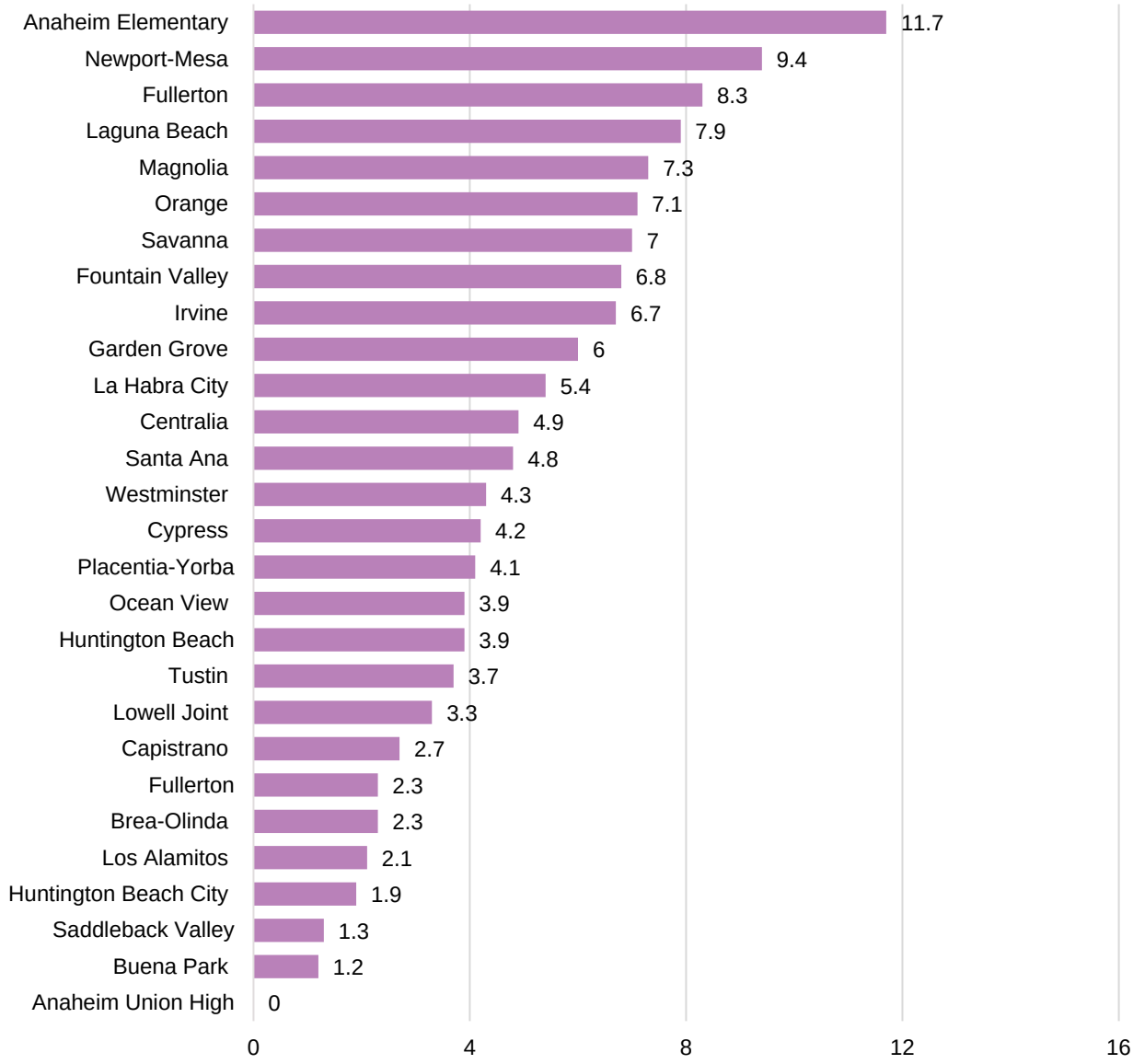


Source: U.S. Health Resources & Services Administration, 2021.

School Based Nurse Ratios

According to the National Association of School Nurses, the ideal ratio of nurses per 10,000 students is 13.0.[92] In Orange County, the most common ratio was 4.3 nurses per 10,000 students. The number of school nurses per 10,000 students ranges from zero in Anaheim Union High and OCDE/Special Education, to 11.7 in Anaheim Elementary School.[32]

Figure 72: School nurse FTE per 10,000 Orange County students



Note: Data on total FTE credentialed school nurses and total number of students in the OCDE 2020-2021 Year End Report was used to create the nurse ratio per 10,000 students. Anaheim Union High reported no credentialed school nurses but did report 4 school readiness nurses. It is important to note that the ratios are not reflective of the race, ethnicity, and language spoken of the population in each region.
Source: OCDE 2020-2021 Year End Report.

Provider Ratios and Race/Ethnicity

Nationally, BIPOC patients are less likely than White/Caucasian patients to report being the same race as their healthcare providers.[93] This misalignment may lead to strained patient-provider relationships and is thought to contribute to disparities in health outcomes. Historical medical mistreatment of BIPOC in the United States has contributed to a mistrust of healthcare providers within these groups. According to research collected by The Urban Institute and Robert Wood Johnson Foundation, racial alignment between patient and provider is associated with greater likelihood of patients agreeing to and receiving preventive care, better patient experience ratings, and higher ratings on patient-reported measures of care quality.[93]

The most recent report on Orange County's healthcare provider cultural background is from 2013 by the Medical Board of Calfornia titled 2013 Cultural Background Survey Statistics.[94] No data currently exists on the diversity of Orange County's healthcare provider workforce. Effective July 27,2021, through Assembly Bill 133, HCAI is required to collect and report provider race/ethnicity data from healthcare licensing boards. As providers renew or initiate a license, data on the diversity of the healthcare workforce is now being requested, by specialty, including, but not necessarily limited to, data on race, ethnicity, and languages spoken.[95]

Healthcare Facilities

Proximity to healthcare facilities is an important factor driving positive health behaviors and outcomes for children and families in Orange County. The resource assessment therefore also considers the availability of key healthcare facilities, including Federally Qualified Health Centers, community health centers, Orange County Health Care Agency Child and Youth Services behavioral health clinic locations, and the number of neonatal and pediatric hospital beds.

Federally Qualified Health Centers

Federally Qualified Health Centers (FQHCs) are safety net providers that primarily provide services typically furnished in an outpatient clinic. FQHCs include community health centers, migrant health centers, healthcare centers for unhoused individuals, public housing primary care centers, and health center program "look-alikes." They also include outpatient health programs or facilities operated by a tribe or tribal organization or by an urban Indian organization. FQHCs are one important community resource to ensure the at-risk and underserved population health needs are met. As reported by HRSA, the 28 million people served nationally by FQHCs include one in nine children and one in three people living in poverty.[96]

According to the Centers for Medicare & Medicaid Services (CMS), in 2021 there were 48 Federally Qualified Health Centers (FQHCs) in Orange County, or seven per 100,000 children.[97] FQHCs are community-based organizations, recognized by CMS, that provide comprehensive primary and preventive care to medically underserved areas and populations, regardless of ability to pay. By comparison, California had 1,486 FQHCs or 17 per 100,000 children.

Community Health Clinics

Community Health Clinics in Orange County are an important resource for at-risk and vulnerable population to access healthcare, including primary care, behavioral health, dental and vision. The Coalition of Orange County Community Health Centers directory suggest there are 42 health centers in Orange County.[98] These clinics offer family practice (29 locations), pediatrics (24 locations), dental (19 locations), behavioral health (16 locations) of which four offer medication-assisted treatment, reproductive health (15 locations), and vision (6 locations) services. The locations are not mutually exclusive.

Child and Youth Behavioral Health Clinic Locations

HCA's Children and Youth services provides a broad range of services for behaviorally, emotionally, or mentally disordered children and adolescents which include evaluation, therapy, medication management, crisis intervention and collateral services to parents and families. There are 23 child and youth behavioral health clinic locations in Orange County. The locations are dispersed throughout Orange County, with six locations in South Region (Laguna Beach (1), Dana Point (1), San Clemente (1), Aliso Viejo (1), Lake Forest (1), and Mission Viejo (1)), six locations in East Region (Orange (1), Santa Ana (5)), three locations in the West Region (Westminster (1), Foundation Valley (2)), and two in the Central Region (Costa Mesa (2)).

School Based Health Clinics

School-based health centers (SBHCs) are uniquely situated to bring health care professionals and educators together to address the multifaceted needs of children, youth, and families. Some SBHCs serve only students, while others also serve family members or the broader community surrounding the school. According to California School-Based Health Alliance, there are nine school-based health clinics (SBHCs) in Orange County. California has 300. In SY 2020-2021, there were 49,858 public school students per every SBHC in Orange County.[46] This ratio was higher than in California at 19,641 public school students per every SBHC. In California, the child per SBHC ratio rages from 1,845 students in Mariposa to 81,000 students in Sacramento per SBHC.

Neonatal and Pediatric Beds

Orange County has fewer Neonatal Intensive Care Unit (NICU) beds per 100,000 children under 18 years at 458, compared to California at 514.[99] The number of Pediatric Intensive Care Unit (PICU) beds per 100,000 children and Pediatric Acute beds per 100,000 population in Orange County is comparable to California.

Table 50: Beds per 100,000 children staffed by service type

Service Type	Orange County	California
Neonatal Intensive Care Unit (NICU)	458.0	514.0
Pediatric Acute	17.9	17.8
Pediatric Intensive Care Unit (PICU)	5.4	5.3

Source: Department of Health Care Access and Information, 2021.

Influence of COVID-19 on Health

Before the COVID-19 PHE, the healthcare sector was just beginning to understand how poor health outcomes are influenced by factors that traditionally were not considered health-related, such as racism and discrimination, gender inequity, socioeconomic status, and educational attainment. For instance, low-income families often live without a safety net, caring for sick children and working multiple jobs to meet basic needs. Many also face impossible choices, such as leaving children alone at home because childcare is unaffordable, or not filling prescriptions to be able to feed their family.

The COVID-19 PHE pulled back the curtains on social structures and systems. Arguably, the most important reveal is the ability to understand how health, education, economy, and environment are inextricably linked. The disparities in how low-income and BIPOC communities experienced the COVID-19 PHE helped bring attention to these social determinants of health.

CHOC had a central role in caring for Orange County children during the COVID-19 PHE. With the county's clinicians, healthcare facilities and families fearful of exposing their children to the virus, preventive care became a lower priority for families. However, the reality that children need consistent access to clinical care pushed healthcare providers and payers to embrace telemedicine technology and find a way to make it work at scale. This breakthrough demonstrated that remote office visits could work in a traditional-care setting, with related benefits. Staying home for a medical appointment meant families did not need to find transportation or take half a day off work to get routine care for their children. With this shift, clinicians could reserve in-person visits for the most critical patients.

COVID-19 Deaths and Cases

As of August 19, 2022, there were 7,303 deaths in Orange County.[100] Of these deaths, 17 were youth and young adults, including five children 0-17 years and 12 young adults 18-24 years. Nearly 16% of youth ages 0-18 years had a confirmed case of COVID-19. Adolescents 15-18 years experienced the highest rate of COVID-19 among youth, representing 32.3% of all youth, followed by children ages 4-9 years at 25.9%.[100]

Table 51: Number and percent of confirmed cases by age group, Orange County

Population by Age Group	Number	Percent of Cases Among Total Population	Percent of Cases Among Youth
0-3 years	12,545	1.9%	12.1%
4-9 years	26,767	4.1%	25.9%
10-12 years	17,591	2.7%	17.0%
13-14 years	13,085	2.0%	12.7%
15-18 years	33,361	5.1%	32.3%
Confirmed cases youth (0-18 years)	103,349	15.8%	100%
Confirmed cases 19+ years	550,213	84.2%	
Total confirmed cases	653,562	100.0%	

Note: Updated as of 8/19/2022. Source: HCA, COVID-19 Case Counts and Testing Figures.

One in three COVID-19 cases in Orange County were among Hispanic or Latino/a residents.[100]

Table 52: Percent of cases to percent Orange County population by race and ethnicity

Race/Ethnicity	Percent of Cases	Percent of Population	Disparity Gap (Percentage Point Difference)
American Indian/Alaska Native	0.4%	0.2%	0.2%
Asian	16.7%	21.1%	-4.4%
Black/African American	1.7%	1.6%	0.1%
Hispanic or Latino/a	34.4%	35.0%	-0.6%
Multiracial	1.1%	2.9%	-1.8%
Native Hawaiian/Pacific Islander	0.8%	0.3%	0.5%
White/Caucasian	29.3%	38.6%	-9.3%
Other	15.6%	0.2%	15.4%

Note: Updated as of 8/19/2022. Data not available for the pediatric population. Source: HCA, COVID-19 Case Counts and Testing Figures.

COVID-19 Vaccinations Among Children, Youth, and Young Adults

As of August 17, 2022, 81.2% of Orange County's population has at least one COVID-19 vaccine dose. Of 3,243 counties in the United States, only 715 have reached this level.[101] Nearly three in four people in Orange County (73.2%) are fully vaccinated, putting Orange County in the top 11% of counties in the United States at this level.[102] Yet, while vaccination rates were high in Orange County, pediatric COVID-19 vaccination rates were low relative to their proportion of the population. Only 41.4% of the pediatric population in Orange County, ages 0-17 years, were fully vaccinated against COVID-19 as of August 18, 2022.[103]

Table 53: Number and percent of the population fully vaccinated by age group, Orange County

Population by Age Group	Number Fully Vaccinated	Population Estimate	Percent of Population Fully Vaccinated
0-4 Years	2,114	186,749	1.1%
5-11 Years	94,742	201,969	46.9%
12-17 Years	157,470	230,416	68.3%
18-24 Years	231,148	290,802	79.5%
25+ Years	1,846,165	2,222,031	83.1%
Total Population	2,331,639	3,131,967	74.4%
Total Pediatric Population 0-17 years	254,326	619,134	41.1%

Note: Updated as of 8/19/2022. Source: California Immunization Registry (CAIR2).

Proportionate to their population, age groups 12-17 years and 18-24 years have the lowest COVID-19 vaccination rates.

Table 54: Percent fully vaccinated to percent Orange County population by age group

Population by Age Group	Percent Fully Vaccinated	Percent of the Population	Disparity Gap (Percentage Point Difference)
0-4 Years	0.1%	5.8%	5.7%
5-11 Years	2.9%	8.3%	5.4%
12-17 Years	5.2%	7.6%	2.4%
18-24 Years	7.2%	9.2%	2.0%
25+ Years	57.3%	69.0%	11.7%

Note: Updated as of 8/19/2022. Source: California Immunization Registry (CAIR2).

Proportionate to their population, the Hispanic or Latino/a and White/Caucasian race and ethnicity groups have the lowest COVID-19 vaccination rates.

Table 55: Percent fully vaccinated to percent Orange County population by race and ethnicity

Race/Ethnicity	Percent Fully Vaccinated	Percent of the Population	Disparity Gap (Percentage Point Difference)
Asian/Pacific Islander	16.3%	21.4%	-5.10%
Black/African American	1.7%	1.0%	0.70%
Hispanic or Latino/a	38.5%	17.8%	20.70%
White/Caucasian	34.8%	23.0%	11.80%

Note: Updated as of 8/19/2022. Source: California Immunization Registry (CAIR2).

Conclusions and Next Steps

CHNAs are a vital tool to support community benefit efforts and inform population health management. The CHNA provides valuable data to direct resources toward high-risk populations, identify opportunities to enhance care delivery, inform patient engagement initiatives, and direct overall strategic planning. Community benefits are free or subsidized programs and services provided to meet identified community needs and to serve the public interest. Investments should be made from the perspective of doing the greatest good for the greatest number of people.

The health and well-being of children and adolescents in our region depend on our ability to understand and address the needs of our community and work together to meet them. It is hoped that this CHNA will support CHOC in forging new partnerships and collaborations to meet community needs and will be a resource for all of us working to improve the health and well-being of children, teens and families in Orange County.

The findings from this CHNA will guide our Board of Directors and leadership in developing a plan to invest resources into the community that:

- Maximizes the community benefit and impact of prioritized investments
- Informs the way we deliver care helping us to meet families where they are
- Promotes collaboration with our partners to build a workforce that reflects the communities we serve
- Supports partnerships with community groups that can help our providers better understand the realities facing the children and families in our care
- Aligns our efforts to improve access to pediatric and adolescent mental healthcare in the county
- Educates internal and external stakeholders about the importance of considering the impact of key health drivers such as Healthy and Affordable Foods, Early Learning Opportunities and Success in School, Safe Neighborhoods, and Connectedness, as we develop programs to address the identified CHOC CHNA Health Priorities of Mental Health and Access to Pediatric Healthcare Services

CHOC welcomes community comments on the 2022 CHNA. Please share your insights with us at CommunityComments@choc.org.

Appendices & Endnotes

Appendix A: CHOC List of Services

Appendix B: List of Zip Codes Included in CHOC's PSA

Appendix C: Community Health Survey

Appendix D: Community Health Survey Distribution Channels

Appendix E: Town Hall Presentation

Appendix F: Key informant Interview Guide

Appendix G: Population Demographics

Appendix H: Health Outcomes Data Tables

Appendix I: Driver of Health Data Tables

Appendix J: IRS Checklist

Appendix A: CHOC List of Services

The following is a list of CHOC's inpatient and outpatient services:

- Adolescent Medicine
  - Eating disorders
  - Reproductive Health
  - Mental Health
  - (LGBTQIA+) Adolescent Healthcare
- Allergy / Immunology
  - Asthma Education Programs
  - Breathmobile
  - Eosinophilic Esophagitis Clinic
- Autism
- Blood and Donor Services
- Breast Milk Donations
- Cardiology / Heart Institute
  - Cardiac Catheterization Laboratory
  - Cardiodiagnostics
  - Cardiovascular Intensive Care Unit (CVICU)
  - Electrophysiology (EP) Program
  - Healthy Lifestyle Classes
  - Heart Surgery
  - Interventional Cardiology Program
  - Lipid Clinic
  - Pacemaker and Implantable Cardioverter Defibrillator Program
  - Pulmonary Hypertension Clinic
  - Sports Cardiology Program
- Child Life
- Cord Blood Bank
- Craniofacial Orthodontics
- Critical Care
  - Cardiovascular Intensive Care Unit (CVICU)
  - Extracorporeal Life Support Program (ECMO)
  - Neonatal Intensive Care Unit (NICU)
  - Pediatric Intensive Care Unit (PICU)
  - Transport Services
- Dentistry
- Dermatology
- Developmental and Behavioral Pediatrics
  - Developmental Services
- Emergency Medicine
  - Injury Prevention
  - Safety Tips
  - Transport Services
  - Trauma Center
- Endocrinology and Diabetes
  - Healthy Lifestyle Classes
- Fetal Care Center of Southern California
- Gastroenterology
  - Colorectal/Bowel Management Program
  - Eosinophilic Esophagitis Clinic
  - Feeding Program
  - Functional Abdominal Pain Program
  - Gastrointestinal Motility Program
  - Inflammatory Bowel Disease (IBD) Program
  - Intestinal Rehabilitation Program
- General and Thoracic Surgery
- Genetics
- Hematology
  - Vascular Anomalies Center
- Infectious Disease
- Integrative Health
- Laboratory Services
- Lactation Services
- Metabolic Disorders

- Metabolic Lab
- Neonatology / Perinatology
  - Neonatal Intensive Care Unit (NICU)
  - Neurocritical NICU
  - Small Baby Unit
  - Surgical NICU
  - High-Risk Infant Follow-Up Clinic
- Nephrology
- Neurology / Neuroscience Institute
  - Concussion Program
  - Developmental Services
  - Down Syndrome Program
  - Epilepsy Program
  - Muscular Dystrophy Association Clinic
  - Neurodiagnostics
  - Neuromuscular Disease Program
  - Sleep Disorder Center
  - Spasticity Clinic
  - Spina Bifida Clinic
- Neurosurgery / Neuroscience Institute
  - Brachial Plexus Program
  - Concussion Program
  - Epilepsy Program
  - Neuro-oncology Program
  - Plagiocephaly Clinic
  - Spasticity Clinic
  - Spina Bifida Clinic
- Nutrition Services
- Oncology / Hyundai Cancer Institute
  - Adolescent and Young Adult Cancer Program
  - After Cancer Treatment Survivorship Program
  - Blood and Marrow Transplant Program
  - Bone and Soft Tissue Sarcoma Program
  - Histiocytosis Program
  - Leukemia Program
  - Lymphoma Program
  - Neuro-oncology Program
  - Recurrent and Refractory Cancer Program
  - Solid Tumor Program
- Ophthalmology
- Orthopaedics / Orthopaedic Institute
  - Clubfoot and Foot Disorder Program
  - Fracture Clinic
  - Hand Program
  - Infant and Adolescent Hip Disorder Program
  - Limb Program
  - Muscular Dystrophy Association Clinic
  - Musculoskeletal Tumor Program
  - Neuromuscular Disease Program
  - Orthopaedic Surgery
  - Spasticity Clinic
  - Spina Bifida Clinic
  - Spine Center
  - Sports Medicine Program
- Otolaryngology (Ear, Nose and Throat)
  - Cleft and Craniofacial Program
  - Cochlear Implant Program
  - Vascular Anomalies Center
- Palliative Care
- Pharmacy
- Physical Medicine and Rehabilitation
  - Rehabilitation Services
  - Physical Therapy
  - Occupational Therapy
  - Speech and Language Pathology
  - Developmental Therapy
- Plastic Surgery
  - Brachial Plexus Program
  - Cleft and Craniofacial Program
  - Vascular Anomalies Center
- Primary Care
- Psychology / Psychiatry
  - Mental Health Services
- Pulmonology

    - Severe Asthma Program
    - Chronic Lung Disease
    - Cystic Fibrosis Center
    - Interstitial Lung Disease
    - Respiratory Syncytial Virus (RSV) Prevention Program
    - Sleep Disorder Center
    - Tracheostomy and Mechanical Home Ventilation
- Radiology / Imaging
- Rehabilitation Services
- Research Institute
- Rheumatology
- Social Services
- Spiritual Care
- Surgical Services
- Thoracic Surgery
- Urology
    - Bedwetting and Daytime Incontinence Program
    - Disorders of Sexual Differentiation Program
    - Hypospadias Program
    - Spina Bifida Clinic

Appendix B: List of Zip Codes Included in CHOC's PSA

Zip Code	Community Name
92656	Aliso Viejo
92801, 92802, 92804, 92805, 92806, 92807, 92808	Anaheim
92821, 92823	Brea
90620, 90621	Buena Park
92624	Capistrano Beach
92625	Corona del Mar
92626, 92627	Costa Mesa
90630	Cypress
92629	Dana Point
92610	Foothill Ranch
92708	Fountain Valley
92831, 92832, 92833, 92835	Fullerton
92840, 92841, 92843, 92844, 92845	Garden Grove
92646, 92647, 92648, 92649	Huntington Beach
92602, 92603, 92604, 92606, 92612, 92614, 92617, 92618, 92620, 92697	Irvine
90631	La Habra
90623	La Palma
92694	Ladera Ranch
92651	Laguna Beach
92653	Laguna Hills
92677	Laguna Niguel
92637	Laguna Woods
92630	Lake Forest
90720	Los Alamitos
92655	Midway City
92691, 92692	Mission Viejo
92660, 92661, 92662, 92663	Newport Beach
92657	Newport Coast
92865, 92866, 92867, 92868, 92869	Orange
92870	Placentia
92688	Rancho Santa Margarita
92672, 92673	San Clemente
92675	San Juan Capistrano
92701, 92703, 92704, 92705, 92706, 92707	Santa Ana
90740	Seal Beach
92676	Silverado
90680	Stanton
90742	Sunset Beach
92679	Trabuco Canyon
92780, 92782	Tustin
92861	Villa Park
92683	Westminster
92886, 92887	Yorba Linda

Appendix C: Community Health Survey

CHOC Community Health Survey

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Q2.1 CHOC is interested in hearing from parents, caregivers, and young adults age 18-24...We are also interested in hearing from individuals who provide any of the following services to children birth to 24 years of age or children their families: Physical healthcare services, Behavioral healthcare services or supports. Care management, Social services or community support services. Please choose the category that best describes you:

- Parent or Caregiver
- Young adult who is between 18 - 24 years of age
- Foster Parent
- Healthcare Professional (physical/medical, behavioral/mental, oral/dental)
- Service Provider (social worker, school nurse, home visitor, school-based professional, etc.)

Start of Block: Part 1: Health Factors [PROVIDER]

Q3.1 What is health? Every person has their definition of health for children and families. For the following two questions, please tell us the first word that comes to mind.
Q3.2 Children who are healthy are:
Q3.3 Families who are healthy are:

Q3.4 There are many ways to define a "healthy community." Please review the following list of factors commonly used to define a “healthy community” for children and families. Choose the top three factors that you feel are essential characteristics of a happy, healthy, and thriving community for children and families. In other words, what three things most benefit the health and well-being of the children and families you serve?

- Access to dental care
- Access to gender-affirming care for transgender and nonbinary children and youth
- Access to healthcare providers (e.g., family doctors, pediatricians)
- Access to mental health services (e.g., counselors, psychiatrists)
- Access to treatment services for substance use or misuse
- Services for children and youth with special healthcare needs
- Affordable housing
- Arts and cultural events
- Business friendly environment
- Clean water and environment
- Fair and equitable treatment of people and groups no matter their race, gender identity, age, or sexual orientation
- Good jobs and a healthy economy
- Healthy food and proximity to grocery stores
- Low crime and safe neighborhoods
- Low rates of death and disease
- Low rates of infant deaths
- Low levels of violence within the home, including child abuse and intimate partner violence
- Parks and recreation
- Reliable transportation
- Religious or spiritual support
- Safe, stable, and nurturing relationships within the family unit
- Social support and connections
- I don't know what this question is asking
- I don't want to answer

Q3.5 All communities have health problems. Please review the following list of health problems found in communities. Choose the top three problems that have the most significant impact on the overall health of children and families you serve. In other words, what three things are the most damaging to their health?

- Cancer (all types)
- Diabetes
- Eating disorders
- Firearm-related injuries
- Heart disease and stroke
- High blood pressure
- HIV/AIDS
- Infant death
- Infectious diseases (e.g., hepatitis, tuberculosis)
- Vaccine-preventable diseases (e.g., measles, influenza, mumps)
- COVID-19 pandemic
- Injuries (physical or emotional) from domestic violence or abuse
- Poor mental health
- Developmental disabilities (e.g., autism, ADHD)
- Respiratory/lung disease
- Sexually transmitted infections (STIs)
- Alcohol addiction
- Drug addiction
- Suicide
- Unintended pregnancy, including teenage pregnancy
- Unintentional injuries (e.g., motor vehicle accidents, drowning)
- Vehicular accidents related to driver behaviors (e.g., texting; aggressive, distracted, or impaired driving)
- I don't know what this question is asking
- I don't want to answer

Q3.6 Please review the following list of harmful behaviors, factors, and conditions contributing to injuries, violence, and poor health outcomes. Select three things happening in the community where the children (and families) you serve are living that you feel most negatively impact childrens' overall health.

- Aging caregivers (e.g., hearing/vision loss, limited mobility)
- Alcohol misuse
- Bullying, including cyberbullying
- Community violence (e.g., gang violence, homicide)
- Discrimination or racism
- Social isolation
- Not completing high school
- Homelessness

- Human trafficking/sex trafficking
- Immigration-related issues
- Obesity/overweight
- Lack of exercise/physical activity
- Lack of access, at times, to enough food for an active, healthy life
- No internet service or poor access to reliable internet service
- Not getting prenatal or maternity care
- Not getting regular health screenings
- Not getting vaccinated against COVID-19
- Not using seat belts or child safety seats
- Not wearing a mask when the risk of transmitting a virus is high
- Opioid use/misuse (including fentanyl)
- Poor eating habits (e.g., fast food, junk food)
- Rape/sexual assault
- Child abuse/neglect
- Domestic violence, including intimate partner violence and elder abuse
- Social media, including excessive or inappropriate use
- Tobacco use, including vaping
- Overuse of technology/excessive screen time
- Being uninsured/underinsured
- I don't know what this question is asking
- I don't want to answer

Q4. Access to Care & Patient Experience Access to affordable, quality healthcare is vital to physical, social, and mental health. Access to care allows individuals to enter the healthcare system, find care easily and locally, pay for care, and get their health needs met. The following questions will help us understand how easy or hard it is for children and families to access care in Orange County.

Q4.2 What provider type best describes you?

- Community service provider (e.g., social worker, home visitor, infant-toddler specialist)
- Healthcare professional (e.g., physical/medical, behavioral/mental, oral/dental)
- Local public health department
- School nurse
- Educator (e.g., administrator, teacher, school-based preschool/after school care, Head Start, or other school-based professional)
- Childcare provider
- Other, please describe _____

Display This Question:

If What provider type best describes you? = Healthcare professional (e.g., physical/medical, behavioral/mental, oral/dental)

Q4.3 Please select your healthcare professional type:

- ☐ Physician
- ☐ Advanced Practice Nurse Practitioner
- ☐ Behavioral Health Professional
- ☐ Dental Provider

Q4.4 Please select the group(s) of children that you predominantly work with:

- ☐ Infancy (newborns up to 1 year of age)
- ☐ Early childhood (1 - 5 years of age)
- ☐ Middle childhood (6 - 10 years of age)
- ☐ Adolescence (11 - 17 years of age)
- ☐ Young adulthood (18 - 24 years of age)
- ☐ Children (birth to 24 years of age) with special healthcare needs

Q4.5

Thinking of the children you work with (selected in the previous question), we would like you to rank the following areas where families experience barriers to accessing care. Please drag the services in rank order from the most significant barrier (1) to the least significant (10).

_____ Access, utilization, and engagement with primary care providers

_____ Access, utilization, and engagement with oral health providers

_____ Access, utilization, and engagement with behavioral health services

_____ Care coordination, navigation, and referrals across all healthcare services

_____ Care coordination, navigation, and referrals across all social services, including community supports

_____ Programs and services addressing chronic disease (e.g., heart disease, diabetes, arthritis)

_____ Programs and services addressing chronic conditions (e.g., behavioral health or physical, cognitive, intellectual, or neurodevelopmental disabilities)

_____ The safe transition of adolescent patients to the adult healthcare system

_____ Wellness and prevention programs

_____ Programs to address maternal health outcomes

Q4.6 Federal regulations define targeted case management services to include the following four components. Please read the four components then, based on your professional experience please select the component that you feel poses the greatest barrier for children and families in need of care

- Comprehensive assessment and periodic reassessment of individual needs to determine the need for any medical, educational, social, or other services.
- Development (and periodic revision) of a specific care plan based on the information collected through the assessment.
- Referral and related activities (such as scheduling appointments for the child) to help the child obtain needed services.
- Monitoring and follow up activities.

Q4.7 What services would you like to see in the communities where your patients/clients live that DO NOT exist now or exist but not in the way or quantity you need to help people stay healthy? Select the top three.

- Assistance getting, understanding, and using birth control
- Pre-pregnancy or prenatal care
- After pregnancy and between pregnancy care
- Pregnancy or birth-related depression services
- Well visits with a primary care provider or family doctor
- Well-baby and well-child visits with a pediatrician or family doctor
- Home visiting
- Services to reduce stress, such as respite
- Mental health services, such as counseling
- Substance use treatment, such as drug or alcohol counseling
- Support for quitting smoking
- Services addressing intimate partner/domestic violence
- Services to prevent injuries and violence, including self-harm
- Parenting information
- Information on avoiding infant death
- Newborn screening information
- Early intervention (i.e., early identification of the need for testing and support services for babies with developmental delays)
- Services and treatment for babies born with health issues related to drug, tobacco, or alcohol exposure/use
- Creating safe sleep spaces for infants
- Specialists and treatment centers
- Diagnostic testing following newborn screening (e.g., follow up hearing or genetic testing)
- Infant feeding, including breastfeeding support
- Supplemental birth supports (e.g., doula, pelvic floor specialist, lactation consultant)
- Wellness services, such as those to increase healthy eating and physical activity
- Lead poisoning prevention

- ☐ Programs that help youth develop social, ethical, emotional, physical, and cognitive skills needed during adolescence and to transition into adulthood
- ☐ Support transitioning a child to the adult healthcare system
- ☐ Bullying prevention
- ☐ Sexual health education
- ☐ Availability of medical homes (i.e., patient-centered, comprehensive, coordinated care)
- ☐ Training for parents/caregivers to navigate the system of care for children and youth
- ☐ Support to navigate the system of care for children and youth
- ☐ Programs that promote community inclusion for children and youth with special healthcare needs
- ☐ Gender-affirming care for transgender and nonbinary children and youth

Q4.8 Following is a list of the most common barriers to having programs and resources in a community that support the health and wellness of children and families. Please rank these barriers from the most significant barrier (1) to the least significant (10).

_____ Funding
_____ Lack of local policy support or favorable political climate
_____ Stigma
_____ Social norms prevent the use of services
_____ Limited local resources
_____ Healthcare workforce shortage
_____ Lack of specialized training
_____ Lack of awareness about services
_____ Geographic accessibility
_____ Lack of understanding of different cultures

Q4.9 From your experience providing services to children or children and their families, is there anything else you would like us to know?

_____

_____

_____

_____

_____

Q5.1 Demographic information offers an opportunity to get a clearer picture of the communities in Orange County, which, in turn, impacts funding, resources, and the stories we tell through data. Demographic information helps us create health programs and design community initiatives that recognize different people and their experiences (good and bad). Without this information, it is hard to meet your or your family's needs.

Q5.2 Please select the community where you live.

- Aliso Viejo
- Anaheim
- Brea
- Buena Park
- Capistrano Beach
- Corona Del Mar
- Costa Mesa
- Cypress
- Dana Point
- Foothill Ranch
- Fountain Valley
- Fullerton
- Garden Grove
- Huntington Beach
- Irvine
- La Habra
- La Palma
- Ladera Ranch
- Laguna Beach
- Laguna Hills
- Laguna Niguel
- Laguna Woods
- Lake Forest
- Los Alamitos
- Midway City
- Mission Viejo
- Newport Beach
- Newport Coast
- Orange
- Placentia
- Rancho Santa Margarita
- San Clemente
- San Juan Capistrano
- Santa Ana
- Seal Beach
- Silverado
- Stanton

- Sunset Beach
- Surfside
- Trabuco Canyon
- Tustin
- Villa Park
- Westminster
- Yorba Linda

Q5.3 How long have you lived in Orange County?
- Less than one year
- 1-2 years
- 3-5 years
- 6-10 years
- 11+ years
- I prefer not to say

Q5.4 How old are you?
- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65 or older
- I prefer not to say

Q5.5 How many people (including yourself) currently, live in your household?
- 1-2 people
- 3-5 people
- 6-8 people
- 9+ people
- I prefer not to say

Q5.6 Including yourself, how many people in your household are between 0 – 17 years of age?
- 0
- 1
- 2
- 3
- Four or more
- I prefer not to say

Q5.7 What is your gender identity? Select all that apply.

- Agender
- Cisgender man (assigned sex at birth)
- Cisgender woman (assigned sex at birth)
- Gender expansive, which includes gender fluid, gender neutral, gender queer, gender nonconforming, and non-binary
- Intersex
- Transgender man
- Transgender woman
- Two-spirit or other Native Identity
- Questioning
- Other
- I prefer not to say

Q5.8 What is your sexual orientation? Select all that apply.

- Heterosexual or straight
- Gay or man who has sex with other men
- Lesbian or woman who has sex with other women
- Bisexual or bi
- Pansexual or pan
- Asexual or ace
- Queer
- Questioning
- Other
- I prefer not to say

Q5.9 What is your relationship status?

- Single
- Married
- In a long-term relationship
- Divorced
- Widowed
- Other
- Prefer not to say

Q5.10 What is your ethnicity?

- Hispanic or Latino/a
- Not Hispanic or Latino/a
- I prefer not to say

Q5.11 What is your family's country of origin?

- Chile
- Colombia
- Costa Rica
- Cuba
- El Salvador
- Guatemala
- Honduras
- Mexico
- Puerto Rico
- Spain
- United States
- Venezuela
- Other
- I prefer not to say

Q5.12 What is your race? Please choose all that apply.

- Alaska Native
- American Indian
- Asian or Pacific Islander
- Black or African American
- Middle Eastern or North African
- White
- Other
- I prefer not to say

Q5.13 Please select the Asian or Pacific Islander group that best identifies you. Select all that apply.

- Chinese
- Filipino
- Guamanian or Chamorro
- Indian
- Japanese
- Korean
- Native Hawaiian
- Samoan
- Vietnamese
- Other
- I prefer not to say

Q5.14 What is your highest level of education?

- Less than a high school degree
- High school graduate (high school diploma or equivalent including GED)
- Some college but no degree
- Associates degree in college (2-year)
- Bachelor's degree in college (4-year)
- Master's degree
- Professional degree beyond bachelor’s degree (e.g., JD, MD, DDS)
- Doctorate degree (e.g., PhD, EdD)
- I prefer not to say

Q5.15 What is your employment status?

- Working full time
- Working part-time
- Working multiple jobs
- Unable to work due to a disability
- Unemployed
- Retired
- Caregiving for an older adult/parent
- Stay at home caregiver for the child(ren)
- I prefer not to say

Q5.16 Which category best describes your household's income? If living with a partner/spouse, please consider the income of both individuals.

- Less than $20,000
- $20,000 to $29,999
- $30,000 to $49,999
- $50,000 to $74,999
- $75,000 to $124,999
- $125,000 and above
- I prefer not to say

Q5.17 Where do you get health insurance for you and your child(ren)? Select all that apply.

- Indian Health Services
- Medicaid (CalOptima)
- Medicare
- Private health insurance provided by an employer (yours or your partner/spouse)
- Private health insurance bought directly by you
- Private health insurance bought through the Health Insurance Marketplace (Covered California)
- My child(ren) do(es) not have health insurance
- I do not have health insurance

Q5.18 Last, but not least, where / how did you get this survey?

- Church
- Community Meeting
- Email
- Facebook
- Grocery Store
- Healthcare Provider
- Instagram
- Library
- Newspaper
- Newsletter
- Next Door
- Personal Contact (e.g. friends or family)
- Target/Walmart or similar
- School
- Twitter
- Workplace

Q5.19 Would you be interested in participating in a focus group to talk about health issues and the quality of life in Orange County for children and families?

- Yes
- No

Skip To: Q5.20 If Would you be interested in participating in a focus group to talk about health issues and the qua... = No

Q5.20 Would you like to enter your name into the Amazon gift card lottery?

- Yes
- No

Skip To: End of Survey If Would you like to enter your name into the Amazon gift card lottery? = No

Q6.1 HMA will be scheduling a series of in-person and virtual focus groups in the next three weeks. By providing your name and contact information you are consenting to be contacted by HMA and be invited to participate in a focus group. Your consent to be contacted by HMA does not require that you participate in a focus group. We respect your right to change your mind.

Q6.2 Please provide your first name and the method you prefer to contact you.

- My first name is: _____
- Please contact me by email at:

  _____
- Please contact me by phone at:

  _____
- Please text me at: _____

Q7.1 Thank you for participating in this survey; we appreciate your feedback and would like to offer you the chance to win a $50 Amazon gift card. We will need your email address to deliver the gift card. Do you consent to give HMA your email address? We will only use it to send your gift card should you win our lottery.

Yes (please provide your email in the box below)

_____

No

Skip To: End of Survey If Thank you for participating in this survey; we appreciate your feedback and would like to offer y... = No

Q8.1 As the parent or caregiver please select any or all for whom you provide care. You may select one or more options.

- Newborn or infant (birth up to 1 year of age)
- Young children (1 - 5 years of age)
- Children (6 - 10 years of age)
- Children (11 - 17 years of age)
- Young adults (18 - 24 years of age)
- Children (birth to 24 years of age) with special healthcare needs
- I am a young adult and I care for one or more children
- I am a young adult and am answering on behalf of myself (I do not have any children)

Q9.1 Access to Care & Patient Experience. Access to affordable, quality healthcare is vital to physical, social, and mental health. Access to care allows individuals to enter the healthcare system, find care easily and locally, pay for care, and get their health needs met. The following questions will help us understand how easy or hard it is for children and families to access care in Orange County.

Q9.2 Children with special healthcare needs are children who have or are at increased risk for chronic physical, developmental, behavioral, or emotional conditions. They also require health and related services of a type or amount beyond that required by children generally. Do you have a child with special healthcare needs?

- Yes
- No

Q9.3 During the past 12 months, where did you usually take your child/children for routine medical care such as check-ups?

- Doctor's office
- Emergency room in a hospital
- Emergency room, not in a hospital
- Urgent care clinic
- Retail clinic (e.g., Walgreens, CVS)
- School-based health center
- Virtual doctor visits (e.g., telemedicine, telehealth, other online communication)
- My children do not have a usual place for medical care
- My children did not need medical care in the last 12 months
- I do not have any children
- I prefer not to say

Q9.4 On average, how much time does it take you to travel to see a doctor or other healthcare provider (e.g., nurse, nurse practitioner, physician assistant) for your child(ren) or children you care for?

- Less than 15 minutes
- 15 – 30 minutes
- 30 – 45 minutes
- Longer than 45 minutes
- I don't know
- I do not have any children

Q9.5 When did your child(ren) last see the dentist? If you have more than one child, consider the most recent dentist visit when answering.

- Within the last year
- More than one year ago
- I can't remember the last time my child/children saw a dentist
- I don't know what this question is asking
- I don't want to answer
- I do not have any children

Q9.6 Please rate the overall health of the child(ren) living in your home. My child(ren) is/are:

- Very healthy
- Healthy
- Somewhat healthy
- Unhealthy
- Very unhealthy
- I do not have any children

Q9.7 Some people experience barriers when trying to get healthcare services. For example, not having childcare during the appointment time or appointments are not available in the evening or on weekends. What barrier(s) have you experienced in getting services to support your child's(ren's) healthcare and wellness? Select all that apply.

- Application forms to get health insurance are too complicated
- Could not find a healthcare provider that understood, valued, and respected my culture
- Could not find providers that looked like me
- Could not locate providers that speak my language
- Did not have childcare
- Did not know what services and resources were available
- Felt embarrassed about getting services
- High out-of-pocket-costs (too expensive)
- Did not feel safe going to the hospital or a clinic
- Needed evening or weekend appointments
- Needed service not offered in my area
- No health insurance
- Not easy to travel to, or I did not have transportation
- Not eligible for services
- Long wait times to get appointment
- Provider has poor access for persons with a disability
- I have not experienced any barriers
- I do not have any children

Q9.8 Some people may avoid or delay necessary healthcare services because of fear or discomfort. For example, a person or family may avoid getting healthcare services if they feel their healthcare provider (e.g., doctor, nurse, dentist, pharmacist, midwife, clinical social worker) will not listen to their concerns due to who they are or who their children are. Has this happened to you?

- Yes
- No

Display This Question:

If Some people may avoid or delay necessary healthcare services because of fear or discomfort. For e... = Yes

Q9.9 I have avoided or delayed healthcare because I was worried that me or my child(ren) would be treated unfairly due to my/our/their: Select all that apply.

- ☐ Age
- ☐ Disability (e.g., physical, mental, behavioral, intellectual, or cognitive)
- ☐ Ethnicity (i.e., discrimination based on cultural identity, including culture, religion, dress, customs, nationality, or ancestry such as Hispanic, Latino/a, Spanish)
- ☐ Gender identity
- ☐ Immigration status
- ☐ Income
- ☐ Insurance status
- ☐ Preferred language (e.g., I'm worried the doctor won't understand me)
- ☐ Race (i.e., discrimination based on physical characteristics or qualities attributed to one's race, including Black, American Indian, Pacific Islander, Asian, etc.)
- ☐ Religion or spiritual beliefs
- ☐ Sexual orientation
- ☐ Specific health condition (e.g., HIV/AIDS, excess weight)
- ☐ Substance use
- ☐ I don't know what this question is asking
- ☐ I don't want to answer
- ☐ Other, please describe _____

Q9.10 How often did any of the following things happen to you while getting healthcare services for you or your child(ren)?

	Never	At least once	A few (3-4) times	Most of the time
You were treated with less courtesy than other people.	O	O	O	O
You were treated with less respect than other people.	O	O	O	O
You received poorer service than others.	O	O	O	O
A doctor or nurse acted as if they think you are not smart.	O	O	O	O
A doctor or nurse acted as if they are afraid of you.	O	O	O	O
A doctor or nurse acted as if they are better than you.	O	O	O	O
You felt like a doctor or nurse was not listening to what you were saying.	O	O	O	O

Q10.1 Community Strengths. Every community has good things or "strengths" that help the people who live there feel like they belong. Feeling like you belong or community connectedness is one of the main drivers of good health and quality of life. Following are statements about the quality of life in Orange County. Please consider each message about the neighborhood where you live and tell us if you agree, are neutral, or disagree.

	Agree	Neutral	Disagree
I am satisfied with the quality of life in my community. (Consider your sense of safety, wellbeing, participation in community life and associations, etc.)	O	O	O
I am satisfied with the healthcare system in my community. (Consider access, cost, availability, quality, and options in healthcare.)	O	O	O
This community is a good place to raise children. (Consider school quality, childcare, after school programs, recreation, etc.)	O	O	O
There is economic opportunity in my community. (Consider locally owned and operated businesses, jobs with career growth, job training/higher education opportunities, affordable housing, reasonable commute, etc.)	O	O	O
This community is a safe place to live. (Consider residents' perceptions of safety in the home, the	O	O	O

workplace, schools, playgrounds, parks, and the mall. Do neighbors know and trust one another? Do they look out for one another?)			
There are networks of support for individuals and families during times of stress and need. (Consider neighbors, support groups, faith-based community outreach, etc.)	O	O	O
There is a broad variety of affordable healthcare services in the community.	O	O	O
There are enough social services in the community to meet the needs of our children and families.	O	O	O

Q10.2 When you are sick or need health advice for your child or children, where do you usually go? Select up to three.

- 211
- 911
- Advocacy organizations
- Community-based organizations (e.g., Families Forward, Illumination Foundation)
- Community health center (e.g., CHOC Clinics, Families Together, AltaMed)
- Community health workers/promotoras de salud
- Cultural centers or culturally specific organizations
- Doctor's office
- Faith-based organizations or church
- Family member
- Friend or community member
- Government agencies (e.g., Women, Infants, and Children [WIC], local health departments)
- Hospital or emergency room (e.g., CHOC, St. Joseph, UC Irvine)
- Libraries
- Peer health support
- Retail store or minute health clinic (e.g., Walgreens, CVS, Walmart)
- Schools
- Urgent care
- Virtual/internet groups/social media
- None of the above
- I don't know what this question is asking
- I don't want to answer

Q10.3 If you need help getting resources such as jobs, food, childcare, or housing, where do you usually go? Select up to three

- 211
- Advocacy organizations
- Community-based organizations (e.g., Families Forward, Illumination Foundation)
- Community health center (e.g., CHOC Clinics, Families Together, AltaMed)
- Community health workers/promotoras de salud
- Cultural centers or culturally specific organizations
- Faith-based organizations or church
- Family member
- Friend or community member
- Government agencies (e.g., Women, Infants, and Children [WIC], local health departments)
- Hospital (e.g., CHOC, St. Joseph, UC Irvine)
- Libraries
- Peer health support
- Schools
- Virtual/internet groups/ social media
- None of the above
- I don't know what this question is asking

□ I don’t want to answer

Q10.4 In this question, we will present a list of healthcare and social services to you. In the past 12 months, did you or any household member need any of the services listed?

	Yes, this service was needed and received	Yes, this service was needed but not received	No, we did not need this service
Services for children/youth with emotional problems or delinquent behavior	O	O	O
Treatment or counseling for alcohol, tobacco (including vaping), or other drug addiction	O	O	O
Low- or no-cost dental/oral health services	O	O	O
Mental health services	O	O	O
Parenting information, training, or classes	O	O	O
Childcare/daycare assistance (including CCCAP)	O	O	O
Physical or mental healthcare because of sexual assault or physical abuse	O	O	O
Work-related/employment services (e.g., help finding work or job training)	O	O	O
Financial assistance (e.g., unemployment, CalWORKs/TANF, Social Security)	O	O	O
Housing services (e.g., rental/utility bill assistance, LEAP, or	O	O	O

shelters)			
Transportation assistance services (e.g., vouchers, reimbursements)	O	O	O
Food assistance (e.g., CalFresh)	O	O	O

Q11.1 Health Priorities. Following is a list of issues that affect health and well-being. The list includes items that are outside of CHOC's services but would help us understand issues that have the most impact on the area where you live. Thinking about your community, what are the top three needs that, if met, would make your community healthier?

- Education about behavioral health issues (e.g., substance use, suicide prevention, and mental health diagnoses like anxiety, depression, bipolar disorder)
- Jobs that pay enough money to support me and my family
- Programs to prevent substance use or addiction to alcohol, marijuana, opioids, tobacco, vaping, etc.
- Affordable housing
- Teamwork between healthcare organizations and community organizations to help families meet their needs
- Help for families transitioning to new healthcare providers or finding the type of healthcare provider they need
- Help managing disease or chronic health conditions
- Positive activities, services, resources, and programs for youth
- Affordable, healthy, and nutritious food
- High-quality, culturally responsive healthcare services
- Quality and affordable childcare
- Pediatricians or pediatric sub-specialists (e.g., pain clinics, arthritis, neurology, pulmonology)
- Safe recreational facilities that are multi-generational (e.g., community rec centers, parks, biking & walking trails)
- School health and wellness programs
- Enough resources to promote social support and connections (e.g., family, friends)
- Emergency preparedness for disasters such as fire, drought, flood, and pandemics
- Healthy environment (e.g., clean air and water)
- Disease prevention services and education
- Injury and violence prevention services and education
- Ending racism and discrimination
- I don't know what this question is asking
- I don't want to answer

Appendix D: Community Health Survey Distribution Channels

Table 1: Community Survey Distribution Efforts		
Stakeholder	**Community of Interest**	**Survey Distribution Methods**
Access Cal	Arab- and Muslim-Americans	A CHOC representative shared survey marketing materials for distribution within Access Cal's network.
African American Alliance Fund	African American residents	A CHOC representative shared survey marketing materials for distribution within the Alliance Fund's network.
American Academy of Pediatrics - OC Chapter, CHOC	Pediatricians, families	Sent the survey to approximately 25 school nurses and asked them to complete it and distribute it within their networks.
Anaheim Learn Well	Anaheim families	An HMA representative shared survey marketing materials for distribution within Anaheim Learn Well's network.
CalOptima	Providers, families	Shared the survey via email with members of CalOptima's Member Advisory Committee (MAC), Provider Advisory Committee (PAC), OneCare Connect Member Advisory Committee (OCC MAC), and Whole-Child Model Family Advisory Committee (WCM FAC) for distribution to their networks.
Children and Families Coalition	Service providers	Shared the survey via email with the Coalition's networks, the Be Well Collaborative, and the FaCT Collaborative for distribution within their networks.
CHOC	Families	Worked with the Medical Director of CHOC's Primary Care Network (encompassing all CHOC primary care clinics in Orange County) to distribute the survey. Provided the QR code in 5 community clinics and all primary care clinics.
Clinic in the Park	Families facing barriers to care	Distributed the survey via email to Clinic in the Park collaborators and Reach Out and Read providers and collaborators.
Coalition of OC Community Health Centers	Families, safety net providers	An HMA representative shared survey marketing materials for distribution within the Coalition's network.
Dayle McIntosh Center	People with disabilities	A CHOC representative shared survey marketing materials for distribution within the Dayle McIntosh Center's network.
Health Funders Partnership of Orange County	Healthcare safety net	An HMA representative shared survey marketing materials for distribution within the Health Funders Partnership's network.
Healthy Smiles for Kids of OC	Families, oral health providers	Distributed the survey via email to their providers and posted a flyer advertising the survey at their clinic to promote patient participation.
HERStory, Inc.	Pregnant and postpartum BIPOC families	An HMA representative shared survey marketing materials for distribution within HERStory's network.

Appendix F: Key informant Interview Guide

CHOC Key Informant Interview Guide

Proposed Interview Protocol

1. Invitation –HMA will send an introductory email to the potential key informant organization, and CC CHO staff. (Refer to the table below with the proposed points of contact and suggested outreach method.)
2. All interviews will be confidential. Quotes from participants may be used for illustrative purposes without attribution.
3. Interview will include two representatives from HMA: one lead and one support consultant who will take notes. We will inquire with interviewees if they are comfortable with our recording the session (for internal review purposes only).

Invitation Email

Children's Hospital of Orange County (CHOC) is conducting a community health needs assessment (CHNA). The purpose of the CHNA is to create a report that uplifts the health needs and experiences of communities in Orange County through systematic, comprehensive data collection and analysis. The data are collected in many ways, including qualitatively by talking with community leaders and families and conducting a community health survey, and quantitatively by looking at existing data from hospitals, education systems, local community-based reports, as well as county and state data.

CHOC will use the findings from the CHNA to help identify the health needs and the factors that influence the health of Orange County children and families. CHOC will use CHNA results to guide their community health improvement plan, ensuring resources are focused on the most pressing pediatric healthcare needs identified by the community.

You have been identified as a community leader with a perspective needed for the CHNA. <<Describe perspective>>. Would you be available for a one hour discussion during the week of June 13th? Below we list some dates and times. If you are able to participate, please let us know what works best for you.

LIST DATE AND TIMES

We will shared a calendar invite and the discussion guide in advance of the interview.

Questions

Note: While interview questions will be customized for each interviewee based on nature of the data strategy or approach under examination, the following set of questions will be used by interviewers as guide. Interviewers can use their discretion in how they verbalize questions to best align with the interviewee and the flow of the conversation.

Interviewee Agency/Organization

1. Which area of expertise do you represent? Out of these categories:
    a. Education
    b. Economy

c. Community of Interest
d. Behavioral Health
e. Physical Health

Probe: What is your organization's/agency's mission? What communities do you work in?

Identifying Top Health Issues

2. Based on your area of expertise, what are some of the major challenges facing the Orange County community?

3. What do you feel are the major health concerns for Orange County children and families?

Probe: Which populations do you think are most vulnerable or at risk for these conditions/issues? In what way?

4. What factors do you think contribute most to these specific health concerns in Orange County?

5. Do you think there are any emerging threats to health of Orange County children and residents that might not yet be major issues, but have the potential to become more important?

Probe: What are these? Why do you think these are important?

Addressing Top Health Issues

6. Thinking about the top health issues you've mentioned, what are the community's greatest strengths or assets around these issues?

7. Thinking about the top health issues you've mentioned, in what ways does the community have a gap in in addressing those issues?

8. Thinking about the top health issues you've mentioned, what is currently being done to address those issues?

9. What do you think leaders and decision-makers can do to help improve the health of Orange County children and families?

Conclusion

Thank you for taking the time to talk with us.

Appendix G: Population Demographics

Appendix H: Health Outcome Data Tables

Appendix I: Driver of Health Data Tables

Appendix G-I are available upon request from CHOC.

Appendix J: IRS Checklist

Section §1.501(r)(3) of the Internal Revenue Service code describes the requirements of the CHNA.

FEDERAL REQUIREMENTS §1.501(r)-3 CHECKLIST

FEDERALREQUIREMENTS §1.501(r)-3	REGULATION SECTION	REPORT REFERENCE
A Activities Since Previous CHNA(s)		
Describes the written comments received on hospital's most recently conducted CHNA and most recently adopted implementation strategy	(b)(5)(C)	About CHOC
Describes an evaluation of the impact of any actions that were taken, since the hospital facility finished conducting its immediately preceding CHNA, to address the significant health needs identified in the hospital facility's prior CHNA(s).	(b)(6)(F)	About CHOC
B Process & Methods		
Background Information		
Identifies any parties with whom the facility collaborated in preparing the CHNA(s).	(b)(6)(F)(ii)	CHNA Methodology
Identifies any third parties contracted to assist in conducting a CHNA.	(b)(6)(F)(ii)	CHNA Methodology
Defines the community it serves, which:		CHNA Methodology, Appendix B
Must consider all patients without regard to whether (or how much) they or their insurers pay for care or whether they are eligible for assistance.	(b)(i)	CHNA Methodology
May take into account all relevant circumstances including the geographic area served by the hospital, target population(s), and principal functions.	(b)(3)	CHNA Methodology
May not exclude medically underserved, low-income, or minority populations who live in the geographic areas from which the hospital draws its patients.	(b)(6)(i)(A)	CHNA Methodology
Describes how the community was determined	(b)(6)(i)(A)	CHNA Methodology
Describes demographics, how community was determined, and other descriptors of the hospital service area.	(b)(6)(i)(A)	CHNA Methodology
Health Needs Data Collection		
Describes data and other information used in the assessment:	(b)(6)(ii)	CHNA Methodology
Cites external source material (rather than describe the method of collecting the data)	(b)(6)(F)(ii)	Endnotes
Describes methods of collecting and analyzing the data and information	(b)(6)(ii)	CHNA Methodology
CHNA describes how it took into account input from persons who represent the broad interests of the community it serves in order to identify and prioritize health needs and identify resources potentially available to address those health needs.	(b)(1)(iii) (b)(5)(i) (b)(6)(F)(iii)	CHNA Methodology
Describes the medically underserved, low-income, or minority populations being represented by organizations or individuals that provide input.	(b)(6)(F)(iii)	CHNA Methodology; Survey Demographics
At least one state, local, tribal, or regional governmental public health department (or equivalent department or agency) or a State Office of Rural Health	(b)(5)(i)(A)	CHNA Methodology

FEDERALREQUIREMENTS §1.501(r)-3	REGULATION SECTION	REPORT REFERENCE
Members of the following populations, or individuals serving or representing the interests of populations listed below. (Report includes the names of any organizations - names or other identifiers not required.)	(b)(5)(i)(B)	CHNA Methodology, Appendix D
Medically underserved populations	(b)(5)(i)(B)	CHNA Methodology, Appendix D and E
Low-income populations	(b)(5)(i)(B)	CHNA Methodology, Appendix D and E
Minority populations	(b)(5)(i)(B)	CHNA Methodology, Appendix D and E
Additional sources (optional) – (e.g. healthcare consumers, advocates, nonprofit and community-based organizations, elected officials, school districts, healthcare providers and community health centers).	(b)(5)(ii)	Endnotes
Describes how such input was provided (e.g., through focus groups, interviews or surveys).	(b)(6)(F)(iii)	CHNA Methodology, Appendix D, E, F
Describes over what time period such input was provided and between what approximate dates.	(b)(6)(F)(iii)	CHNA Methodology,
Summarizes the nature and extent of the organizations' input.	(b)(6)(F)(iii)	CHNA Methodology, Appendix C and F
C CHNA Needs Description & Prioritization		
Health needs of a community include requisites for the improvement or maintenance of health status both in the community at large and in particular parts of the community (such as particular neighborhoods or populations experiencing health disparities).	(b)(4)	Assessment of Orange County's Resources Available to Meet the Social and Health Needs of Children and Families; Key Drivers of Health; Health Priorities; Community Health Survey: Important Factors for Healthy Kids
Prioritized description of significant health needs identified.	(b)(6)(i)(D)	Key Drivers of Health; Health Priorities; Community Health Survey: Important Factors for Healthy Kids
Description of process and criteria used to identify certain health needs as significant and prioritizing those significant health needs.	(b)(6)(i)(D)	CHNA Methodology; Health Priorities
Description of the resources potentially available to address the significant health needs (such as organizations, facilities, and programs in the community, including those of the hospital facility.	(b)(4) (b)(6)(E)	Assessment of Orange County's Resources Available to Meet the Social and Health Needs of Children and Families
D Finalizing the CHNA		
CHNA is conducted in such taxable year or in either of the two taxable years immediately preceding such taxable year	(a)(1)	May 1-September 2022. Date of Posting
CHNA is a written report that is adopted for the hospital facility by an authorized body of the hospital facility (authorized body defined in §1.501(r)-1(b)(4)).	(b)(iv)	Date of Posting

FEDERALREQUIREMENTS §1.501(r)-3	REGULATION SECTION	REPORT REFERENCE
Final, complete, and current CHNA report has been made widely available to the public until the subsequent two CHNAs are made widely available to the public. “Widely available on a web site” is defined in §1.501(r)-1(b)(29).	(b)(7)(i)(A)	Date of Posting
May Not be a copy marked "draft"	(b)(7)(ii)	Date of Posting
Posted conspicuously on website (either the hospital facility’s website or a conspicuously located link to a web site established by another entity).	(b)(7)(i)(A)	Date of Posting
Instructions for accessing CHNA report are clear.	(b)(7)(i)(A)	Date of Posting
Individuals with Internet access can access and print reports without special software, without payment of a fee, and without creating an account.	(b)(7)(i)(A)	Date of Posting
Individuals requesting a copy of the report(s) are provided the URL.	(b)(7)(i)(A)	Date of Posting
Makes a paper copy available for public inspection upon request and without charge at the hospital facility.	(b)(7)(i)(B)	Date of Posting

Endnotes

[1] (Esri)
[2] (California Health Interview Survey , 2020)
[3] (Stambauch, et al., 2013)
[4] (American Academy of Child and Adolescent Psychiatry, 2021) (American Academy of Child and Adolescent Psychiatry, 2021)
[5] (Centers for Disease Control and Prevention, 2022)
[6] (Healthy People 2030, n.d.)
[7] (California Office of Statewide Health Planning and Development, 2020)
[8] (Centers for Disease Control and Prevention, 2022)
[9] (Center for Disease Control and Prevention, 2021)
[10] (Centers for Disease Control and Prevention, 2019)
[11] (Miller, 2022)
[12] (Conway, Swendsen, Husky, He, & Merikangas, 2016)
[13] (Orange County Health Care Agency, 2022)
[14] (Potential Emerging Risks Among Children Following Parental Opioid-Related Overdose Death, 2020)
[15] (California Department of Health, n.d.)
[16] (Milliman, 1993)
[17] (Census, S2701, 2015-2019)
[18] (Census, Tables B27001 A-I and C27001 A-E, 2019)
[19] (California Health Interview Survey, 2016-2020)
[20] (Population Reference Bureau, 2021)
[21] (OC Children's Screening Registry Dashboard, March 30, 2022)
[22] (Orange County Health Care Agency, Family Health Division)
[23] (Tikkanen, 2020)
[24] (Orange County Health Care Agency)
[25] (Orange County Social Services Agency, 2021)
[26] (Managing Chronic Health Conditions in Schools | Healthy Schools | CDC)
[27] (California Department of Education, DataQuest, 2018/19)
[28] (California Health Interview Survey , 2020)
[29] (California Health Interview Survey, 2019 and 2020)
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[31] (California Healthy Kids Survey - Alcohol, Tobacco & Other Drug Prevention (CA Dept of Education))
[32] (Orange County Department of Education, 2020/21)
[33] (California Health Interview Survey, 2017-2018)
[34] (Orange County Health Care Agency, 2022)
[35] (Centers for Disease Control and Prevention, 2020)
[36] (Overall (all ages) Hunger & Poverty in the United States | Map the Meal Gap)
[37] (USDA, 2019)
[38] (Orange County Health Care Agency, Nutrition Services-WIC)
[39] (California Department of Social Services, Calfresh County Data Dashboard, 2022)
[40] (USDA, 2019)
[41] (Duncan, 2007)
[42] (First 5 Orange County, 2020)
[43] (Orange County Early Development Index, 2022)
[44] (California Assessment of Student Performance and Progress, 2018/19)
[45] (Belfield, 2007)
[46] (California Department of Education, DataQuest, 2020/21)
[47] (Balfanz, 2012)
[48] (Lara, Noble, Pelika, & Coons, 2018)
[49] (California Department of Education, DataQuest, 2020/21)
[50] (Taylor, 2018)
[51] (Alexis, 2021)
[52] (Federal Bureau of Investigation, 2020)

[53] (Zabar, 2009)
[54] (California Department of Justice Criminal Justice Statistics Center)
[55] (Orange County Human Relations Commission, 2019)
[56] (California Healthy Kids Survey (CHKS), 2017-2019)
[57] (Children's Hospital of Orange County, n.d.)
[58] (Orange County Human Trafficking Task Force, 2021)
[59] (Greenbaum, 2017)
[60] (Murdock, Hodge-Willians, Hardin, & Rood, 2022)
[61] (Whitlock, 2007)
[62] (Census U. , 2015-2019)
[63] (Center for Disease Control and Prevention, 2018)
[64] (Keles et al, 2020)
[65] (Athanasiou, Melegkovits, Andrie, & et al, 2018))
[66] (L1ght, 2020)
[67] (US Census Bureau, Table B13002, 2019)
[68] (Orange County Health Care Agency, 2020)
[69] (B01002: MEDIAN AGE BY SEX - Census Bureau Table)
[70] (Orange County Business Council, 2021 - 2022)
[71] (Abdi, Seok, & Murphey, 2020)
[72] (S1810: DISABILITY CHARACTERISTICS - Census Bureau Table)
[73] (Special Education Enrollment - Kidsdata.org)
[74] (B09018: RELATIONSHIP TO HOUSEHOLDER... - Census Bureau Table)
[75] (Children in Single-Parent Households | County Health Rankings & Roadmaps)
[76] (B09005: HOUSEHOLD TYPE FOR CHILDREN... - Census Bureau Table)
[77] (B16004: AGE BY LANGUAGE SPOKEN AT... - Census Bureau Table)
[78] (U.S. Census Bureau, 2022)
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[84] (Center for Disease Control and Prevention, 2022)
[85] (Health Resources & Services Administration, 2022)
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[88] (Health Resources & Services Administration, 2021)
[89] (US Department of Health and Human Services Health Resources and Services Administration & Maternal and Child Health Bureau, 1999)
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[91] (Health Resources & Services Administration, 2018)
[92] (Durant, Gibbons, C., M., & Wyckoff, 2011)
[93] (Gonzalez, Kenney, McDaniel, & O'Brien, 2022)
[94] (Medical Board of Calfornia, 2013)
[95] (HCAI, n.d.)
[96] (NC Oral Health Collaborative, 2020)
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[98] (The Coalition of Orange County Community Health Centers, 2022)
[99] (HCAI, 2019-2020)
[100] (Orange County Health Care Agency, 2022)
[101] (CDC, 2022)
[102] (CDC, 2022)
[103] (California Immunization Registry (CAIR2) , 2022)