

MEDI-CAL STATISTICAL REPORT

MAY 2015

Medi-Cal’s Child Population Ages 0-11: *The Medi-Cal Population Before the Implementation of the Affordable Care Act*

Introduction

California was one of many states that voluntarily expanded Medicaid under the Affordable Care Act (ACA) by extending benefits to previously unqualified populations. Evaluating the effects of this transition and the full implementation of the ACA on California’s Medicaid program, Medi-Cal, requires researchers and stakeholders to possess a clear understanding of the Medi-Cal population before the expansion. To address this informational need, the Research and Analytic Studies Division (RASD) has created a series of reports on the socio-demographic, regional, and health characteristics of the 2011-12 Medi-Cal population.

This report focuses on Californians between the ages of 0 and 11 years. Medi-Cal provides coverage to 2.6 million individuals between the ages of 0 and 11, representing 41.1% of the state’s population age 14 and younger.¹ Individuals 11 and younger constitute 34.4% of the total Medi-Cal population.

To create a nuanced picture of the 2011-12 child Medi-Cal population, RASD combined Department of Health Care Services (DHCS) administrative data and data derived from the California Health Interview Survey (CHIS). As a survey, CHIS provides information on socio-demographic determinants of health and health behaviors not available in administrative data. In turn, Medi-Cal administrative data balances the limitations of a telephone survey such as CHIS; while CHIS provides data from a sample of respondents weighted to represent the entire state, Medi-Cal administrative data includes a record for each Medi-Cal

Key Findings:

- More than half (58.4%) of children enrolled in Medi-Cal came from families with incomes below 100% FPL. By contrast, only 3.1% of those with private insurance, 15.6% of those enrolled in Healthy Families, and 38.7% of the uninsured came from families with incomes below 100% FPL.
- Children with private insurance (79.9%) were twice as likely as those enrolled in Medi-Cal (37.4%) to have a parent/guardian who was married.
- Children enrolled in Medi-Cal (17.8%) were less likely than those with private insurance (71.3%) to live in a home that was owned.
- Children enrolled in Medi-Cal (51.7%) were less likely to have a parent/guardian or other family member who read to them every day than those with private insurance (73.5%).
- Children enrolled in Medi-Cal (62.5%) were less likely to have a parent/guardian or other family member who played music or sang songs with them every day than those with private insurance (74.8%).
- Children enrolled in Medi-Cal (58.9%) were less likely than those with private insurance (73.9%) to have a parent/guardian who believed their preschool is a good place to be.
- Children enrolled in Medi-Cal (55.3%) were less likely to have a parent/guardian who had confidence in the staff at their child’s preschool than those with private insurance (70.6%).
- Children enrolled in Medi-Cal (21.9%) were less likely than those with private insurance (40.2%) to have childcare for 10 or more hours per week.

beneficiary.

In this report, RASD presents socio-demographic and health related data for the child population by insurance status. Where population size allowed, RASD compared the characteristics of Medi-Cal beneficiaries to Californians with private insurance, without any insurance coverage, and those enrolled in California's Children's Health Insurance Program (CHIP), Healthy Families, in 2011-2012. The inclusion of Healthy Families as a distinct category allows stakeholders to monitor that population as it undergoes a transition independent of the ACA during the same period. (For more information on the Healthy Families program, please see the [Background](#) section of this report). Beginning in January 2013, DHCS began to transition the Healthy Families population into Medi-Cal. Subsequent reports will reflect that transition and the eventual discontinuation of the Healthy Families program by January 2014. Readers of this report should remain aware that the 2011-2012 Healthy Families population shown here corresponds with an eligibility category now integrated into the Medi-Cal population.

Data Sources

RASD used two complementary data sources to create this report: DHCS administrative Medi-Cal data and CHIS survey data. [Appendix A, Data Sources and Methods](#), contains a detailed technical discussion of the data and methodology used to produce the statistics in this report.

CHIS

CHIS is an independent, population-based telephone survey that represents California's non-institutionalized population living in households. CHIS covers a wide range of topics focused on the health and health care needs of California's diverse population. Although CHIS addresses recognized negative health behaviors, it also captures factors more subtly related to health, such as soda consumption, the availability of affordable fruits and vegetables, and neighborhood cohesion factors. In addition, CHIS includes characteristics specifically related to children, such as parental involvement and childcare. Because this level of detail is not available through administrative data, CHIS is a valuable resource for Medi-Cal stakeholders. Further, the addition of CHIS data allowed RASD to present the Medi-Cal population alongside privately insured and uninsured residents of the state, giving context to these unique statistics.

CHIS is a continuous survey that takes two years to complete a data cycle. During 2011 and 2012, CHIS completed 7,334 child interviews (interviewees 0 to 11 years old). RASD excluded children with public insurance other than Medi-Cal or Healthy Families from this analysis. After exclusions, this report includes data on 7,228 children. Among this sample, 2,237 interviewees were enrolled in Medi-Cal, 4,134 had private insurance, 262 were uninsured, and 595 were enrolled in Healthy Families.

Within each household selected for survey participation, CHIS interviewed one randomly selected adult. If the selected adult was the parent or legal guardian of a child or adolescent, CHIS then selected one child or adolescent in the household to be interviewed. Interviews for children ages 0 to 11 were usually conducted by their parent or guardian. There were some cases where the adult gave permission for the child interview but did not want to participate in the adult interview. There were 1,559 interviews for children that could not be linked to data from an interview with their parent or guardian. Data for some

characteristics in this report were obtained only from the adult interview associated with the child. These characteristics included: employment, education, marital status, food insecurity, home ownership, affordable fruits and vegetables in the neighborhood, smoking in the household, and daily smoking by the parent or guardian.

DHCS Administrative Data

RASD drew enrollment eligibility data from Medi-Cal Eligibility Data Systems (MEDS) January 2012, reflecting a 12-month reporting lag, for 2,613,080 children. RASD considers a specific month's eligibility count finalized 12 months after the month's end; therefore, RASD utilized a 12-month reporting lag to ensure the data were complete as possible.

RASD confined the study of Medi-Cal beneficiaries to "certified eligibles," individuals who received a valid eligibility determination and were enrolled during January 2012.² The certified eligible classification excludes beneficiaries who were qualified for Medi-Cal but not enrolled during the period,³ as well as beneficiaries who were required to meet a monthly Share of Cost (SOC) obligation as a condition of receiving Medi-Cal-covered services, but did not meet that obligation in January 2012. This definition differs from the CHIS statistics. In the CHIS survey individuals are described as Medi-Cal enrollees if they state they were covered by Medi-Cal.

Limitations

The CHIS survey presents estimated characteristics for the entire California population produced using a representative sample of interviewees from the state of California. As such, readers should review this report with an awareness of sampling error. Sampling error is the deviation between the 'true' value of the characteristics for a population and the estimate of the characteristics produced from a sample of the population. Charts derived from CHIS data include individual confidence intervals to provide readers with an indication of the reliability of the estimates. All differences that are cited in this report were found to be statistically significant when tested unless stated otherwise. Smaller sample size decreases the chance of detecting statistical significance. In some cases the smaller sample size for children may have contributed to the lack of statistical significance reported here.

Further, readers should interpret the CHIS findings reported here with the understanding that interviews for children between the ages of 0 and 11 were conducted by their parent or guardian. There were some cases where the adult gave permission for the child interview but did not want to participate in the adult interview.

Medi-Cal is a safety-net program intended to provide health care to individuals who might otherwise struggle to secure affordable health insurance. Many Medi-Cal beneficiaries qualify based on their income relative to the federal poverty level (FPL), coupled with their assets, deprivation (deprivation represents the absence of one parent or the underemployment or unemployment of the principal wage earner in a family with children), disability, and health needs not addressed through other means. Readers should remain mindful of Medi-Cal eligibility guidelines when drawing conclusions about differences between the Medi-Cal, privately insured, and uninsured populations. RASD advises readers to interpret other economic indicators in this report (unemployment, educational attainment, home

ownership, etc.), when comparing groups, with similar consideration for Medi-Cal’s program goals and eligibility guidelines.

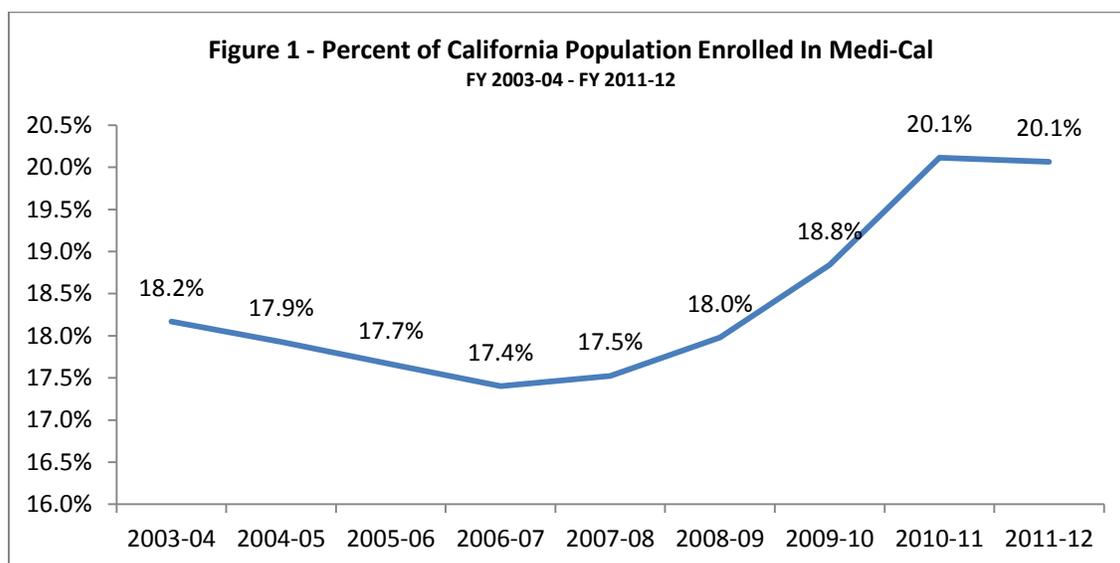
How to Read this Report

This report contains a general discussion and analysis on topics related to the health of the California child population ages 0-11 in 2011-12. As noted above, RASD used two complementary data sources to create this report: DHCS administrative Medi-Cal data and CHIS survey data. Sub-headers on each “Findings” page state which of these two data sources RASD used to produce the statistics related to that topic area. RASD advises readers to note the data source for each topic and remain mindful of the limitations specific to that data source when reviewing the report.

Background:

Medi-Cal

Medi-Cal is the joint state-federal program that provides low- and no-cost health care to low-income residents of California. While Medi-Cal eligibility is generally based on income relative to the FPL,⁴ the program also provides coverage to individuals considered blind or disabled under the Social Security Administration, individuals with qualifying health conditions (such as breast cancer or tuberculosis), and Medicare enrollees who meet specific income requirements. With annual spending of over \$45 billion in 2011, Medi-Cal is an essential financier of health care in California and provides care to a substantial percentage of the population.^{5,6}

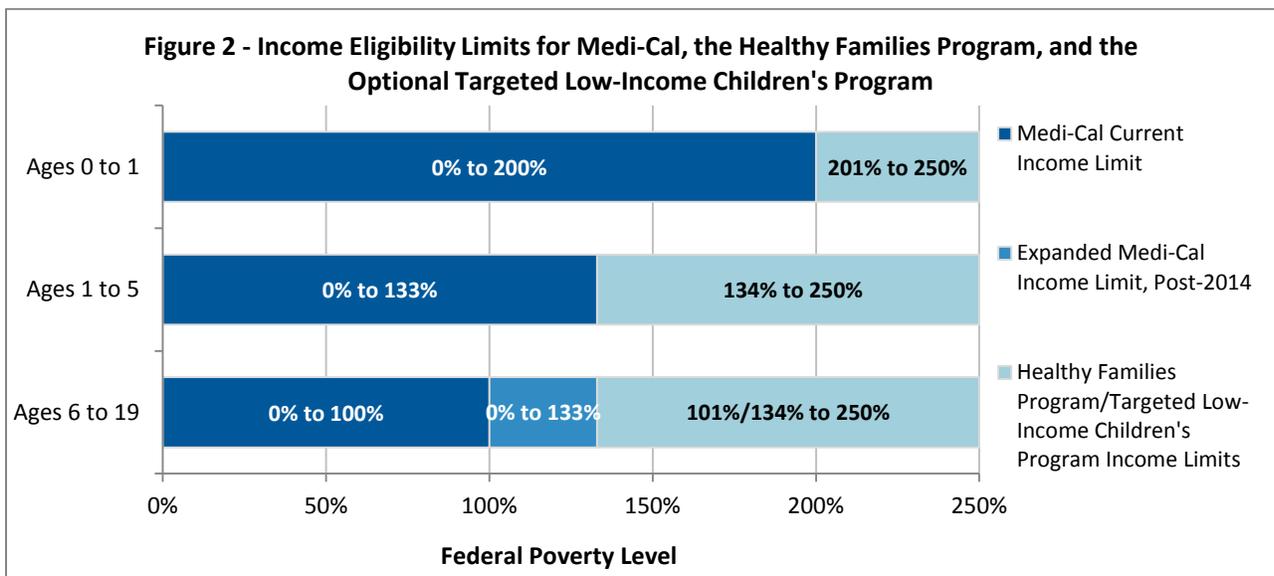


Source: Prepared by DHCS Research and Analytic Studies Division using (1) Medi-Cal Certified Eligible data selected from the MEDS System MMEF files, January 2003-December 2012, and (2) State of California, Department of Finance, California County Population Estimates and Components of Change by Year, July 1, 2000-2010 Sacramento, California, December 2011. February 2012 revision.

In January 2012, over 7 million Californians participated in Medi-Cal, which accounted for 20.1% of the state's population. This value represents a leveling off of the previous trend; from 2007-08 to 2010-11 Medi-Cal provided services to a steadily increasing percentage of California's population, which was primarily driven by the nation's economic recession. Although there was no significant increase from 2010-11 to 2011-12, stakeholders predict that the percentage of Californians enrolled in Medi-Cal will continue to increase under the ACA.

California's CHIP Program: Healthy Families

CHIP is a federal program that was established in 1997 for the purpose of providing health insurance to uninsured children in families with modest household incomes too high to qualify for Medicaid. The federal government provides 65% of the funding for a state's program, while the states fund the remaining 35% of the cost. California's CHIP program, Healthy Families, became effective July 1, 1998. The Healthy Families Program is separate from Medi-Cal and provides health insurance at a low cost to eligible children ages 0-19. Healthy Families covers children above Medi-Cal FPL limits by age group, up to and including 250% FPL.⁷ In 2012, the program had increased to a total of over 870,000 enrollees.

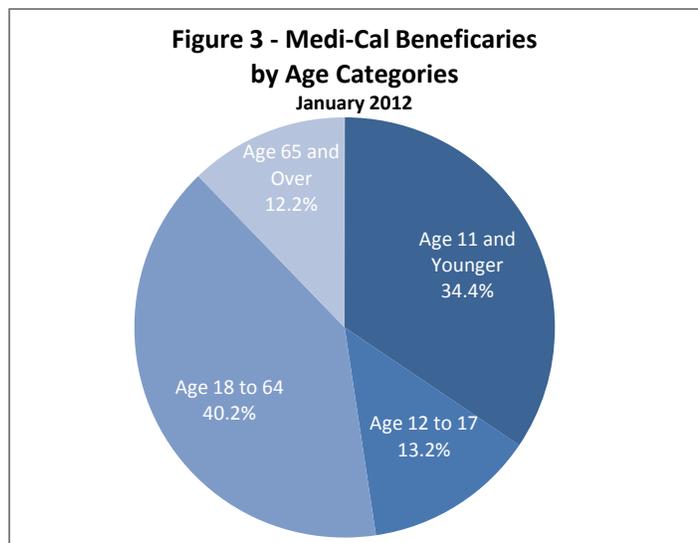


Source: California Healthcare Foundation's *Medi-Cal Facts and Figures: A Program Transforms*.

The ACA maintains CHIP eligibility standards until 2019. As a part of the Medicaid expansion, California began implementing the Optional Targeted Low-Income Children's Program (OTLICP) in order to transition Healthy Families enrollees into the Medi-Cal program beginning in January 2013. Eligibility standards, benefits and cost sharing will remain the same or similar to those effective under the Healthy Families Program.⁸ Understanding the socio-demographic, regional, and health characteristics of the CHIP/Healthy Families population is important in assessing the future of the overall Medi-Cal population as nearly one million former Healthy Families beneficiaries transition into Medi-Cal. The inclusion of Healthy Families as a distinct category in this report allows stakeholders to monitor that population as it undergoes a transition independent of the ACA during the same period.

Study Population:

This analysis will focus on Medi-Cal beneficiaries ages 0 to 11, enrolled during the 2011-12 period. As of January 2012, this cohort accounted for over 2.6 million beneficiaries and 34.4% of the Medi-Cal population. Beneficiaries ages 12 to 17 made up 13.2% of the Medi-Cal population. Beneficiaries ages 18 to 64 made up 40.2% and beneficiaries ages 65 and older accounted for 12.2% of the Medi-Cal population in January 2012.



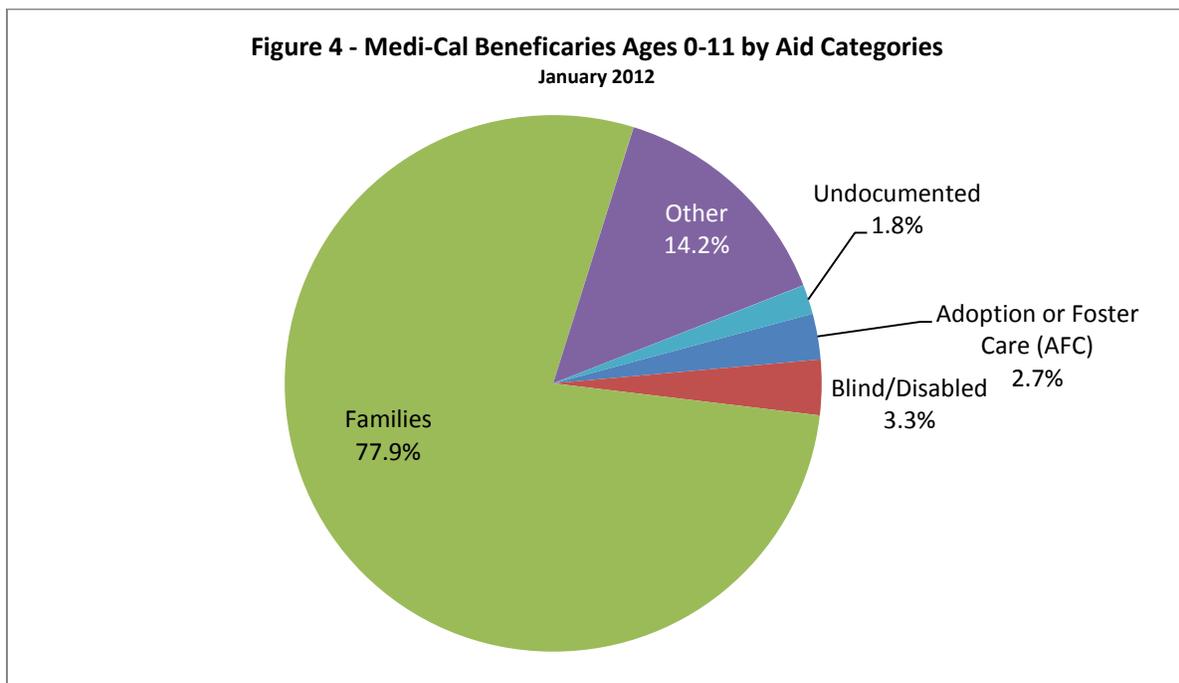
Source: *Certified Eligibles Only - Prepared by DHCS Research and Analytic Studies Division using Medi-Cal eligibility data obtained from the MEDS System MMEF files, January 2012 reflecting a 12-month reporting lag.*

Eligibility Pathway of Study Population

An eligibility pathway represents the means by which a beneficiary qualified for Medi-Cal coverage. For analysis, eligibility pathways can be grouped into and presented as “aid categories”. In addition to representing the way a beneficiary qualified for Medi-Cal, aid categories reveal the scope of services available to that individual.

For the purpose of this analysis, RASD grouped Medi-Cal’s child population into five broad categories: Families, Blind/Disabled, Undocumented, Adoption or Foster Care, and Other. The Undocumented aid category covers beneficiaries without satisfactory immigration status (SIS). In general, beneficiaries qualified under an Undocumented aid category are only eligible for emergency or pregnancy-related services through Medi-Cal. The Families aid category primarily includes beneficiaries with public assistance who qualify for Medi-Cal based on their low-income status relative to the FPL, the medically needy and those who qualify based on 1931(b). Beneficiaries enrolled in the Blind/Disabled aid category generally qualify by meeting the Supplemental Security Income (SSI) medical definition of disability. The Other aid category is an aggregate of children eligible for Medi-Cal under an eligibility pathway not specifically listed.

In January 2012, beneficiaries ages 0-11 in the Families aid category made up the largest portion of the Medi-Cal child population (77.9%).

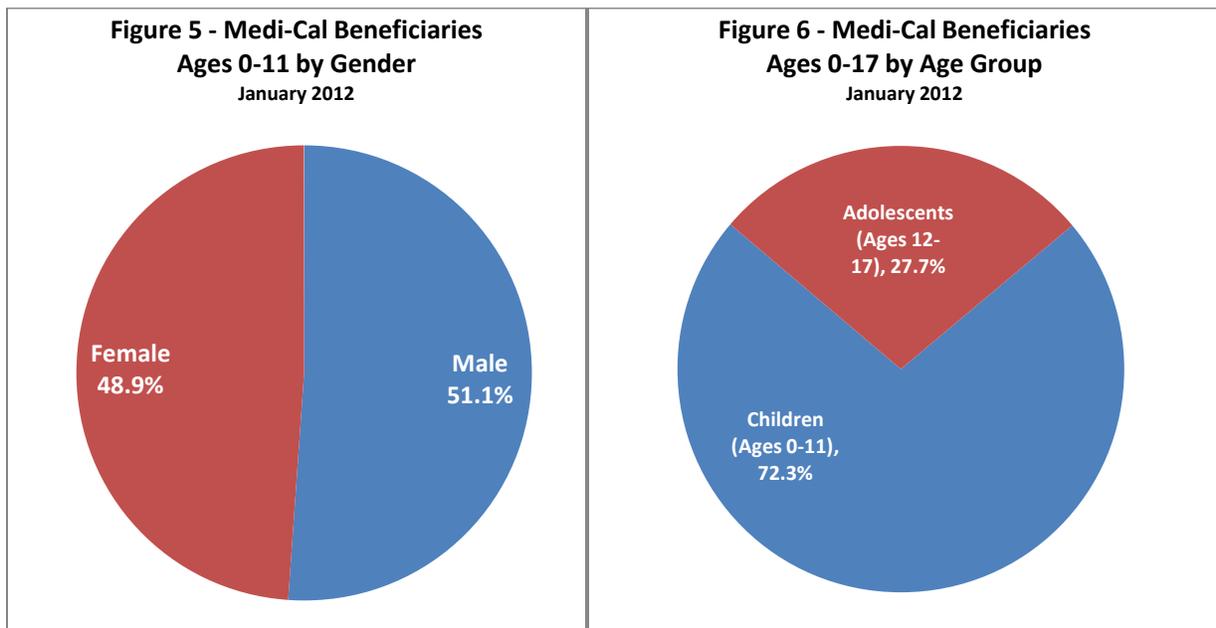


Source: Certified Eligibles Only - Prepared by DHCS Research and Analytic Studies Division using Medi-Cal eligibility data obtained from the MEDS System MMEF files, January 2012 reflecting a 12-month reporting lag.

Findings: Age and Gender in Medi-Cal's Child Population

Derived from DHCS Administrative eligibility data.

In January 2012, children enrolled in Medi-Cal were evenly split between male (51.1%) and female (48.9%) beneficiaries. RASD found that children (ages 0 to 11) accounted for the majority (72.3%) of the Medi-Cal population age 17 and younger. Adolescents (ages 12 to 17) made up 27.7% of Medi-Cal beneficiaries ages 17 and younger.



Source: Certified Eligibles Only - Prepared by DHCS Research and Analytic Studies Division using Medi-Cal eligibility data obtained from the MEDS System MMEF files, January 2012 reflecting a 12-month reporting lag.

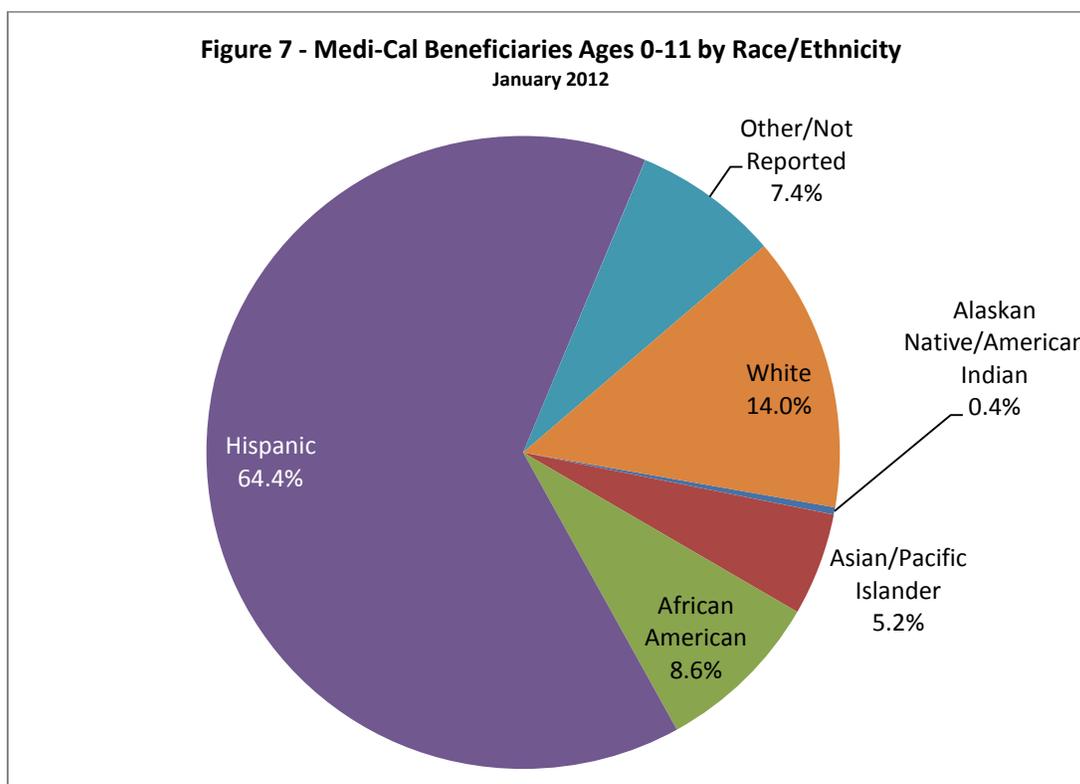
Findings: Race and Ethnicity in Medi-Cal's Child Population

Derived from DHCS Administrative eligibility data.

Differences in health outcomes for racial and ethnic minorities remain a persistent problem in health care. Racial and ethnic minorities are less likely to receive routine medical treatments, and experience a lower quality of health care.^{9,10} In addition, the social, economic, and environmental disadvantages faced by some ethnic groups contribute to health disparities.¹¹

Reduced access to health insurance and health care services exacerbate the difficulty in addressing variability in health outcomes for racial and ethnic minorities. Minorities are less likely to have employer-based insurance, which contributes to lower rates of insurance among minorities.¹²

In 2012, Hispanics accounted for 64.4% of the Medi-Cal population ages 0 to 11. Whites comprised the second largest group at 14.0%, followed by African-Americans (8.6%), and Asian/Pacific Islanders (5.2%).



Source: Certified Eligibles Only - Prepared by DHCS Research and Analytic Studies Division using Medi-Cal eligibility data obtained from the MEDS System MMEF files, January 2012 reflecting a 12-month reporting lag.

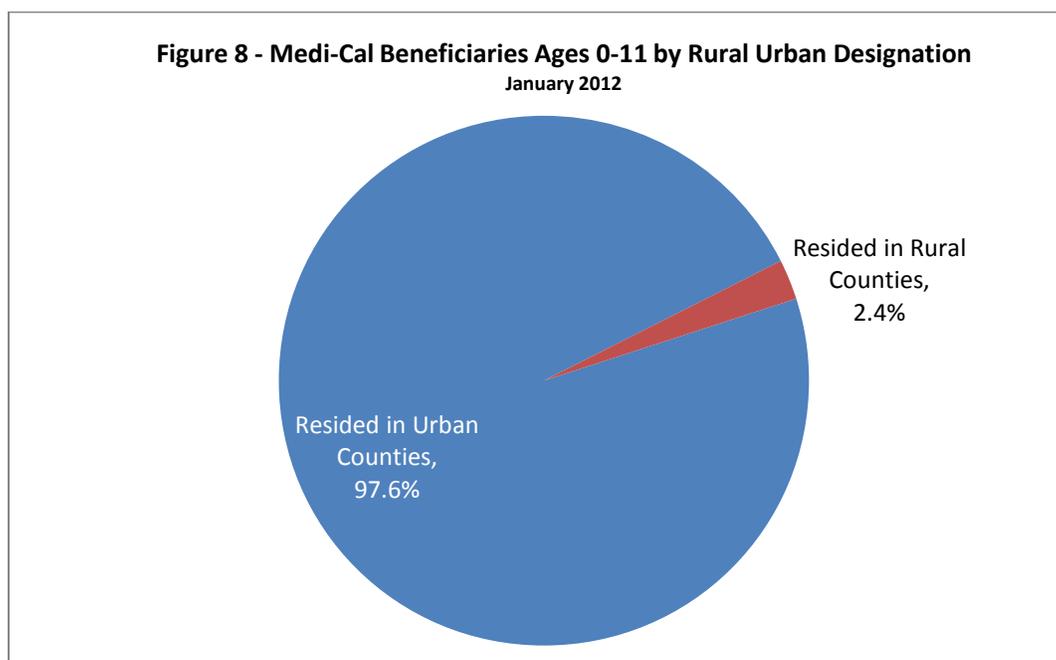
Findings: Regional Distribution in Medi-Cal's Child Population

Derived from DHCS Administrative eligibility data.

In 2012, 79% of the U.S. population lived in metropolitan areas.¹³ Where a community falls on the urban to rural spectrum influences its demographic, environmental, economic, and social characteristics. Urban counties have younger, more diverse populations and higher concentrations of poverty, whereas rural populations live further from health resources.¹⁴ Geographic distance, severe weather, lack of transportation, or challenging traveling conditions may restrict health care access. Emergency response times are also a serious concern for rural populations that tend to be older and have more chronic health conditions.¹⁵ Rural populations are more likely to have chronic diseases and mental health issues, have higher proportions of obesity, and higher rates of infant mortality.¹⁶ Rural residents are also less likely to have insurance coverage through Medicaid.¹⁷

For this analysis, RASD defined an urban county as one in an established metropolitan region based on population size, degree of urbanization, and adjacency to a metropolitan area (see [Appendix A, Data Sources and Methods](#)). RASD classified counties outside or adjacent to metropolitan areas as rural. California's population is highly urbanized. While California has 37 urban counties and 21 rural counties, 87% of the population lives in urban areas. This proportion reflects the population concentration inherent in the urban-rural analysis; rural counties have much smaller populations and thus account for a much smaller percent of the state's population.

Only 2.4% of Medi-Cal beneficiaries ages 0 to 11 lived in rural counties in 2012. The remainder of the Medi-Cal child population (97.6%) resided in urban counties.



Source: Certified Eligibles Only - Prepared by DHCS Research and Analytic Studies Division using Medi-Cal eligibility data obtained from the MEDS System MMEF files, January 2012 reflecting a 12-month reporting lag.

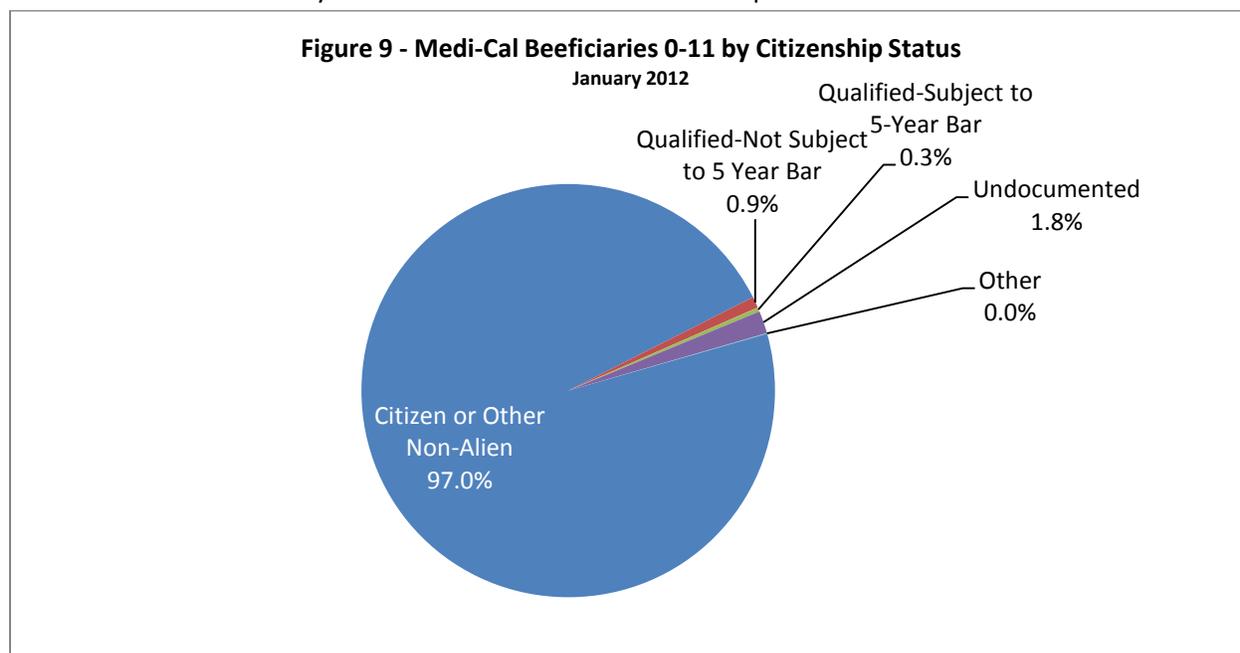
Findings: Citizenship Status in Medi-Cal's Child Population

Derived from DHCS Administrative eligibility data.

The significant immigrant population in the U.S. includes a growing number of mixed-citizenship families. A mixed-citizenship status family refers to a household comprised of individuals with different citizenship or immigration status, including legal immigrants, undocumented immigrants, and naturalized citizens.^{18,19} Mixed-citizenship status families are very complex in regards to their health insurance eligibility. While some family members may qualify for different health insurance programs, others may not be eligible at all. California offers full-scope Medi-Cal coverage to legal immigrants, Permanently Residing under Color of Law (PRUCOL) immigrants, and naturalized citizens provided that they meet all other Medi-Cal qualifications, regardless of the length of their residency.²⁰ In California, undocumented immigrants are not eligible for full-scope Medi-Cal benefits and are eligible for emergency and pregnancy related services only. An individual who is not eligible for a health insurance program may apply on behalf of an eligible family member, such as an undocumented parent may apply on behalf of their child who is a U.S. citizen.²¹

Research shows that from 2006 to 2011, the number of children ages 0 to 17 who had at least one parent who was an immigrant increased by 1.5 million children.²² Children with immigrant parents accounted for nearly one-quarter of all children in the U.S. and the number continues to increase, thus resulting in an increase in mixed-citizenship status families.²³

In 2012, the majority of Medi-Cal's child population ages 0-11 had citizenship or non-alien status (97.0%). Beneficiaries without satisfactory immigration status (SIS) (Undocumented, 1.8%) contributed the only other significant percentage. The percentage of children with citizenship or other-non alien status was higher in comparison to the nonelderly Medi-Cal population with similar citizenship status, which demonstrated many children resided in mixed-citizenship status families.



Source: Certified Eligibles Only - Prepared by DHCS Research and Analytic Studies Division using Medi-Cal eligibility data obtained from the MEDS System MMEF files, January 2012 reflecting a 12-month reporting lag.

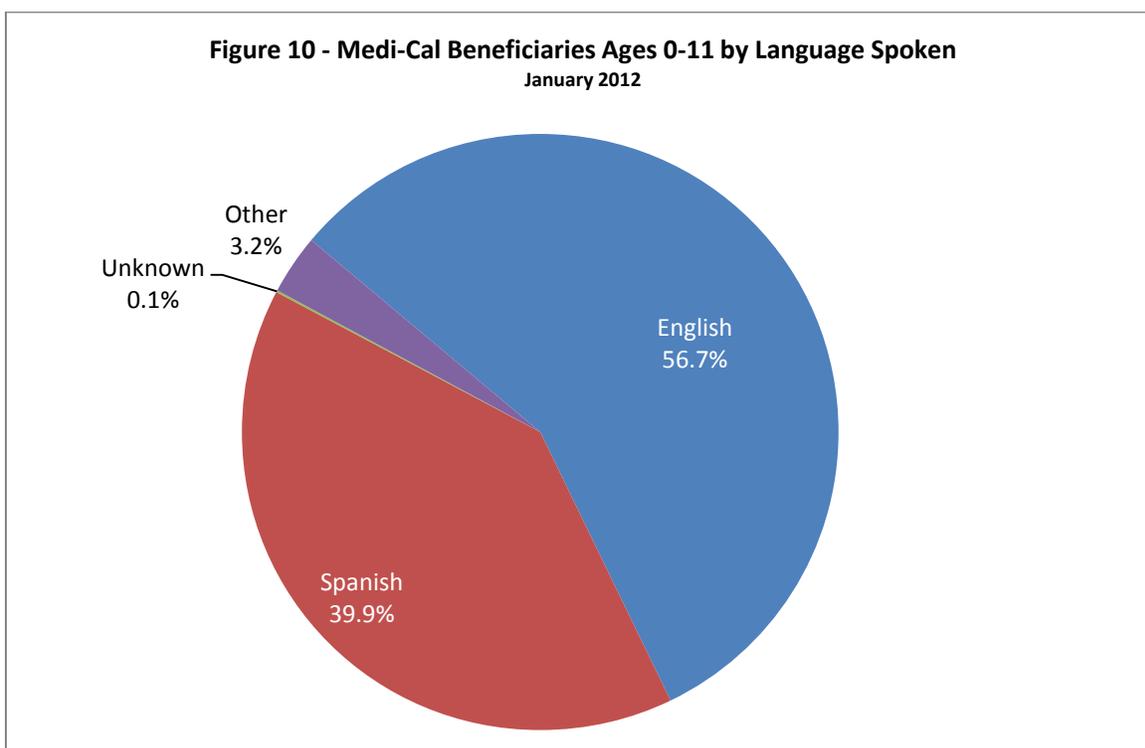
Findings: Language Spoken by Medi-Cal's Child Population

Derived from DHCS Administrative eligibility data.

Non-financial barriers such as limited English proficiency contribute to disparities in insurance status and access to quality health care.²⁴ Immigrants with limited English proficiency report lower satisfaction with the level of care they received, and a poorer understanding of their medical diagnosis. Limited English proficiency can also affect patient safety due to a poor understanding of instructions, or an adverse reaction to medications.²⁵

[Appendix A](#), Data Sources and Methods, provides a complete breakdown of the languages spoken in the Medi-Cal population.

More than half of Medi-Cal beneficiaries between the ages of 0 and 11 spoke English (56.7%), while 39.9% spoke Spanish.



Source: Certified Eligibles Only - Prepared by DHCS Research and Analytic Studies Division using Medi-Cal eligibility data obtained from the MEDS System MMEF files, January 2012 reflecting a 12-month reporting lag.

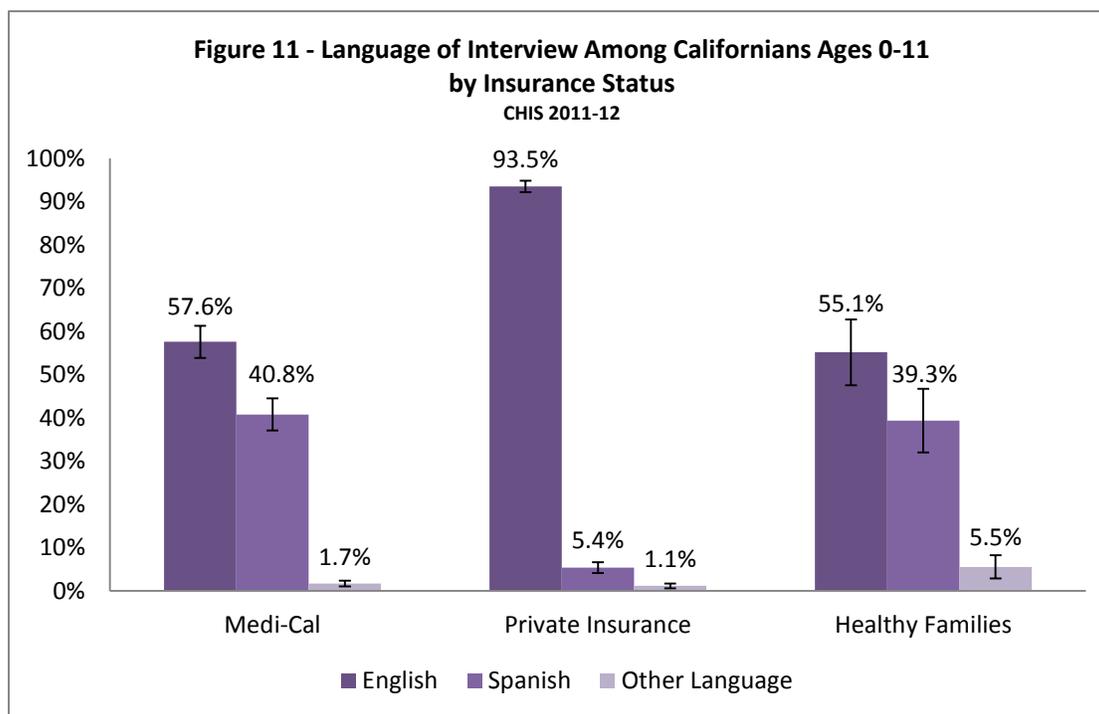
*Note: Values in figure may not add up to 100.0% due to rounding

Findings: Language of Interview in California's Child Population

CHIS Question: Language in which interviewer conducted CHIS interview.

RASD's findings for the language of CHIS interview for children closely mirrors the language findings derived from DHCS administrative eligibility data. As noted earlier in this report, 56.7% of children enrolled in Medi-Cal spoke English as a primary language, followed by Spanish (39.9%). A combined category of all other languages accounted for only 3.3% of the Medi-Cal population ages 0 to 11.

The proportion of interviews conducted in English for children with private insurance (93.5%) was higher compared to those enrolled in Medi-Cal (57.6%) and those enrolled in Healthy Families (55.1%). The proportion of interviews conducted in Spanish for children enrolled in Medi-Cal was more than 7 times higher than the proportion among children with private insurance (40.8% and 5.4%, respectively).



*Note: Values in figure may not add up to 100.0% due to rounding

Findings: Marital Status of Parent/Guardian in California’s Child Population

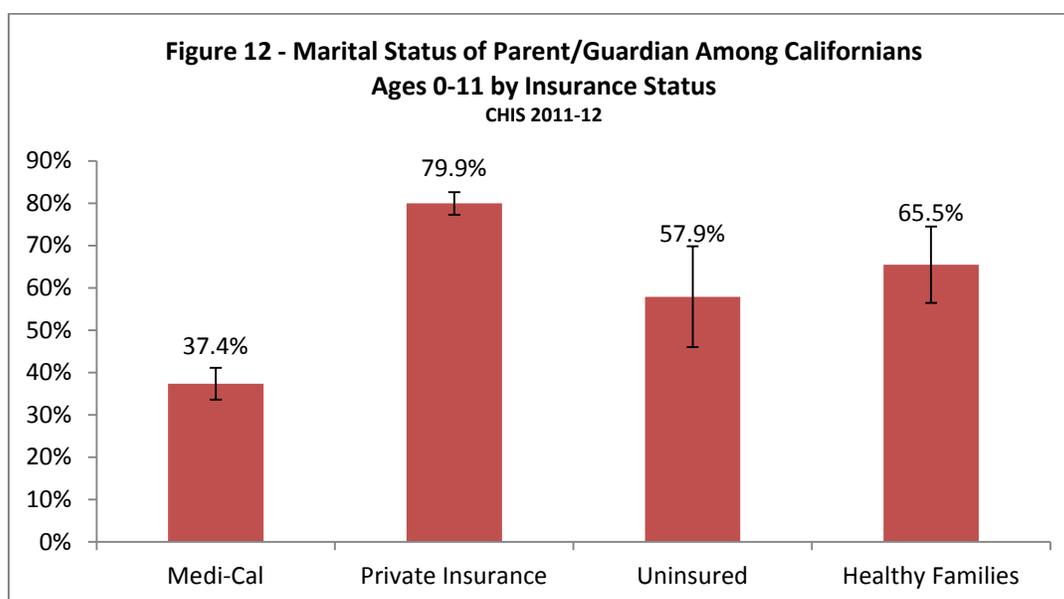
CHIS Question from adult interview: “Are you now married, living with partner in a marriage-like relationship, widowed, divorced, separated or never married?”

Marital status correlates with both health status and income. Additionally, research has shown that there are health benefits from being married. Marriage is also associated with an increased likelihood of having health insurance coverage.^{26,27} In general, low-income populations are less likely to be married than those with higher incomes.²⁸

Research has consistently shown that children of divorced parents score lower on measures of well-being such as academic success and psychological adjustment than children from two parent families.²⁹ Several articles have suggested that children from two parent families have better mental health and greater life satisfaction than those from divorced or single parent families.³⁰ Single mothers were more likely to report poorer physical health for their children than mothers in intact marriages. However, this may be due to the health risks associated with lower socio-economic status.³¹ Additionally, these trends may reflect the fact that children from two parent families obtain more education and engage in fewer negative health behaviors.³²

It is important to note that Medi-Cal considers the absence of one parent in a family with children as deprivation and an eligibility pathway for enrollment. The status of single-parenthood as a condition of eligibility may explain the elevated proportion of unmarried adults in Medi-Cal.

Children ages 0-11 with private insurance were twice as likely as those enrolled in Medi-Cal to have a parent or guardian who was married (79.9% and 37.4%, respectively). Those enrolled in Medi-Cal (37.4%) were less likely than those with private insurance (79.9%), the uninsured (57.9%), and those enrolled in Healthy Families (65.5%) to have a parent or guardian who was married.



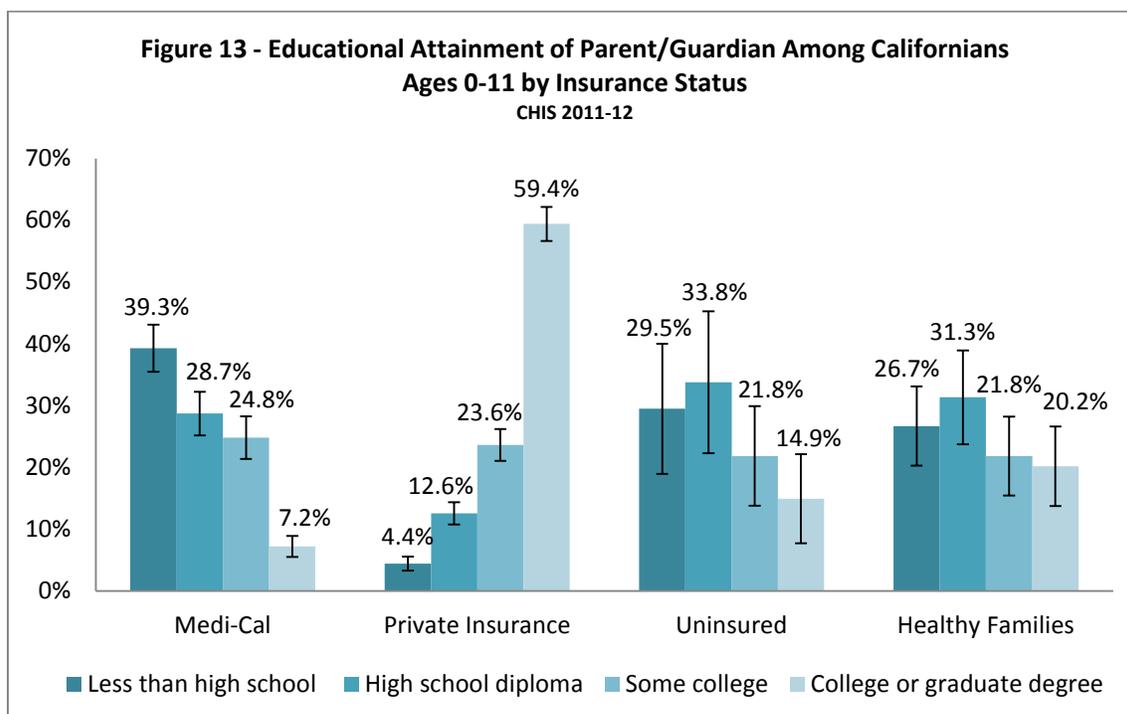
Findings: Education Level of Parent/Guardian in California's Child Population

CHIS Question from adult interview: "What is the highest grade of education you have completed and received credit for?"

A strong and persistent association exists between educational attainment and health status. The reviewed literature shows that morbidity and mortality rates are lower among people with higher educational attainment even after controlling for income, the labor market, and family background.³³ Individuals with more education are less likely to report or die from acute or chronic diseases, and less likely to report anxiety or depression.³⁴ Higher levels of education are associated with a lower probability of reporting fair or poor health, a reduced number of days of work lost, and an increase in reported positive health behaviors.³⁵ This association also exists between a mother's education and her child's health.³⁶

There is also a strong correlation between educational attainment and income. In 2011, 36.7% of California families in which no adult had a high school diploma lived in poverty, compared to 19.9% of families with at least one adult with a high school diploma, and 5.4% of families with at least one adult with a college degree.³⁷

The parents and guardians of children enrolled in Medi-Cal were less educated than those with private insurance, the uninsured, and those enrolled in Healthy Families. Children enrolled in Medi-Cal were nearly eight times more likely to have a parent or guardian with less than a high school education compared to those with private insurance (39.3% and 4.4%, respectively). Those enrolled in Medi-Cal were the least likely to have a parent or guardian with a college or graduate degree (7.2%).



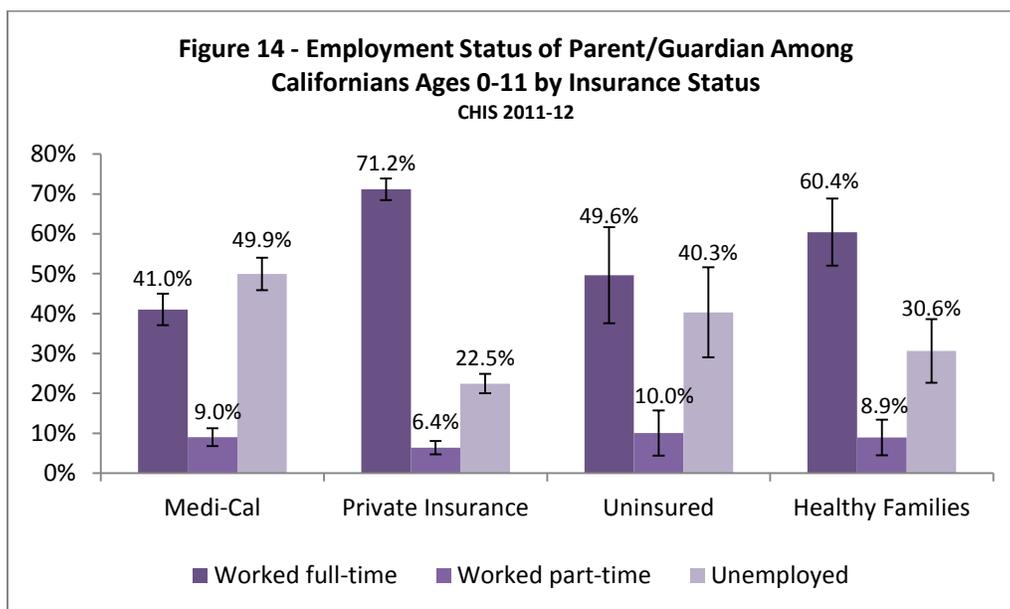
Findings: Employment Status of Parent/Guardian in California’s Child Population

CHIS Question from adult interview: “How many hours per week do you usually work?”

There is a strong association between unemployment and adverse health outcomes. While some of this disparity may be the advantage of individuals with better health in seeking employment, the reviewed literature suggests that unemployment has measurable health consequences and that long-term unemployment may result in greater mortality.³⁸ This relationship is particularly evident when examining mental health issues, such as depression and substance abuse.³⁹ While unemployment is intrinsically linked to income level, the relationship between health and unemployment remains after adjusting for factors such as social class, poverty, age, and pre-existing morbidity.⁴⁰ Children whose family is unemployed experience childhood poverty, as well as inferior health, social, and developmental outcomes.⁴¹ Additionally, children of parents who experience long-term unemployment tend to have poorer academic performance compared to children of parents who were employed.⁴²

Because Medi-Cal is intended to provide coverage to low- or no-income families and individuals, the relationship between unemployment and income creates a correlation between unemployment and Medi-Cal. Many Medi-Cal eligibility pathways require that enrollees have incomes at or below established low-income thresholds. RASD advises readers to remain mindful of the relationship between income and Medi-Cal eligibility when drawing conclusions from the unemployment data presented in this report.

Almost half of the children 0-11 years of age enrolled in Medi-Cal had a parent or guardian who was unemployed (49.9%). This was more than twice as high as among the parents or guardians of those with private insurance (22.5%) and higher than those enrolled in Healthy Families (30.6%).



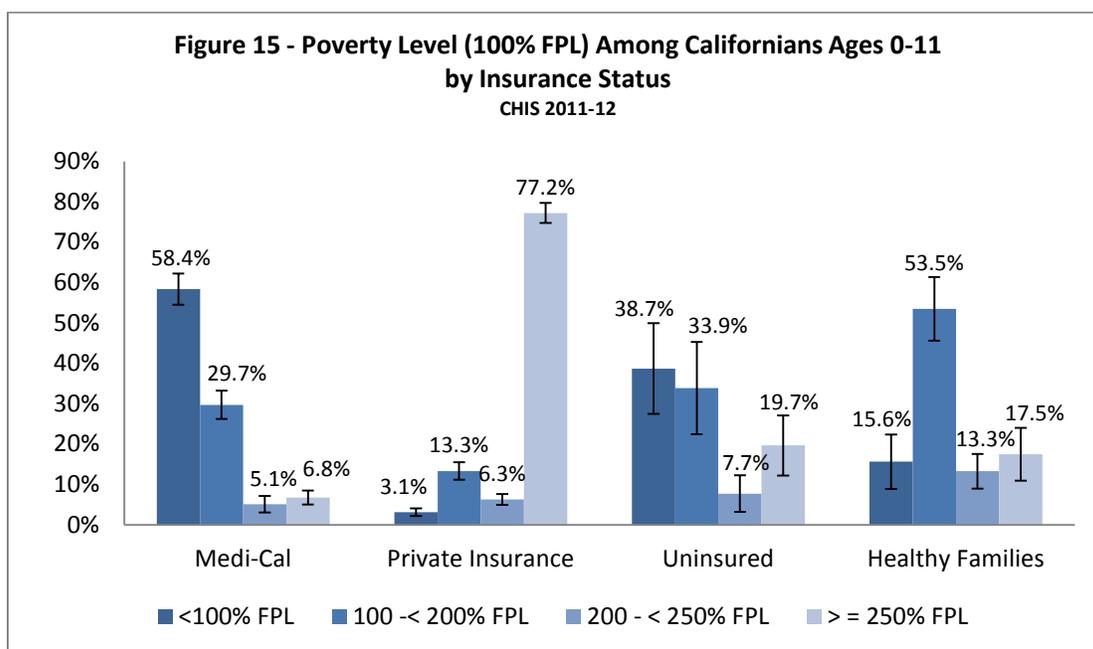
Findings: Federal Poverty Level Status in California's Child Population

CHIS Question from adult interview: "What is the best estimate of your household's total annual income from all sources before taxes in 2010?"

Health status and income level are strongly related. Low-income individuals have an increased risk of mortality and morbidity, and are less likely to have sufficient access to health care or to receive an adequate quality of care.⁴³ Healthy People, a federal organization that identifies long-term health objectives for the U.S. population, recognizes living in poverty as a key determinant of health in a society and an important factor in reducing health disparities.⁴⁴ In the U.S., the standard measure of poverty is the FPL determined by the Department of Health and Human Services. Using household size and income, the FPL allows administrators to measure the proportion and characteristics of the population living in poverty. In 2011, the FPL for a family of four was an income of \$22,350 (100% FPL).⁴⁵

Many Medi-Cal eligibility pathways require that enrollees have incomes at or below established low-income thresholds. RASD advises readers to remain mindful of the relationship between income and Medi-Cal eligibility when drawing conclusions from the income data presented in this report.

More than half of the children ages 0-11 enrolled in Medi-Cal came from families with incomes below 100% of the FPL (58.4%). By contrast, the proportion was only 3.1% of those with private insurance, 38.7% of the uninsured, and 15.6% of those enrolled in Healthy Families. The proportion of children who came from families with incomes above 250% of the FPL was highest among those with private insurance (77.2%) and lowest among those enrolled in Medi-Cal (6.8%).



Findings: Food Insecurity in California’s Child Population

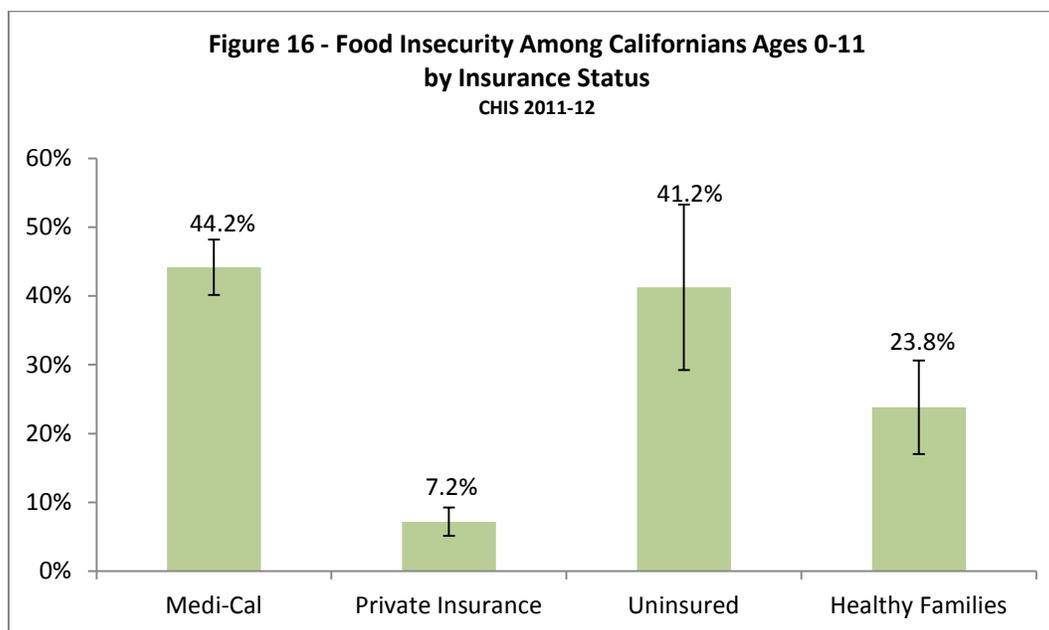
Questions from adult interview (See Appendix A for the questions used to measure food insecurity using CHIS data).

The U.S. Department of Agriculture (USDA) defines food insecurity as an individual or household that, at times, is “uncertain of having, or unable to acquire, enough food to meet needs” due to “insufficient money or other resources for food.”⁴⁶ During 2012, the USDA estimated 14.5% of U.S. households experienced food insecurity at least some time during the year, including 10% of households with children.⁴⁷ Research has shown that there is a strong association with food insecurity and income.⁴⁸ Households with incomes near or below the FPL were more likely to experience food insecurity.⁴⁹

Research links food insecurity to numerous physical and mental health complications at all stages of life.⁵⁰ Among children, food insecurity correlates to malnutrition, poor academic performance, and behavioral issues while food security is associated with a child’s health, development, and well-being. Children who experience food insecurity have greater risks of health and developmental problems in comparison to their counterparts who do not experience food insecurity.^{51,52} The reviewed literature indicates that children who experience food insecurity are sick more often and are more likely to be hospitalized.⁵³ Children who are food insecure are also more likely to have chronic conditions.⁵⁴

RASD constructed this food insecurity measure from several CHIS questions addressing the availability and affordability of food. Children from households with incomes above 200% of the FPL were defined as food secure. A description of the questions used to measure food insecurity is located in [Appendix A](#), Data Sources and Methods.

Children ages 0-11 enrolled in Medi-Cal (44.2%) were 6 times more likely as those with private insurance (7.2%) and almost 2 times more likely as those enrolled in Healthy Families (23.8%) to have a parent or guardian who reported experiencing food insecurity with or without hunger.



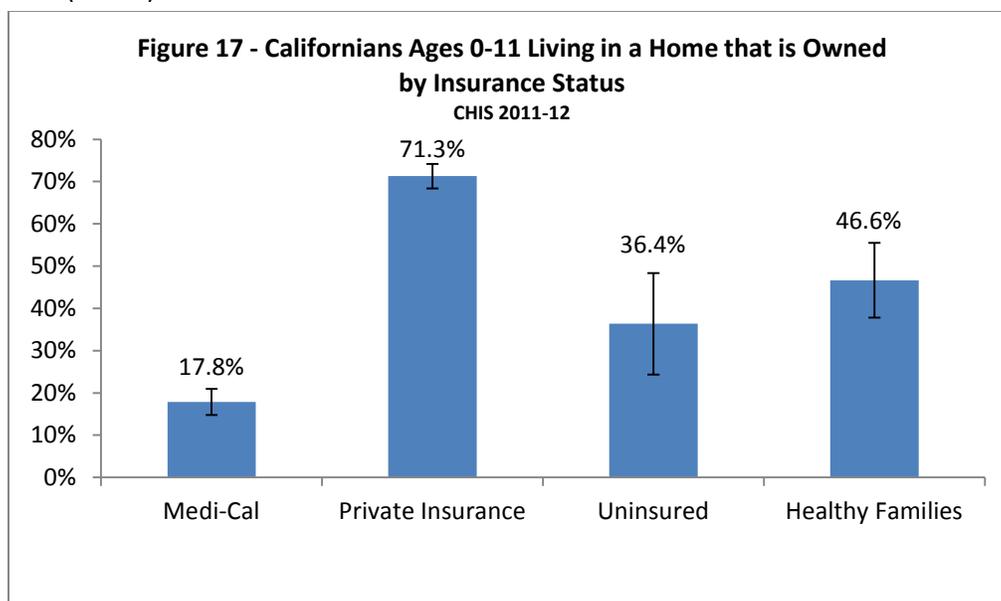
Findings: California’s Child Population Living in a Home that is Owned

CHIS Question from adult interview: “Do you own or rent your home?”

Homeownership is associated with improved health outcomes and social benefits.⁵⁵ Many of the health advantages of homeownership correspond with the tendency of homeowners to maintain healthier residences that promote better living conditions. Renters are more likely to suffer from health conditions associated with residential dampness, toxicity, or allergens.⁵⁶ Historically, researchers have associated homeownership with positive mental health outcomes, including greater life satisfaction.⁵⁷ However, recent studies suggest that the stresses of homeownership may negate some or all of the emotional health advantages for some population groups.⁵⁸ Home foreclosures, which are more common in low-income areas, negatively affect the mental health of residents.⁵⁹

Among children, homeownership is associated with cognitive ability and fewer behavioral problems.⁶⁰ Researchers have found that since homeowners have invested in their community, they are more likely to monitor and correct their children who engage in socially deviant behavior in comparison to parents/guardians who are not homeowners.⁶¹ Children of homeowners also benefit from the stability accompanied with homeownership since homeowners tend to reside in one place longer; therefore, children are not required to move and change schools often, resulting in better school performance.⁶² Children of homeowners are more likely to receive high scores on academic achievement tests and graduate high school in comparison to children of individuals who are not homeowners.⁶³ Children whose parents are homeowners are also less likely to become pregnant during adolescent years.⁶⁴ Research also suggests that homeowners possess managerial and financial skills necessary for homeownership, which are valuable skills that are instilled in their children.⁶⁵

Only 17.8% of children ages 0-11 enrolled in Medi-Cal lived in a home that was owned. This was much lower than among those with private insurance (71.3%), those enrolled in Healthy Families (46.6%), and the uninsured (36.4%).



Findings: Ability to Find Available or Affordable Fruits and Vegetables in the Neighborhood in California’s Child Population

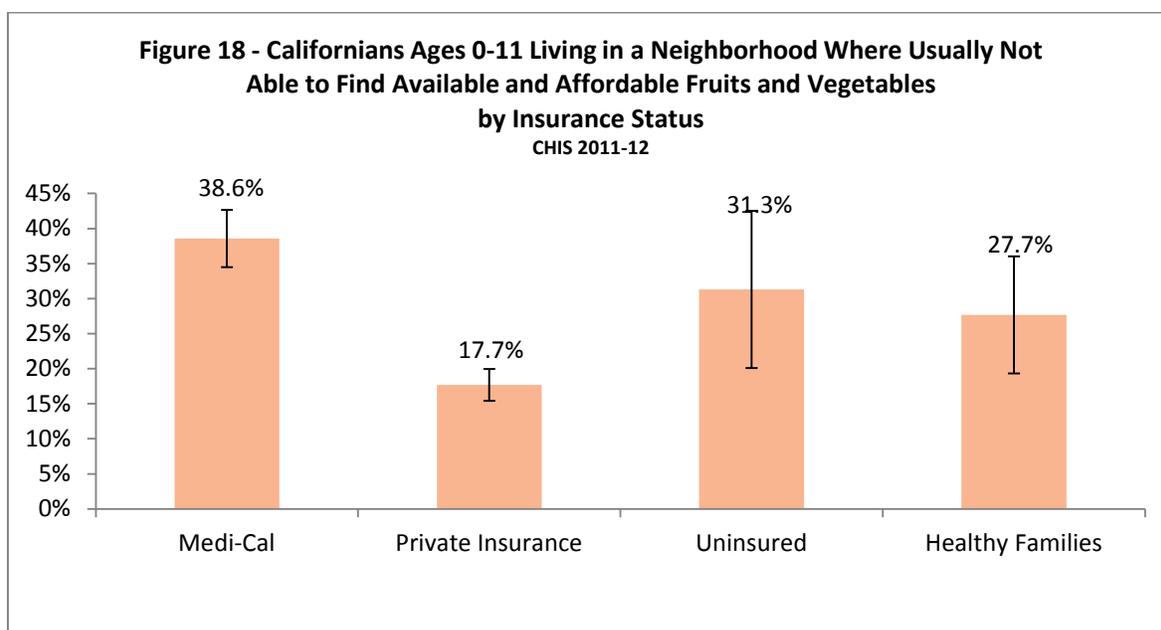
CHIS Question from adult interview: “How often can you find fruits and vegetables in your neighborhood: Never, sometimes, usually or always or never shop for fruits and vegetables?”

“How often are they affordable: Never, sometimes, usually or always?”

Low-income areas are less likely to have healthy food options, making the affordability of available healthy food an important factor in access.⁶⁶ This limited availability compounds the budgetary concerns of low-income families. Energy-dense fats and starches are often the cheaper and more convenient option for low-income populations, while fresh produce is more expensive, harder to come by, and involves greater spoilage and cooking costs.⁶⁷ Access to fruits and vegetables correlates with positive health behaviors, an increased ability to meet federal dietary guidelines, and improved health outcomes.⁶⁸ When studying low-income populations like Medi-Cal beneficiaries, it is important that stakeholders consider the affordability of healthy foods as an impediment that compounds issues of physical access to healthy foods.

For the purpose of this analysis, RASD defined children with a parent or guardian who answered “never” to the first question above and “sometimes” or “never” to the second question above as living in a neighborhood where one is usually not able to find available or affordable fruits and vegetables.

Children ages 0-11 enrolled in Medi-Cal were more likely to live in a neighborhood where one is usually not able to find available or affordable fruits and vegetables than those with private insurance (38.6% and 17.7%, respectively). There were no statistically significant differences in the likelihood of living in a neighborhood where one is usually not able to find available or affordable fruits and vegetables between those enrolled in Medi-Cal (38.6%), the uninsured (31.3%), and those enrolled in Healthy Families (27.7%).



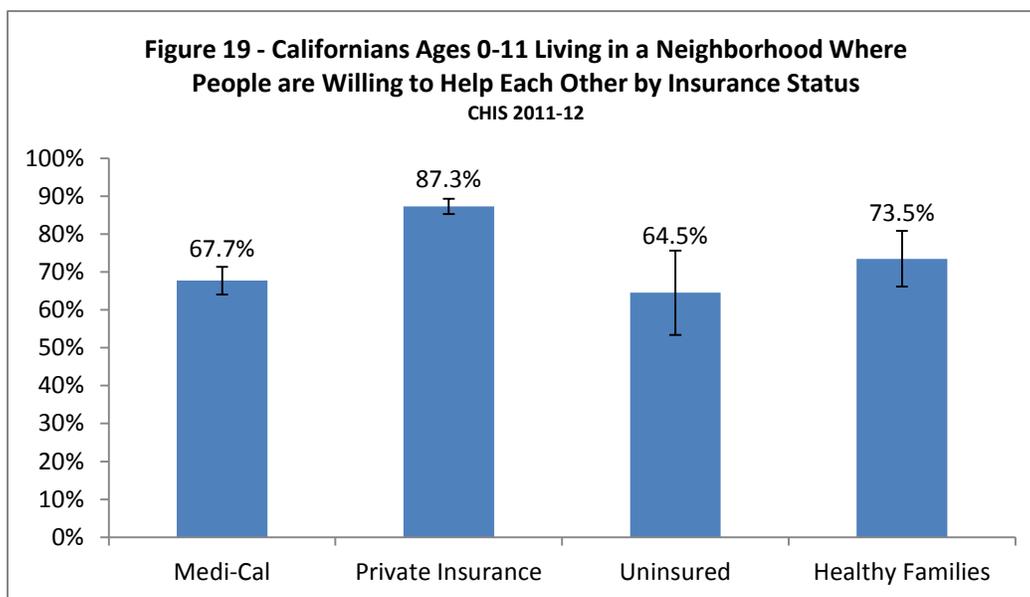
Findings: California’s Child Population Living in a Neighborhood Where People are Willing to Help Each Other

CHIS Question: “People in my neighborhood are willing to help each other: Strongly agree, agree, disagree or strongly disagree?”

Like physical health hazards, the social environments of neighborhoods can influence the health outcomes of the residents. For example, neighborhoods where residents report feeling less close-knit experience increased rates of negative mental health outcomes and health-damaging behaviors like smoking and drinking.⁶⁹ Similarly, research indicates that higher levels of neighborhood social cohesion correlate with better physical and mental health outcomes.⁷⁰ Children who reside in closely-knit neighborhoods are more likely to receive guidance from multiple adults and less likely to engage in negative health behaviors, such as smoking, drinking, or substance use.⁷¹ A resident’s willingness to help neighbors is a common indicator of the level of cohesion in a community.⁷²

For the purpose of this analysis, RASD defined a child as living in a neighborhood where people are willing to help each other if the child’s parent or guardian responded “strongly agree” or “agree” to the above question.

Children with private insurance (87.3%) were more likely than those enrolled in Medi-Cal (67.7%), the uninsured (64.5%), and those enrolled in Healthy Families (73.5%) to live in a neighborhood where people are willing to help each other.



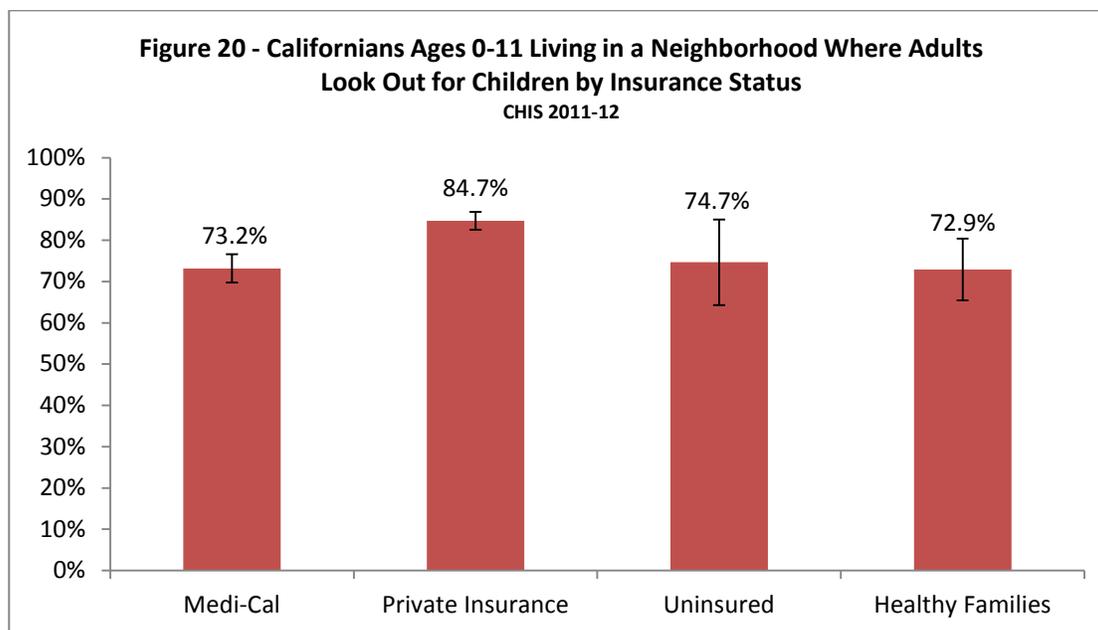
Findings: California’s Child Population Living in a Neighborhood Where Adults Look Out for Children

CHIS Question: “You can count on adults in neighborhood to watch out that children are safe and don’t get in trouble: Strongly agree, agree, disagree, or strongly disagree?”

The social and economic features of a neighborhood affect the mortality, health status, and health behaviors of the population who lives there.⁷³ Children may be particularly vulnerable to unhealthy neighborhood conditions and may experience the consequences both in childhood and into adulthood.⁷⁴

For the purpose of this analysis, RASD defined a child as living in a neighborhood where adults look out for children if the parent or guardian of the child responded “strongly agree” or “agree” to the above question.

Children enrolled in Medi-Cal (73.2%) were less likely than those with private insurance (84.7%) to live in a neighborhood where adults look out for children, but equally likely as the uninsured (74.7%), and those enrolled in Healthy Families (72.9%) to live in a neighborhood where adults look out for children.



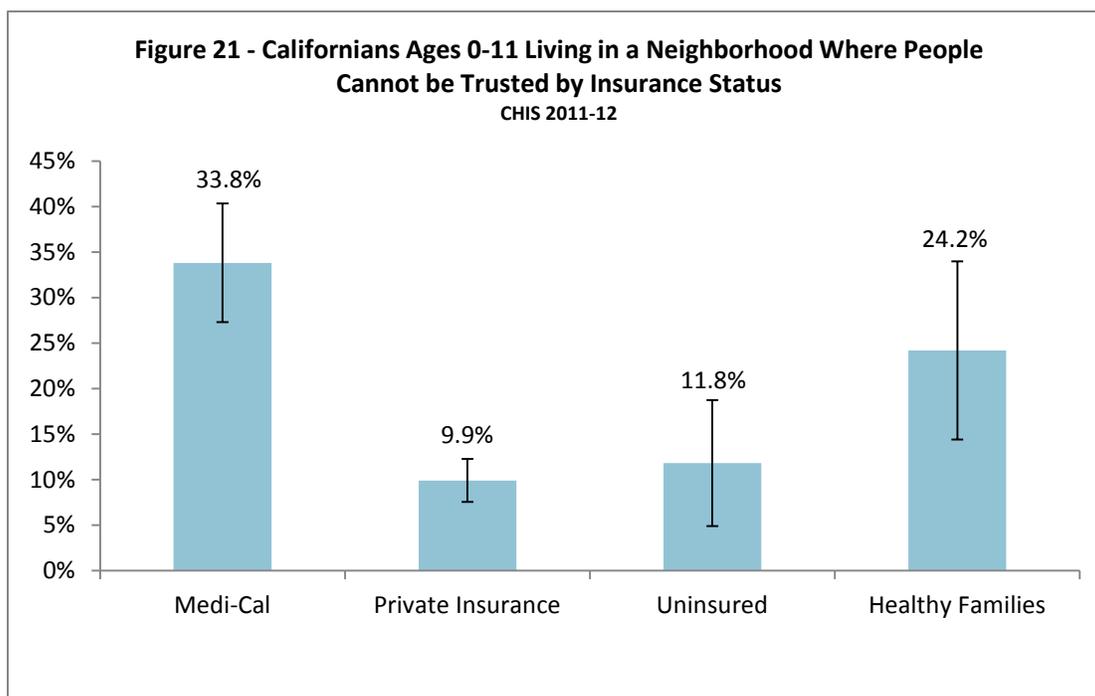
Findings: California’s Child Population Living in a Neighborhood Where People Cannot be Trusted

CHIS Question: “People in this neighborhood can be trusted: Strongly agree, agree, disagree or strongly disagree?”

Research has shown that children learn the topic of trust from their parent’s lectures and from observing the examples parents set for their children in displaying trusting and trustworthy behavior.^{75,76} The reviewed literature suggests trust is formed, in part, by what children hear from their parents regarding their responsibilities to others and by modeling democratic parenting.⁷⁷ Residents who reported high trust among people in a neighborhood area were more common among those who rated the reputation of their own area as very good.⁷⁸ Neighborhood attachment is determined upon the level of social trust and perceptions of social cohesion among neighbors.⁷⁹

For the purpose of this analysis, RASD defined a child as living in a neighborhood where people cannot be trusted if the child’s parent or guardian responded “disagree” or “strongly disagree” to the above question.

Among children ages 0-11, those enrolled in Medi-Cal (33.8%) were more likely than those with private insurance (9.9%) and the uninsured (11.8%) to live in a neighborhood where people cannot be trusted, but not more or less likely than those enrolled in Healthy Families (24.2%).



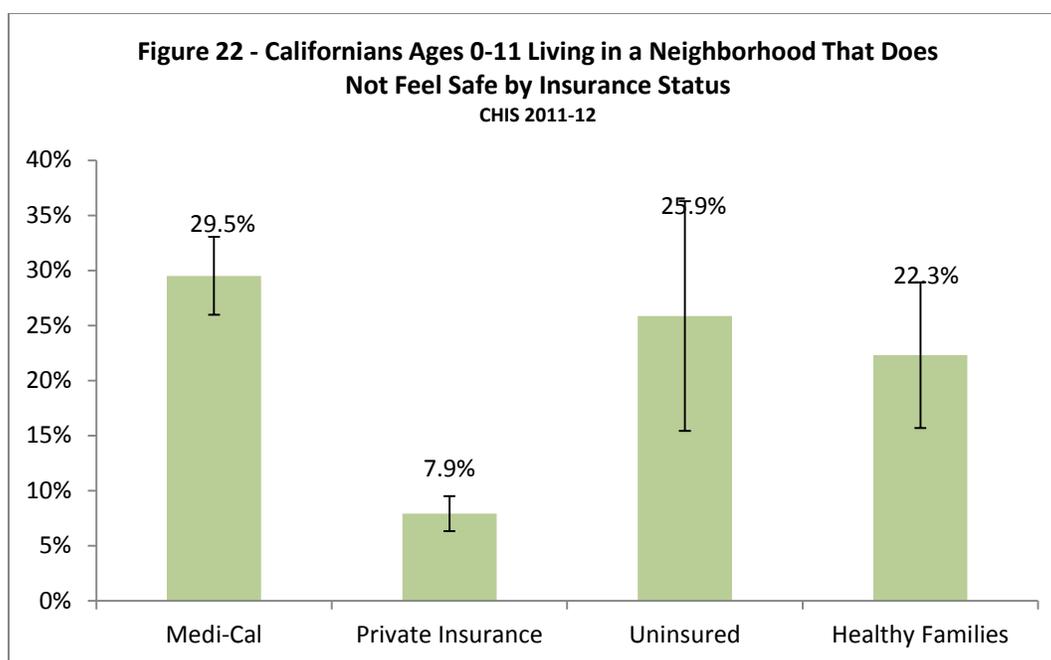
Findings: California’s Child Population Living in a Neighborhood that Does Not Feel Safe

CHIS Question: “Do you feel safe in your neighborhood all of the time, most of the time, some of the time or none of the time?”

The social and economic features of a neighborhood affect the mortality, health status, and health behaviors of the population who lives there.⁸⁰ Neighborhoods influence health through physical factors, such as poor air and water quality, unsafe housing, and limited access to healthy food and safe exercise spaces. Less obvious social factors in a neighborhood can also affect the health of the residents. Research suggests that unsafe neighborhoods affect a child’s daily activities and has been correlated with low physical activity levels.^{81,82} The reviewed literature demonstrates that a parent’s perception of a neighborhood being less safe was independently associated with an increased risk to be overweight at the age of seven.⁸³

For the purpose of this analysis, RASD defined a child as living in a neighborhood that does not feel safe if the child’s parent or guardian responded “some of the time” or “none of the time” to the above question.

Children ages 0-11 enrolled in Medi-Cal (29.5%) were more than three times as likely as those with private insurance (7.9%), but equally likely as the uninsured (25.9%) and those enrolled in Healthy Families (22.3%) to live in a neighborhood that did not feel safe.



Findings: Safety During the Day and the Night in the Neighborhood Park in California’s Child Population

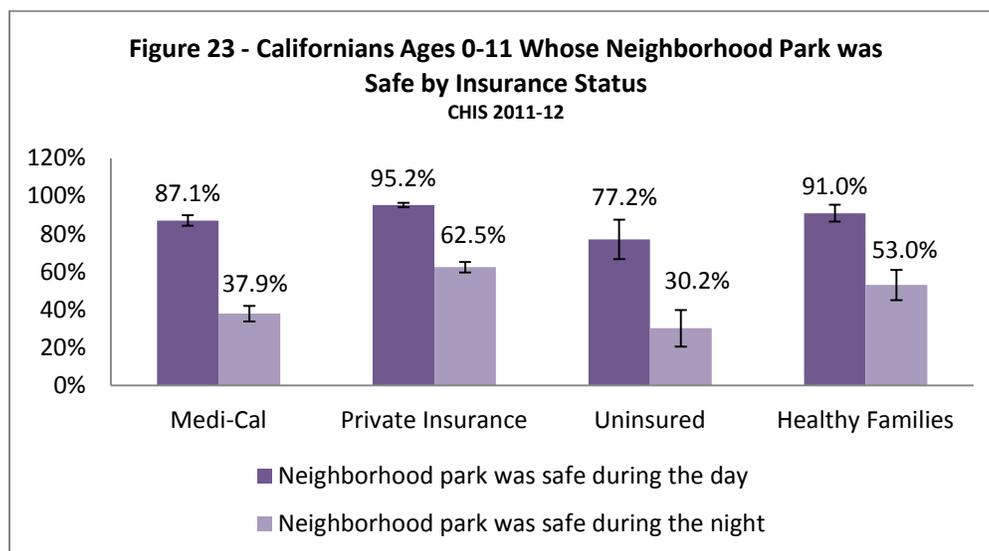
CHIS Question: “The park or playground closest to where I live is safe during the day: Strongly agree, agree, disagree, or strongly disagree?”

CHIS Question: “The park or playground closest to where I live is safe during the night: Strongly agree, agree, disagree, or strongly disagree?”

The natural environment is a key determinant of health.⁸⁴ Researchers have found that “approximately one-quarter of global disease burden, and more than one-third of the burden among children, is due to modifiable environmental factors.”⁸⁵ Parks play a vital role in health and well-being as play has been found to be central to healthy growth and development among children.^{86,87} Physical play is associated with a decreased risk of obesity, improved self-esteem, and improved academic performance.⁸⁸ Parks not only offer a setting for sports and recreational activities, they also provide a location for residents to meet and interact with one another, providing the opportunity to enhance social networks and personal relationships.⁸⁹ The quality, accessibility, and safety of a playground influences the use of the playground as children are more likely to play on recently renovated playgrounds and playgrounds located near their residence.⁹⁰ Neighborhoods with a greater percentage of parks are associated with greater physical activity among children.⁹¹

For the purpose of this analysis, RASD defined a child as living in a neighborhood where the closest park or playground was safe during the day if the child’s parent or guardian responded “strongly agree” or “agree” to the first question above. RASD defined a child as living in a neighborhood where the closest park or playground was safe during the night if the child’s parent or guardian responded “strongly agree” or “agree” to the second question above.

Although most children lived near a park that was safe during the day, the proportion among those enrolled in Medi-Cal was lower than among those with private insurance (87.1% and 95.2%, respectively). Only 37.9% of children enrolled in Medi-Cal lived near a park that was safe at night. This was lower than among those with private insurance (62.5%) and those enrolled in Healthy Families (53.0%).



Findings: Health Behaviors in California's Child Population

The following section of this report explores health behaviors in the child population using five measures: household smoking, the daily smoking of a parent or guardian, fruit and vegetable consumption, soda consumption, and fast food consumption. Except for smoking of a parent or guardian, RASD found little to no statistical significance by insurance type, despite the strong correlation of some of these health behaviors with socioeconomic status. These findings differ from RASD's findings for health behaviors among the adult population (as reported in *Med-Cal's Nonelderly Adults: The Medi-Cal Population before Implementation of the Affordable Care Act*). For example, RASD found that daily soda consumption was more than twice as common among nonelderly adults enrolled in Medi-Cal and the uninsured than nonelderly adults with private insurance.⁹²

There are several possible reasons for the lack of statistical significance in health behaviors for the child population. As previously noted in this report, the smaller sample size for children compared to the nonelderly adult population may have contributed to the lack of statistical significance reported here. It is also possible that parents underreport negative health behaviors affecting their children because they do not understand the extent of their child's exposure or because they wish to conform to the recognized social conformity bias.⁹³ The reviewed literature points to a pattern of parental underreporting of both household smoking and soda consumption when questioned by health professionals.^{94,95} RASD's findings reflected this trend, as nonelderly adults and self-reporting adolescents tended to report higher negative health behaviors than children ages 0-11 for whom their parents supplied data. However, the lower negative health behaviors for children may reflect that parents monitor their children's behavior better than their own and the lack of statistical significance among children may reflect that compared to adults, the health behaviors for children enrolled in Medi-Cal more closely mirrors those with private insurance.

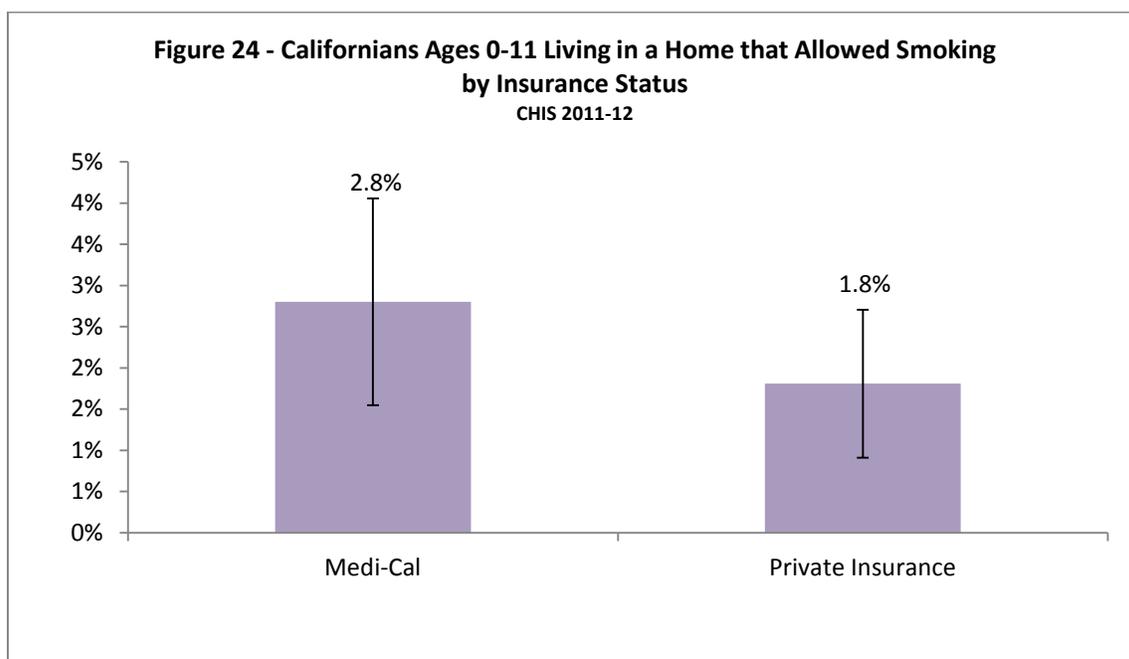
Findings: Smoking Allowed in Home Among California’s Child Population

CHIS Question from adult interview: “Is smoking ever allowed in your home?”

The health consequences of smoking extend beyond the smoker into their household and community. The Centers for Disease Control and Prevention (CDC) defines secondhand smoke as a “combination of smoke from the burning end of a cigarette and the smoke breathed out by smokers.”⁹⁶ Children exposed to secondhand smoke have an increased chance of developing asthma, and are more likely to suffer from ear infections and other illness than children not exposed to secondhand smoke.⁹⁷ Consistent exposure to secondhand smoke among children is associated with respiratory tract infections, wheezing, coughing, middle ear infections, and sudden death syndrome.^{98,99,100} Smoking in the home has also been associated with an increase in the likelihood of emergency department visits for respiratory conditions and an increase in the likelihood of inpatient visits for these conditions.¹⁰¹

Because exposure to secondhand smoke has serious health consequences, it is important for stakeholders to examine the number of households that allowed smoking in the home in addition to the number of cigarette smokers in a population.

Children ages 0-11 enrolled in Medi-Cal were equally as likely as those with private insurance to live in a home that allowed smoking inside (2.8% and 1.8%, respectively).



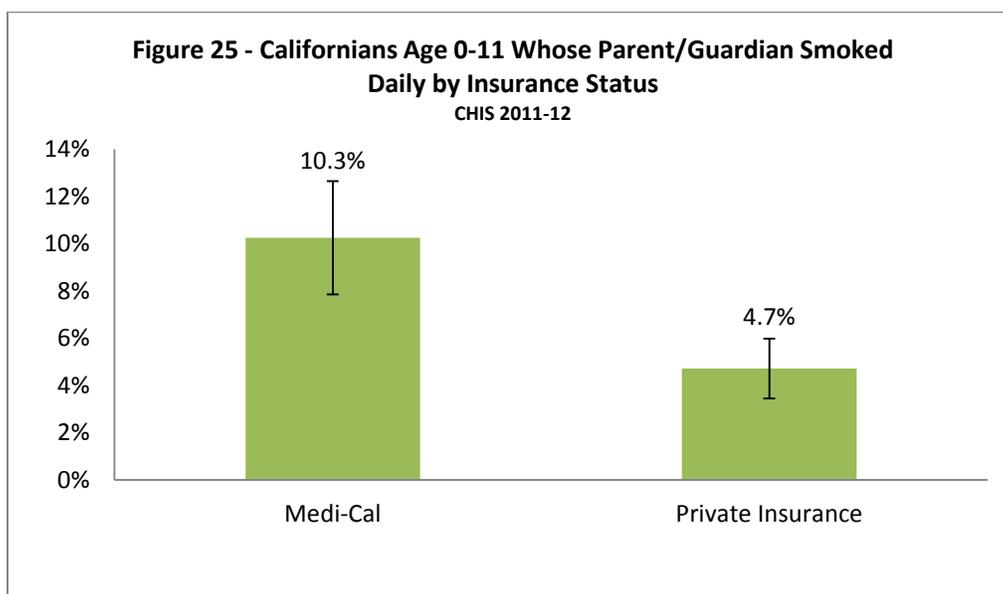
Findings: California’s Child Population with a Parent/Guardian who Smoked Daily

CHIS Question from adult interview: “Altogether have you smoked 100 or more cigarettes in your lifetime? Did you smoke every day, some days or not at all?”

The health consequences of smoking extend beyond the smoker to their household and community. The CDC defines secondhand smoke as a “combination of smoke from the burning end of a cigarette and the smoke breathed out by smokers.”¹⁰² Increased exposure to secondhand smoke increases the risk for many of the same conditions found in cigarette smokers, including cardiovascular disease, stroke, and lung cancer.¹⁰³ Research indicates that secondhand smoke is especially harmful for children. Children exposed to secondhand smoke have an increased chance of developing asthma, and are more likely to suffer from ear infections and other illness than children not exposed to secondhand smoke.¹⁰⁴

Because exposure to secondhand smoke has serious health consequences, it is important for stakeholders to examine the number of children with a parent or guardian who smoked daily.

The proportion of children who had a parent or guardian who smoked daily was more than twice as high among those enrolled in Medi-Cal than among those with private insurance (10.3% and 4.7%, respectively).

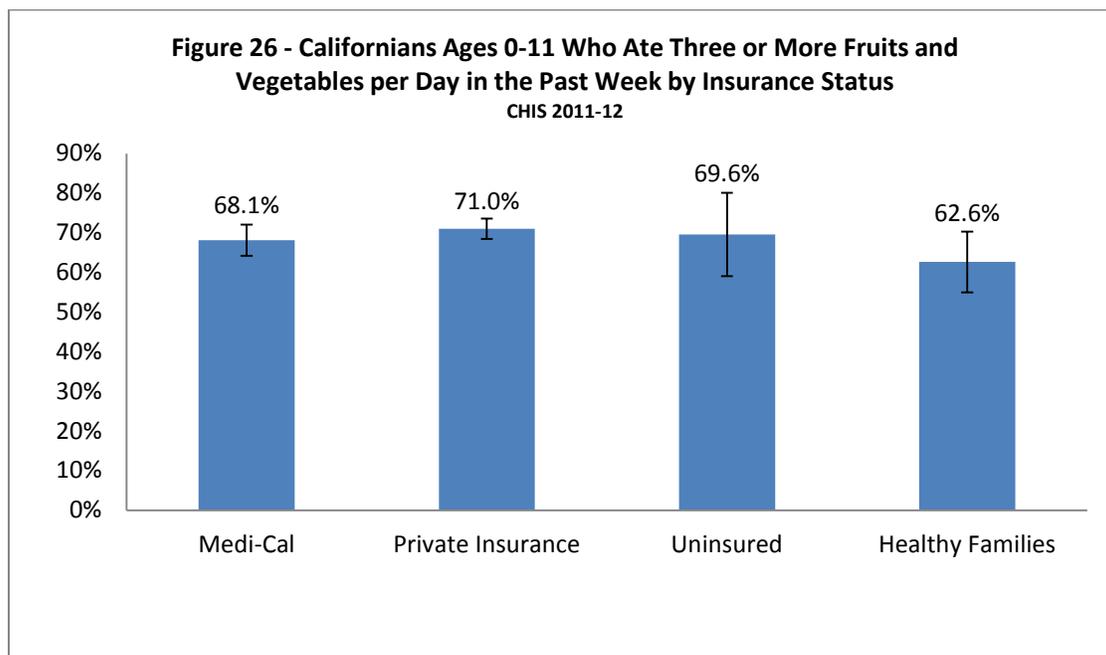


Findings: California’s Child Population who Ate Three or More Fruits or Vegetables per Day

CHIS Question: “Yesterday how many servings of fruit such as an apple or banana did you/he/she eat? Yesterday how many servings of other vegetables did you/he/she eat such as green salad, green beans, or potatoes?”

Fruits and vegetables are an important part of a healthy lifestyle and should be included as part of a healthy diet for children.¹⁰⁵ The *Dietary Guidelines for Americans* issued by the USDA suggests that Americans increase their intake of fruits and vegetables, especially vegetables that are dark green, orange, or red in color.¹⁰⁶ The USDA estimates that the average American consumes only 59% of the recommended vegetable intake and 42% of the recommended fruit intake, despite the well-established health benefits.¹⁰⁷ Most children in the U.S. do not get the recommended amounts of fruits and vegetables for their age and gender.¹⁰⁸ In 2007-2010, 60% of children 1-18 years of age did not meet the recommendations by the USDA Food Patterns for fruit intake and 93% did not meet their recommendations for vegetable intake.¹⁰⁹

There were no statistically significant differences in the proportion of children who ate three or more fruits and vegetables per day in the past week by insurance status. The proportion of children who ate three or more fruits and vegetables was similar among those enrolled in Medi-Cal (68.1%), those with private insurance (71.0%), the uninsured (69.6%), and those enrolled in Healthy Families (62.6%).



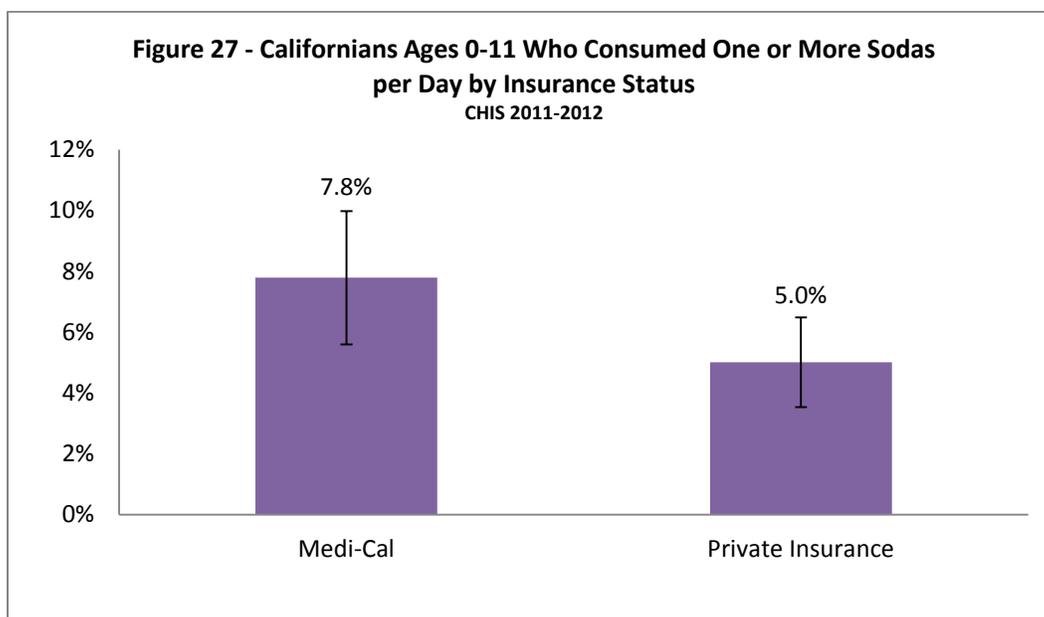
Findings: Soda Consumption in California’s Child Population

CHIS Question: “Yesterday, how many glasses or cans of soda, such as Coke, or other sweetened drinks, such as fruit punch or sports drinks did {he/she} drink?”

Sugar-sweetened beverages, such as soda, provide little nutritional benefit while containing a high concentration of calories. The Academy of American Pediatrics recommends reducing the intake of sugar-sweetened beverages for children.¹¹⁰ Children and youth average about 224 calories per day from sugary drinks which is almost 11% of their daily caloric intake.¹¹¹ Soft drink consumption has been linked with obesity and overweight in children and has been rising among children in the past decade.^{112,113} Drinking a lot of soda in both children and adolescents has been associated with a decrease in milk and fruit juice consumption.¹¹⁴

The reviewed literature indicates that the increase of soda consumption in recent decades, especially in low-income populations, is a major factor in the increased prevalence of obesity in the U.S.¹¹⁵ Consumption of sugar-sweetened drinks has been linked to a mother’s education level.¹¹⁶ A study tracking fruit, vegetables and sugar-sweetened beverages found that children of mothers with low education level were more likely to frequently consume sugar-sweetened beverages than those with higher education levels. The relationship between soda consumption and income disparity makes it an important area of study for Medi-Cal stakeholders.

Soda consumption among children ages 0-11 was not statistically different among those enrolled in Medi-Cal and those with private insurance (7.8% and 5.0%, respectively).



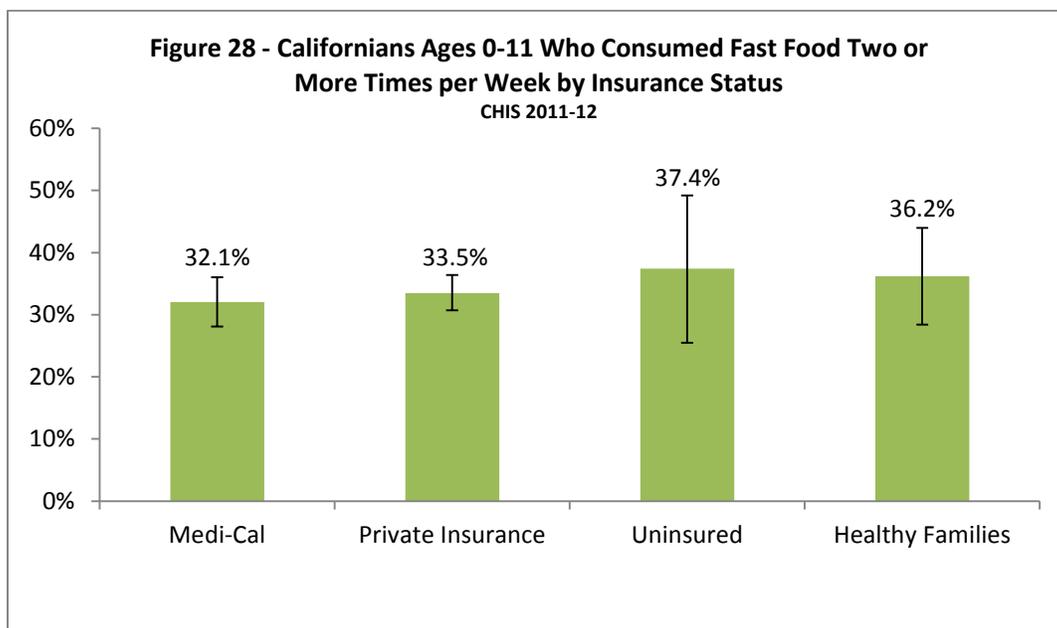
Findings: Fast-Food Consumption in California’s Child Population

CHIS Question: “Now think about the past week, in the past 7 days, how many times did {he/she} eat fast food? Include fast food meals eaten at school or at home, or at fast food restaurants, carryout or drive thru.”

Although fast-food consumption has, on average, decreased in the U.S. in recent years, it still accounts for a substantial percentage of the nation’s calories.¹¹⁷ Regular fast-food consumption has been associated with higher fat intake, and lower intake of healthy nutrients.¹¹⁸ Frequently ingesting fast food contributes to increased weight gain due to the greater intake of calories, fat, saturated fat, and sugar-sweetened drinks.^{119,120} The consumption of fast food has been associated with obesity which is an epidemic among children and a public health problem in many countries.¹²¹ A number of studies indicate an association between rates of obesity and the proximity of schools to fast food restaurants. A study of elementary and middle school children indicated that those who lived very close to fast food restaurants had higher values of Body Mass Index (BMI) than those who did not, even after controlling for a proxy measure of socio-economic status.¹²² Current research has shown that children who frequently ate fast food consumed less fiber and fewer fruits and vegetables compared to children who did not frequently eat fast food. However, it has been shown that food eaten outside of fast food restaurants might have stronger associations with obesity than the food actually eaten at fast food restaurants.¹²³

Fast-food consumption is relevant for Medi-Cal stakeholders as some studies indicate a relationship between low-income adults and increased fast-food consumption.¹²⁴

Among children, there were no statistically significant differences in the proportion who consumed fast food two or more times per week by insurance status. The proportion was 32.1% for those enrolled in Medi-Cal, 33.5% for those with private insurance, 37.4% for the uninsured, and 36.2% for those enrolled in Healthy Families.



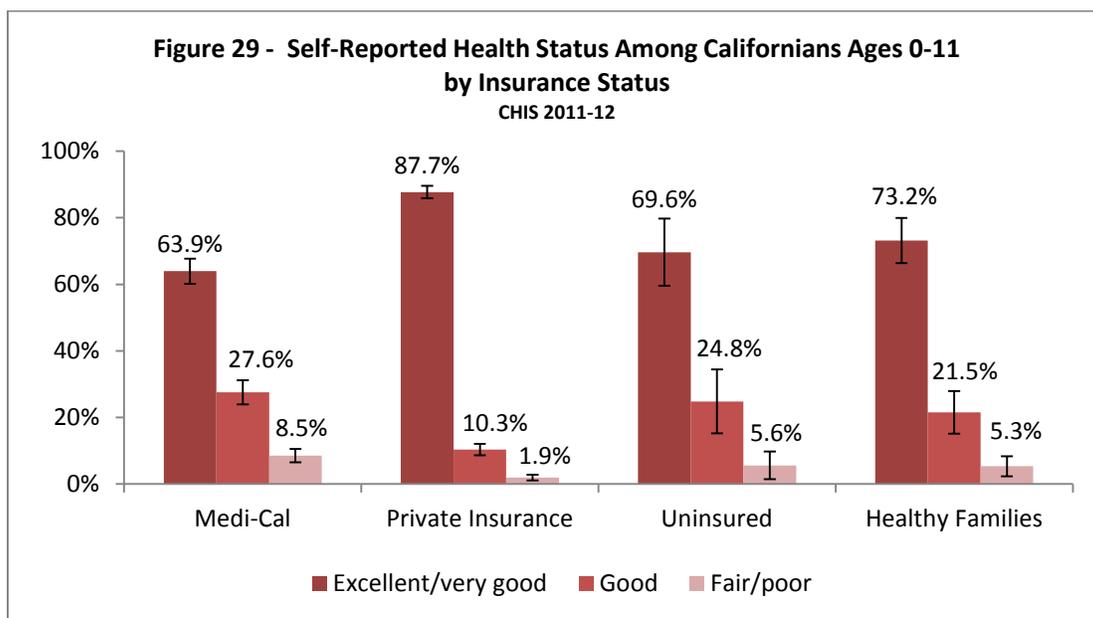
Findings: Self-Reported Health Status in California's Child Population

CHIS Question: "In general, would you say child's health is excellent, very good, good, fair or poor?"

Self-reported health status is the measure of an individual's perception of their own health status. This versatile measure allows researchers to compare health over time and between populations that may not have sufficient conditions in common to allow for other corresponding measures.¹²⁵ Self-reported health status strongly correlates with socioeconomic factors. A national study found that states with greater income inequality were 30% more likely to have individuals report fair or poor health than states with less pronounced income disparity.¹²⁶ Research demonstrates that poverty negatively influences the health and development of children, including increased risk of mortality.^{127,128} The reviewed literature indicates that children who experience poverty are more likely to be classified into the most disadvantaged health status consisting of chronic conditions and developmental problems, including low cognitive achievement, poor social skills, and behavioral problems.¹²⁹

Since health status for children ages 0-11 was reported by their parents, it is important to consider parents who report the health status on their child's behalf may not accurately report their child's health. Research has found that parents of healthy children generally report higher mental health and well-being than the children do and parents of children with chronic conditions tend to report lower quality of life than the children themselves.¹³⁰

Children ages 0-11 enrolled in Medi-Cal were 4.5 times more likely than those with private insurance to have fair or poor health (8.5% and 1.9%, respectively). Children with private insurance (87.7%) were more likely than those enrolled in Medi-Cal (63.9%), the uninsured (69.6%), and those enrolled in Healthy Families (73.2%) to have excellent or very good health.



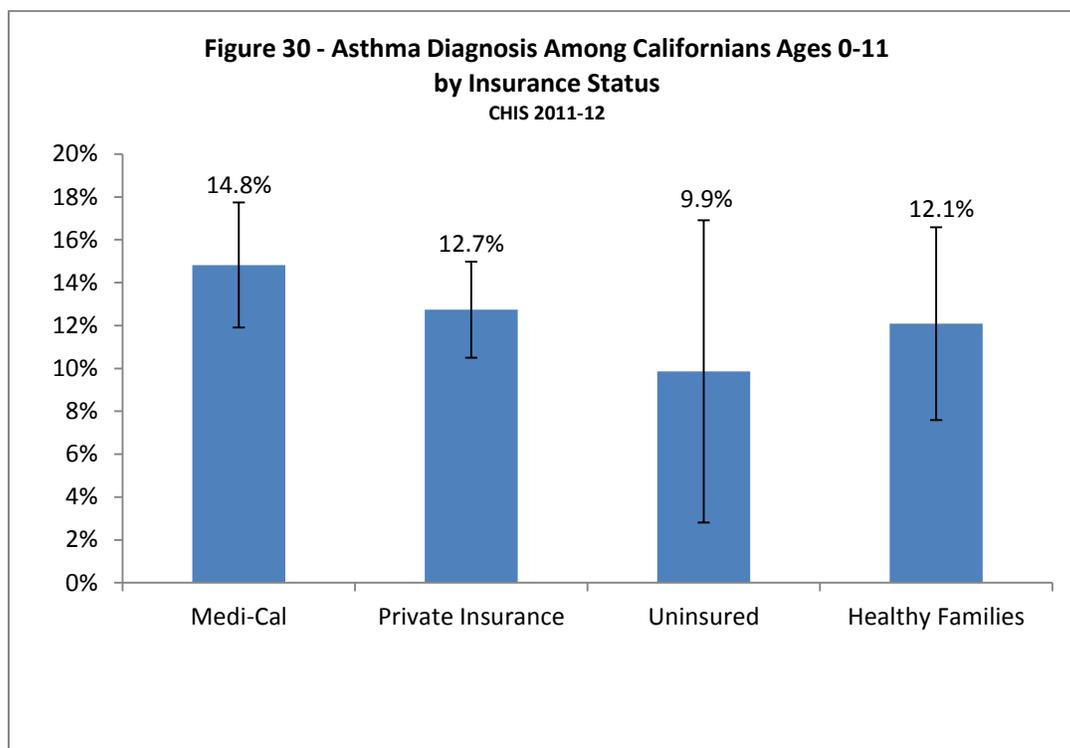
Findings: Asthma Diagnosis in California's Child Population

CHIS Question: "Has a doctor ever told you that your child has asthma?"

Asthma is one of the most common chronic conditions among children.¹³¹ National Heart, Lung, and Blood Institute defines asthma as a long-term lung disease that inflames and narrows the airways.¹³² Some environmental factors that can trigger asthma include secondhand smoke, dust mites, air pollution, pets and mold.¹³³ There is no cure for the disease; however, further difficulties can be avoided if symptoms are managed properly.¹³⁴ Students with asthma may be more likely to experience the poor academic outcomes associated with increased absenteeism.¹³⁵ In 2007, approximately 1.6 million days of school were missed because of asthma in California.¹³⁶ Reviewed literature found that students who attended schools with the highest concentrations of low-income students were more likely to miss school due to asthma than those at schools where the concentration was lower.¹³⁷

According to a nationwide survey in 2012, approximately 14% of children under the age of 18 were reported by an adult familiar with the child's health to be diagnosed with asthma.¹³⁸ Children with Medicaid (17%) were more likely to be diagnosed with asthma than those with private insurance (13%).¹³⁹

In California, there were no statistically significant differences in the proportion of children to have been told by a doctor that they have asthma between those enrolled in Medi-Cal (14.8%), those with private insurance (12.7%), the uninsured (9.9%), and those enrolled in Healthy Families (12.1%).



Findings: Parental Involvement in California's Child Population

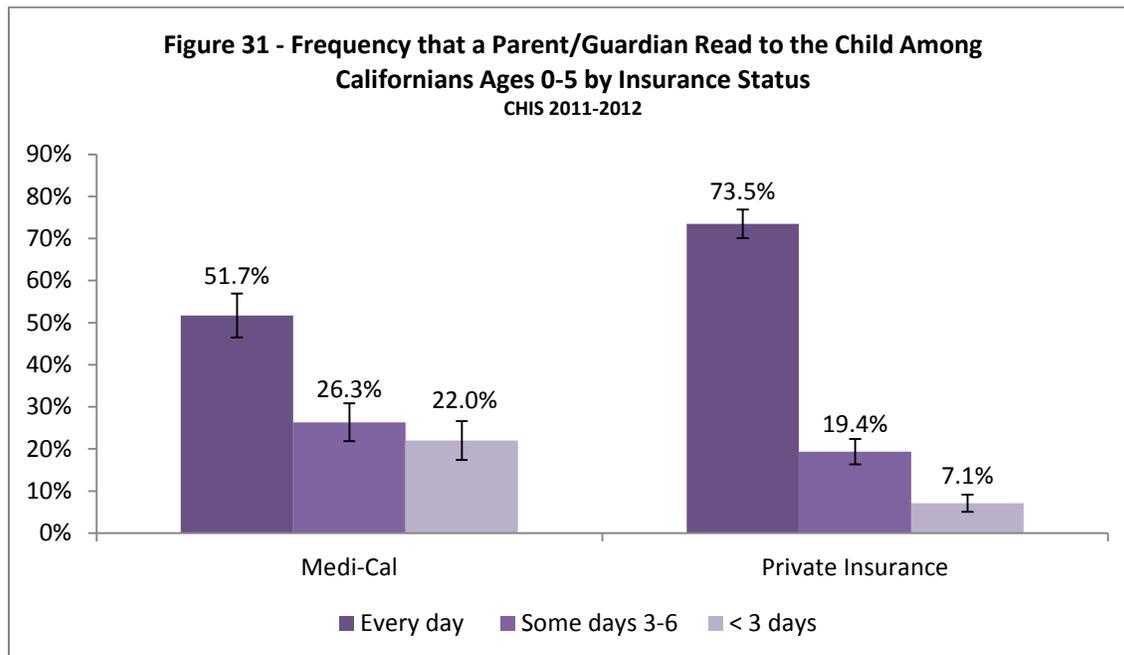
The following section of this report explores parental involvement in the child population ages 0-5 using three measures – reading aloud, playing music or singing, and taking the child out somewhere. The interactions between parent and child can have a significant impact on the development of a child. Research has shown that the quality of the parent-child interaction is related to a child's popularity among peers and their social competence.¹⁴⁰ Parental involvement can increase positive education and social outcomes among infants, toddlers, and preschoolers.¹⁴¹ Parental involvement at home has a more significant impact on children than parental involvement in school activities.¹⁴² More specifically, educational achievement is largely influenced by parents' high expectations and their involvement at home in literacy activities.¹⁴³

Findings: Parental Involvement: Parent/Guardian who Read to the Child in California’s Child Population

CHIS Question for children age 5 and younger: “In a usual week, about how many days do you or any other family members read stories or look at picture books with child?”

The positive impact of reading aloud to children begins in early childhood as it stimulates language and cognitive skills in addition to building motivation, curiosity and memory.¹⁴⁴ Reading aloud to infants provides positive literacy opportunities which prepare them to learn how to read and write.¹⁴⁵ Early reading exposure is important in setting the foundation for children to acquire the basic literacy skills that set them up for success in school and throughout their lifetime.¹⁴⁶ A landmark study on language development indicated that children from low-income families hear as many as 30 million fewer words than their affluent peers before the age of four.¹⁴⁷

Children ages 0-5 with private insurance were more likely to have a parent, guardian, or other family members who read to them every day than those enrolled in Medi-Cal (73.5% and 51.7%, respectively).

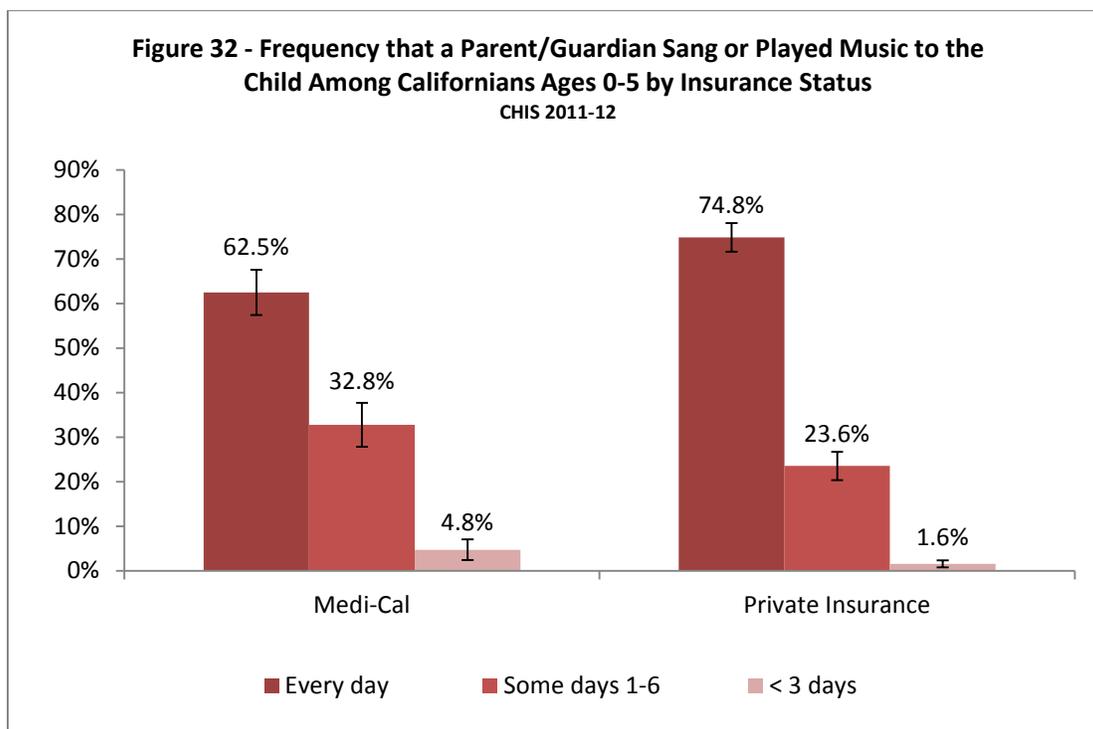


Findings: Parental Involvement: Parent/Guardian who Sang/Played Music to Child in California’s Child Population

CHIS Question for children age 5 and younger: “In a usual week, about how many days do you or any other family member play music or sing songs with child?”

The impact of a parent or guardian singing to their child begins in infancy. A sing song manner of speaking as well as singing lullabies and playing songs is referred to as “infant directed music” or “infant directed singing.” This style of singing may help optimize an infant’s mood and regulate his/her arousal level.¹⁴⁸ It may also strengthen the emotional bond between caregiver and infant.¹⁴⁹ Musical environments created by parents can enhance the capacity of young children to sing, dance, and play and can help them learn socialization.^{150,151} Participating in music-related activities, such as drumming, dancing, and singing can affect child’s cognitive, social-emotional, and psychological growth.¹⁵²

The proportion of children with a parent, guardian, or other family member who played music or sang songs with them every day was higher among those with private insurance than those enrolled in Medi-Cal (74.8% and 62.5%, respectively).

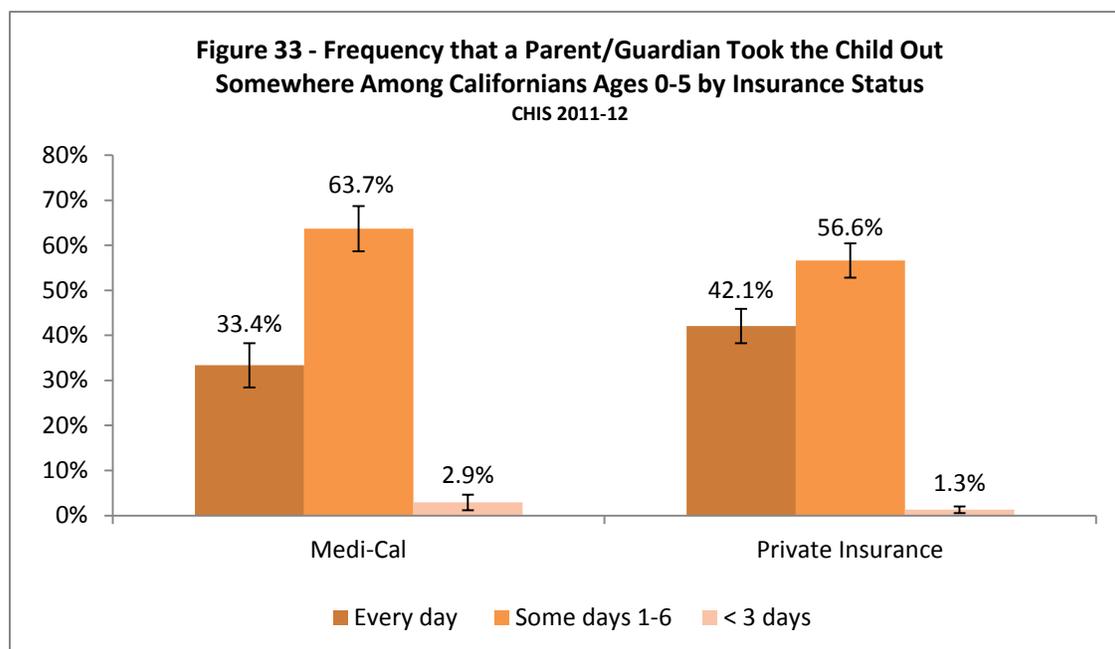


Findings: Parental Involvement: Parent/Guardian Who Took the Child Out Somewhere in California’s Child Population

CHIS Question for children age 5 and younger: “In a usual week, about how many days do you or any other family member take the child out somewhere, for example, to the park, store, or playground?”

Research indicates that children who explore and play outside are less stressed in comparison to children who do not explore and play outside.¹⁵³ Playing outdoors gives children an opportunity to learn more about themselves and aids in building confidence and social skills.¹⁵⁴ In addition to having physical benefits, playing outdoors can have positive effects on a child’s cognitive, social, and emotional development.¹⁵⁵

Children enrolled in Medi-Cal were less likely to have a parent, guardian, or other family member who took them out every day to places like a park, store, or playground than those with private insurance (33.4% and 42.1%, respectively).



Findings: Quality of Childcare in California’s Child Population

Research has found that children, in particular younger children, spend an increasing amount of time in childcare.¹⁵⁶ The total hours of care, stability of care, and the type of care all influence a child’s development; however, the quality of care has by far the greatest influence.¹⁵⁷ Research suggests that high-quality early childhood programs have a positive effect on children.¹⁵⁸ During elementary school years, children who participated in quality preschool programs such as Head Start had better grades, fewer failing grades, fewer absences, and were less frequently retained than their counterparts who did not participate.¹⁵⁹ These children also had greater self-esteem, and so did many of their parents.¹⁶⁰ They were more likely to graduate high school and were also more employable, less dependent on public assistance, and less likely to engage in criminal activity.¹⁶¹ Research has also found that high-quality childcare appears to provide an enhancement in academic performance, perhaps by “fostering the early acquisition of school readiness skills.”¹⁶² Children benefit most when teachers engage in stimulating interactions that support learning and are emotionally supportive, which fosters engagement and enjoyment in learning.¹⁶³ Cumulative experience in center-based care was associated with better outcomes in comparison to other types of childcare.¹⁶⁴

However, finding quality childcare can be particularly challenging for low-income families. Limited resources, as well as fluctuating work schedules, non-traditional hours, and inflexible work policies among low-income families make it more difficult to find quality childcare. In some low-income communities, the supply of good childcare and access to good sources for childcare information may be limited.¹⁶⁵

The following section examines beliefs that parents/guardians have about their child’s preschool. Parents/guardians of children less than 7 years of age were asked about how good their preschool was, how confident they were in the staff at the child’s preschool, and how well the preschool prepared the child for the future. Although estimates based on the questions in this section were higher among children with private insurance compared to those enrolled in Medi-Cal, none of the differences between insurance types were statistically significant. The lack of statistical significance may be driven by the small sample size for these estimates. However, the lack of statistical significance may also indicate that a parent/guardian’s beliefs about the quality of a child’s preschool are similar for those enrolled in Medi-Cal, those with private insurance and those enrolled in Healthy Families.

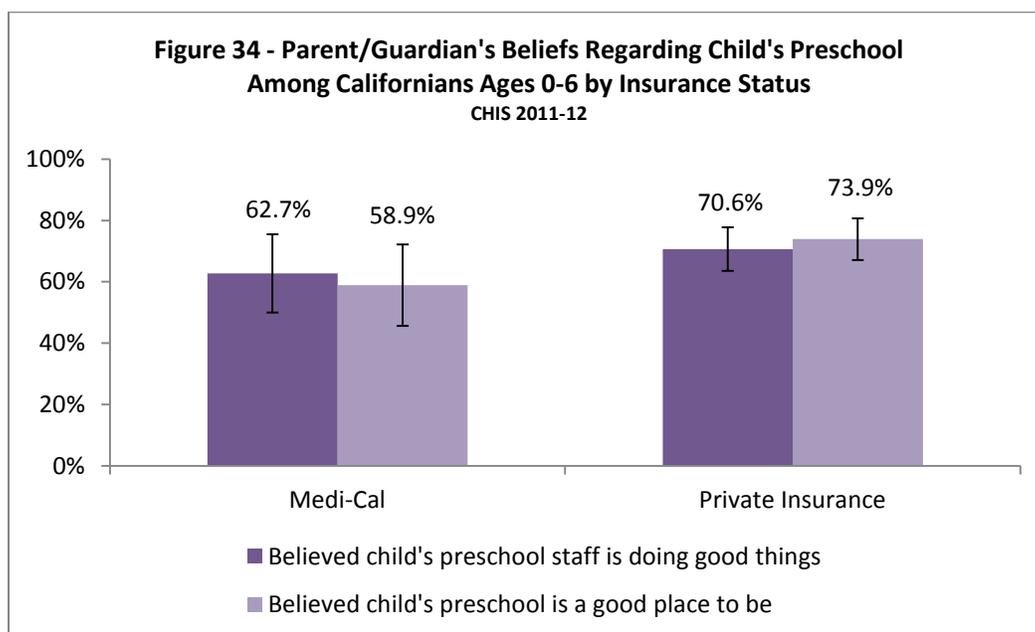
Findings: Quality of Childcare: Beliefs Regarding Child’s Preschool in California’s Child Population

CHIS Question for children less than 7 years of age: “The staff at your child’s preschool is a good place for your child to be: Strongly agree, agree, disagree, or strongly disagree?”

CHIS Question for children less than 7 years of age: “Your child’s preschool is a good place for your child to be: Strongly agree, agree, disagree, or strongly disagree?”

For the purpose of this analysis, RASD defined a parent or guardian as believing their preschool staff is doing good things if the parent or guardian of the child responded “strongly agree” or “agree” to the first question above. RASD defined a parent or guardian as believing their preschool is a good place to be if the parent or guardian of the child responded “strongly agree” or “agree” to the second question above.

The percent of children who had a parent or guardian who believed their child’s preschool staff was doing good things was not statistically significant between those enrolled in Medi-Cal and those with private insurance (62.7% and 70.6%, respectively). The percent of children who had a parent or guardian who believed their preschool is a good place to be was not statistically significant between those enrolled in Medi-Cal and those with private insurance (58.9% and 73.9%, respectively).

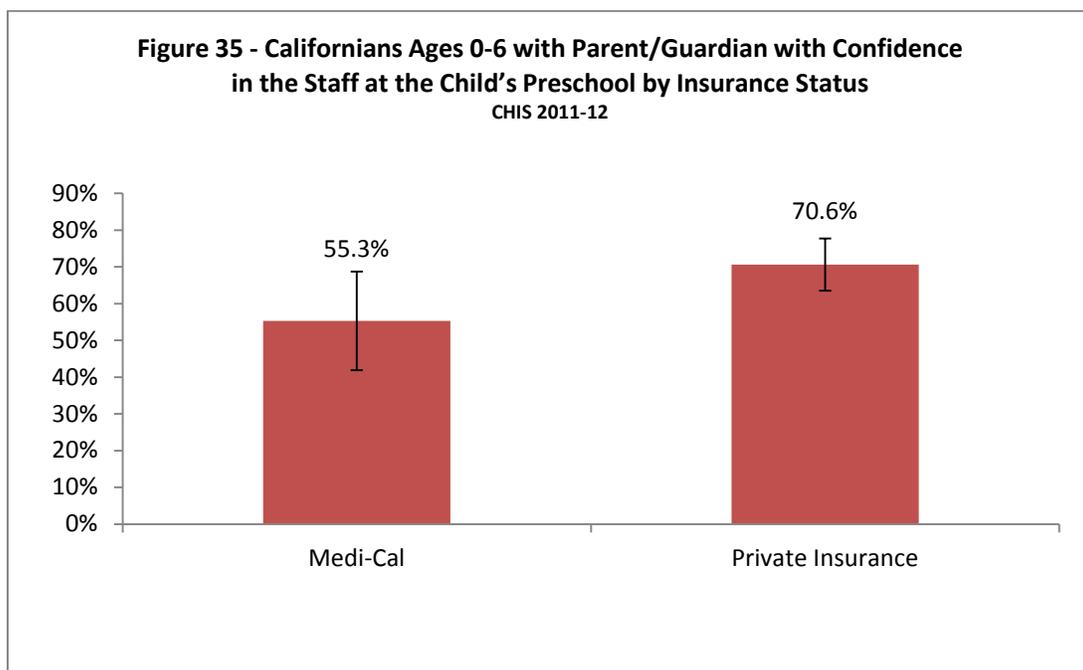


Findings: Quality of Childcare: Parent/Guardian Confident in the Staff at the Child’s Preschool in California’s Child Population

CHIS Question for children less than 7 years of age: “You have confidence in the people at your child’s preschool: Strongly agree, agree, disagree, or strongly disagree?”

For the purpose of this analysis, RASD defined a parent or guardian as having confidence in the staff at their child’s preschool if the parent or guardian responded “strongly agree” or “agree” to the above question.

The percent of children who had a parent or guardian with confidence in the staff at their preschool was not statistically different between those with private insurance and those enrolled in Medi-Cal (70.6% and 55.3%, respectively).

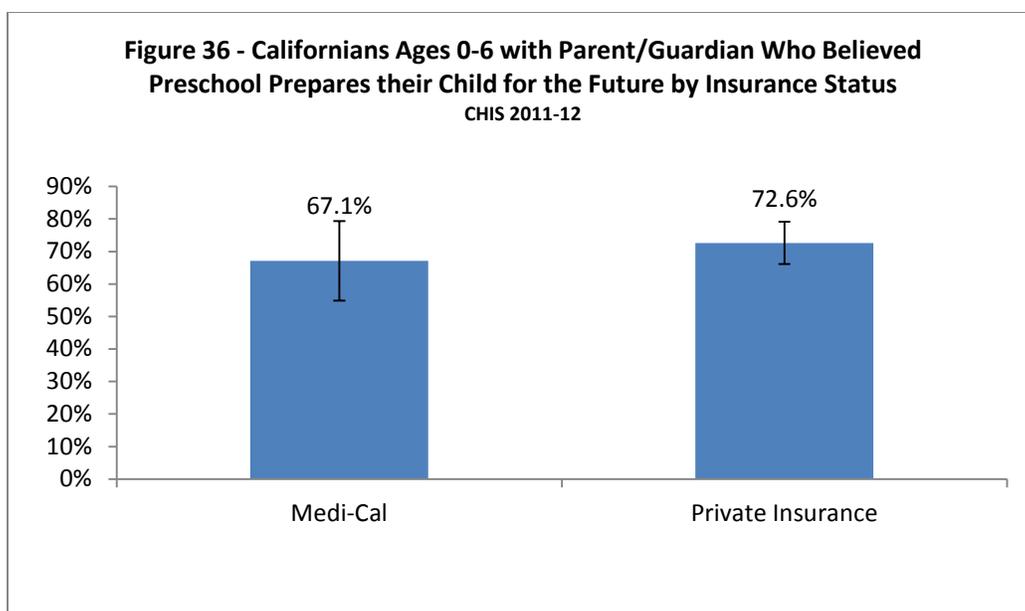


Findings: Quality of Childcare: Parent/Guardian Believed Preschool Prepares the Child for the Future in California’s Child Population

CHIS Question for children less than 7 years of age: “Your child’s preschool is doing a good job at preparing children for their futures: Strongly agree, agree, disagree, or strongly disagree?”

For the purpose of this analysis, RASD defined a parent or guardian as believing their child’s preschool is doing a good job preparing their child for the future if the parent or guardian of the child responded “strongly agree” or “agree” to the above question.

The difference between the percent of children enrolled in Medi-Cal and the percent of children with private insurance who had a parent or guardian who believed their child’s preschool staff was doing a good job preparing their child for the future was not statistically significant (67.1% and 72.6%, respectively).

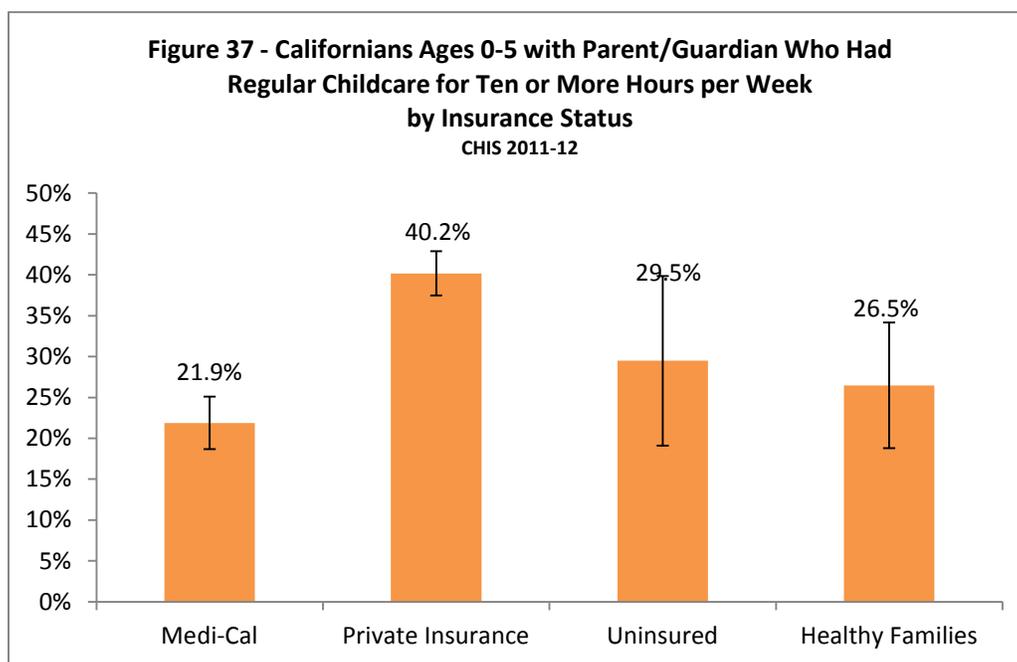


Findings: Parent/Guardian who had Regular Childcare in California's Child Population

CHIS Question for children age 5 and younger: "Do you currently have any kind of regular childcare arrangements for child 10 hours or more per week?"

The number of children in the U.S. who spend a large amount of their childhood in daycare centers continues to increase.¹⁶⁶ Research suggests that children who are exposed to more days in preschool may develop more efficient communication skills due to the variation of social situations they encounter.¹⁶⁷ Research has found that caregivers view themselves as professional educators, who have a great influence on the successful development of children in their care.¹⁶⁸ The relationship between both a caregiver and a child and caregiver and a parent are important factors that influence the quality of childcare children receive.¹⁶⁹

Parents or guardians of children with private insurance were almost twice as likely as parents or guardians of children enrolled in Medi-Cal to have childcare for 10 or more hours per week (40.2% and 21.9%, respectively).

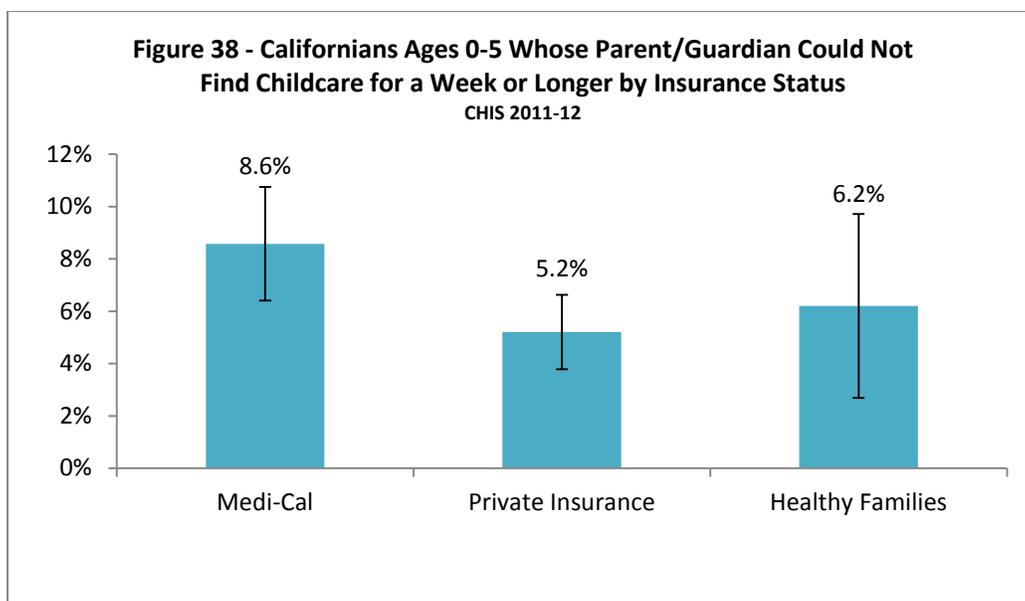


Findings: Parent/Guardian who Could Not Find Childcare in California's Child Population

CHIS Question for children age 5 and younger: "In the past 12 months, was there a time when you could not find childcare when you needed it for your child for a week or longer?"

Childcare not only allows the parent or guardian to be employed, but it also influences a child's development.¹⁷⁰ Research suggests that families who live below the poverty level have relied heavily on relatives to care for their preschool and school-age children rather than center-based care.¹⁷¹ Research has found that while children from low-income households benefit the most from high quality childcare, they are less likely to be enrolled in high-quality childcare programs than are children from affluent families.¹⁷² This may partly be attributed to the lack of access of quality childcare options in their neighborhoods.¹⁷³ The cost of childcare is also a significant consideration for all families, but particularly low-income families.¹⁷⁴

Parents or guardians of children enrolled in Medi-Cal were more likely than parents or guardians of children with private insurance to not find childcare for a week or longer in the past 12 months (8.6% and 5.2%, respectively).



More Information on the Medi-Cal Population

The Research and Analytic Studies Division (RASD) of the Department of Health Care Services (DHCS) performed the analysis for this report. RASD compiles official statistics and performs analytical studies to assist DHCS in achieving its mission and goals. More information regarding Medi-Cal enrollment, program expenditures, and other relevant topics is available at the RASD [website](#).

Subscribe to the RASD Mailing List

Click [here](#) to receive email notifications when new statistical content is added to the RASD website. The RASD website is updated regularly with graphics, pivot tables and statistical briefs describing the Medi-Cal population, Medi-Cal enrollment trends, and other issues relevant to the Medi-Cal program and its stakeholders.

IF YOU PLAN TO CITE THIS PAPER IN A SUBSEQUENT WORK, WE SUGGEST THE FOLLOWING CITATION:

Watkins, J, Epstein, J, and Foos, S. 2015. Medi-Cal's Child Population: The Medi-Cal Population Before the Implementation of the Affordable Care Act. California Department of Health Care Services. Sacramento, CA. May 2015.

PLEASE NOTE:

This document provides a brief summary of complex subjects and should be used only as an overview and general guide to the Medi-Cal program. The views expressed herein do not necessarily reflect the policies or legal positions of the California Health and Human Services Agency (CHHS) or the California Department of Health Care Services (DHCS). These summaries do not render any legal, accounting, or other professional advice, nor are they intended to explain fully all of the provisions or exclusions of the relevant laws, regulations, and rulings of the Medicare and Medicaid programs. Original sources of authority should be researched and utilized.

Appendix A: Data Sources and Methods

Data Sources

The California Health Interview Survey (CHIS)

The California Health Interview Survey (CHIS) is the largest health survey in the state of California. The UCLA Center for Health Policy Research conducts CHIS in collaboration with the California Department of Public Health, the Department of Health Care Services and the Public Health Institute. Collecting information for all age groups on health and health related issues, CHIS gives a detailed picture of the health and health care needs of California's large and diverse population. In 2011, CHIS transitioned to a continuous survey taking two years to complete a data cycle. CHIS has included households with only cell phones since 2007.

Using an independent multistage probability sample, CHIS provides a representative sample of the state's non-institutionalized population. CHIS also provides estimates for most individual counties, as well as estimates for major racial ethnic subgroups and some smaller ethnic subgroups. CHIS conducted the landline sample using a random digit dialing (RDD) method from 41 single county strata and three multi-county strata. For the cell phone sample, CHIS used a RDD sample from telephone numbers with cellular service stratified into 28 geographic strata using seven CHIS regions and telephone area codes. Approximately 20% of the interviews included in the 2011-12 survey occurred via cell phone. Interviews were conducted in five languages: English, Spanish, Chinese (Mandarin and Cantonese dialects), Vietnamese, and Korean.

The 2011-12 survey completed 7,334 child interviews. The graphs and charts for this report reflect data from 7,228 interviews of children ages 0 to 11.

Medi-Cal Administrative Data

RASD drew enrollment eligibility data from Medi-Cal Eligibility Data Systems (MEDS) January 2012, reflecting a 12-month reporting lag, for 2,613,080.

Methods

All estimates in this report using CHIS data were weighted to represent the population of California. Estimates were calculated using procedures in the statistical software package SAS that account for the CHIS complex sample design. Standard errors to produce confidence intervals were calculated using Taylor series linearization. Significant differences were identified with t-tests.

This section provides details on select measures reported by RASD in this analysis.

Language Assignment (Language Spoken, Administrative Data)

Language	Percentage	Language	Percentage
Unknown	0.1%	Lao	0.0%
ASL	0.0%	Mandarin	0.1%
Arabic	0.2%	Mien	0.0%
Armenian	0.2%	Other Chinese	0.0%
Cambodian	0.1%	Other Non-Eng.	0.3%
Cantonese	0.4%	Other Sign	0.0%
English	56.7%	Polish	0.0%
Farsi	0.1%	Portuguese	0.0%
French	0.0%	Russian	0.2%
Hebrew	0.0%	Samoan	0.0%
Hmong	0.3%	Spanish	39.9%
Ilocano	0.0%	Tagalog	0.1%
Italian	0.0%	Thai	0.0%
Japanese	0.0%	Turkish	0.0%
Korean	0.1%	Vietnamese	0.8%

Urban/Rural Distinction

Descriptions	List of Counties
<p>Urban Counties Includes: Counties in metro areas with populations of 1 million or more; Counties in metro areas with populations of 250,000 to 1 million; and Counties in metros areas with populations smaller than 250,000.</p>	Alameda, Contra Costa, El Dorado, Los Angeles, Marin, Orange, Placer, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Francisco, San Mateo, Santa Clara, Yolo, Fresno, Kern, Monterey, San Joaquin, Santa Barbara, Santa Cruz, Solano, Sonoma, Stanislaus, Tulare, Ventura, Butte, Imperial, Kings, Madera, Merced, Napa, San Luis Obispo, Shasta, Sutter, Yuba
<p>Rural Counties Includes: Urban populations of 20,000 or more, adjacent to a metro area; Urban populations of 20,000 or more, not adjacent to a metro area; Urban population of 2,500 to 19,999, adjacent to a metro area; Urban population of 2,500 to 19,999, not adjacent to a metro area; Completely rural area or an urban population less than 2,500, adjacent to a metro area; and Completely rural area or an urban population less than 2,500, not adjacent to a metro area</p>	Lake, Mendocino, Nevada, Tehama, Tuolumne, Humboldt, Amador, Calaveras, Colusa, Glenn, Lassen, Modoc, Del Norte, Inyo, Mono, Plumas, Siskiyou, Alpine, Mariposa, Sierra, Trinity

Food Insecurity

If a respondent's income was above 200% of the FPL they were defined as food secure.

For adults with incomes at or below 200% of the FPL food insecurity was determined using the following 6 questions which represent a validated scale derived from the U.S. Household Food Security questionnaire:¹⁷⁵

1. *"The food that I/we bought just didn't last, and I didn't have money to get more. Was that often true, sometimes true, or never true for you in the last 12 months?"*
2. *"I/we couldn't afford to eat balanced meals. Was that often true, sometimes true, or never true for you in the last 12 months?"*
3. *"Please tell me yes or no in the last 12 months, since (date 12 months ago), did you (or other adults in your household) ever cut the size of your meals or skip meals because there wasn't enough money for food?" (This question is asked only if there is a yes response to question 2.)*
4. *"How often did this happen-almost every month, some months but not every month, or in only 1 or 2 months?"*
5. *"In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money to buy food?" "yes or no?"*
6. *"In the last 12 months, since (date 12 months ago), were you ever hungry but didn't eat because you couldn't afford enough food?"¹⁷⁶ "yes or no?"*

For questions 1 and 2: a responses of "often true" or "sometimes true" were coded as 1 and a response of "never true" was coded as 0.

For questions 3, 5, and 6: a response of "yes" was coded as 1 and a response of "no" was coded as 0.

For question 4: a response of "almost every month" or "some months but not every month" was coded as 1 and a response of "only in 1 or 2 months" was coded as 0.

The scores for each of these questions were summed to obtain a total score from 0 to 6. Those with a total score from 0 to 1 were defined as food secure. Those with a total score of 2, 3 or 4 were defined as food insecure without hunger and those with a total score of 5 or 6 were defined as food insecure with hunger.

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