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Prepared by

UCLA Center for Healthier Children, Families and Communities
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In November 1998, California voters passed Proposition 10, adding a 50 cents-per-pack tax on cigarettes to fund education, health, child care and other programs for expectant parents and children during their first five years of life. That mandate is carried out by First 5 California (also known as the California Children and Families Commission) and 58 First 5 County Commissions. Since its inception, First 5 California has focused attention on the importance of health and early childhood education and development for school readiness and life-long learning potential. Recognizing that improving the quality of and access to early education and health care has a profound impact on how well a child will do in school and later in life, First 5 California's statewide efforts are focused on the development of more comprehensive early childhood services, including voluntary Preschool for All and universal health insurance.

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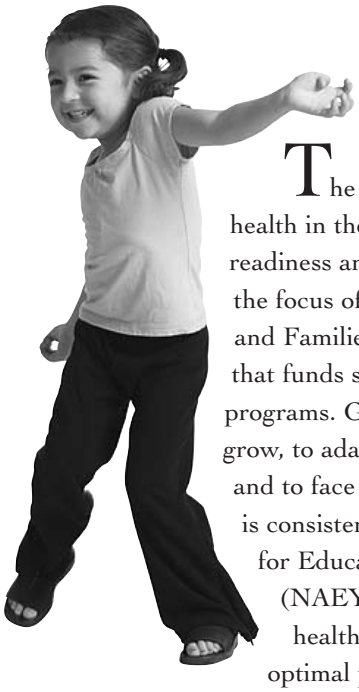
The California Health Interview Survey

CHIS *california health interview survey*

CHIS is a collaboration of the UCLA Center for Health Policy Research, the California Department of Health Services, and the Public Health Institute. Funding for CHIS 2001 has been provided by the California Department of Health Services, the National Cancer Institute, The California Endowment, the California Children and Families Commission, the Centers for Disease Control and Prevention (CDC), and the Indian Health Service. For more information on CHIS please visit www.chis.ucla.edu.



The importance of early childhood health in the development of school readiness and lifelong learning potential is the focus of the First 5 California Children and Families Commission, an organization that funds state and county early childhood programs. Good health allows children to grow, to adapt to changing environments and to face life's challenges…a view which is consistent with the National Association for Education of Young Children (NAEYC) and their concept that good health is critical to the development of optimal physical, emotional, social and cognitive capacities, and to children's readiness for school.

First 5 California has launched an ambitious campaign to leverage new resources in the development of more comprehensive and integrated systems of early childhood services. California's recently issued Master Plan for Education also includes a new school-readiness component which calls for statewide strategies to guarantee that children enter school healthy and ready to learn. These strategies—such as daily parent-child reading—can reduce risk factors, as well as enhance "protective" factors for children's development. The 2001 California Health Interview Survey (CHIS 2001) provides information about key measures of health and well being for California's three million children age 0-5 years, and on patterns and disparities in these measures due to family, social and environmental contexts.

The Contribution of CHIS 2001 to Understanding the Health of California's Young Children

The California Health Interview Survey (CHIS 2001) is a ground-breaking survey on the health and well-being of children, adolescents, and adults. The health outcome and family context measures in CHIS 2001 provide important new statewide information that overlap several of First 5's strategic priority areas. This CHIS 2001 report presents indicators of health and well-being as well as measures of children's access to services and the use of early care and education programs (Exhibit 1). The planned administration of CHIS every two years will make it possible to track changes in health indicators over time, and to add new measures that answer emerging policy and programmatic questions.

This CHIS 2001 report describes health outcomes, health access, health and developmental risks, and health promoting behaviors for young children in California. Many of these are associated with differences in the economic characteristics of the child's family, ethnicity, place of residence and insurance coverage. This report focuses on disparities across population groups and interprets what these disparities mean in relation to a child's health, developmental "trajectory", and prospects for school readiness. It also highlights gradients in outcomes that are related to levels of income, types of health insurance coverage (e.g. none, public, private), and place of residence (urban to rural). When gradients are observed, it is evident that some systemic factor is causing the disparity.

Key Findings

Disparities in Health Status and Well-Being

The global rating of a child's health, ranging from poor to excellent, gives an important indication of children's overall health and well being. Global measures of health provide an overall assessment of children's health and indicate their capacity to function and develop normally in multiple domains: physical, psychological, social, and emotional.

- ✓ In California, about 75% of children age 0-5 years are described by their parents as having excellent or very good health. This is lower than the national average of 85% of young children in very good or excellent health. Given that children in California represent one in nine children nationally, this difference is substantial.
- ✓ Latino children have lower ratings of overall health status, with only about 60% reported to have excellent or very good health, compared to about 90% of Non-Latino White children. This substantial racial/ethnic disparity in young children's health status begins to disappear only for children at or above 300% of the Federal Poverty Level (FPL).
- ✓ Children in urban and in rural areas of California have poorer health status due to health risks and to poor access to medical care compared to children living in suburban areas.

EXHIBIT 1 – CHIS 2001 INDICATORS IN FIRST 5 HEALTH AND WELLNESS FOCUS AREAS

CHILD WELL-BEING	**ORAL HEALTH**
OVERALL HEALTH STATUS	USE OF PREVENTIVE DENTAL SERVICES
PHYSICAL ACTIVITY LIMITATIONS	BARRIERS TO ACCESSING DENTAL CARE
SPECIFIC HEALTH CONDITIONS	PREVENTIVE DENTAL HEALTH BEHAVIOR
ACCESS TO QUALITY HEALTH SERVICES	**NUTRITION AND OVERWEIGHT**
HEALTH INSURANCE COVERAGE	PREVALENCE OF OVERWEIGHT
UNINSURED CHILDREN ELIGIBLE BUT NOT ENROLLED	DAILY INTAKE OF FRUITS AND VEGETABLES
BARRIERS TO ACCESSING SERVICES	DAILY INTAKE OF SODA
USUAL SOURCE OF CARE	SLEEPING WITH MILK/JUICE IN BABY BOTTLE
CHILDREN WITH SPECIAL HEALTH CARE NEEDS	**PHYSICAL ACTIVITY AND FITNESS**
ACCESS TO HEALTH CARE	SEDENTARY TIME WATCHING TV/VIDEO GAMES
MANAGEMENT OF ASTHMA	
	SOCIAL AND DEVELOPMENT-PROMOTING ACTIVITIES
ENVIRONMENTAL HEALTH	PARENT-CHILD READING
USE OF SUNSCREEN	FAMILY SOCIAL ACTIVITIES
PARENT IN HOUSEHOLD SMOKES	
PARENT IN HOUSEHOLD DRINKS	**EARLY CARE AND EDUCATION**
GUNS PRESENT IN OR AROUND THE HOME	CHILD CARE ARRANGEMENTS
	LICENSURE
INJURY/VIOLENCE PREVENTION	**SATISFACTION WITH CHILD CARE**
INJURIES	ENROLLMENT IN PRESCHOOL
	HEAD START ENROLLMENT AMONG ELIGIBLE CHILDREN
CHILDHOOD IMMUNIZATIONS	
PRESENCE OF IMMUNIZATION RECORD	**INCOME ASSISTANCE AND FOOD SECURITY**
DIFFICULTIES GETTING IMMUNIZATIONS	WIC, FOOD STAMPS, TANF
RECEIPT OF REMINDER/RECALL	FOOD SECURITY

Disparities in health status are an important indication of differential exposures to health risks and to protective factors as well as indicators of differential access to health care. Children who start life with fair or poor health status may have difficulty regaining full function if developmental delays or disabilities limit opportunities to learn and grow. Racial/ethnic disparities in health status prevent many young children in California from the optimal developmental trajectories that First 5 hopes to help achieve. The burden of poor health status among lower income and Latino children is especially of concern, given the growing number of low income Latino children in the state of California.

Asthma Prevalence and Impact

Chronic health conditions last for a significant period of time and range from those static conditions that require ongoing medication and treatment, to those conditions such as asthma that can have an episodic and relapsing course. Chronic health conditions can pose significant barriers to a child's physical, cognitive, social and emotional

development. CHIS 2001 provides extensive new information about childhood asthma, the most common health condition affecting young children.

- ✓ About 10.5% of young children age 1-5 years in California have been diagnosed by a doctor as having asthma. Asthma prevalence varies dramatically by race/ethnicity. One out of every five African-American children (20.4%) has been diagnosed as having asthma, compared to 10.4% of Non-Latino White and 9.2% of Latino children.
- ✓ Almost half of African American children with asthma are reported to be symptomatic on a monthly basis, showing that one in ten young African American children in California is regularly affected by asthma.
- ✓ About half (51.5%) of young children diagnosed with asthma are taking medication to control the condition—with little variability by type of health insurance or having a usual source of care—even though many are experiencing symptoms and physical limitations.
- ✓ Nearly one quarter (22.3%) of young children diagnosed with asthma have an asthma-related emergency room visit during the year with a rate of 33.7% for children age 1-2 years, showing that asthma is not well controlled for many young children.

CHIS 2001 information on childhood asthma highlights not only the growing prevalence of asthma in children, but also the extraordinary disparities for African-American children. National data show that only 20-40% of children with asthma receive the recommended medications. The impact of inadequate asthma management can be seen in the symptoms and limitations experienced by young children in California. Changes in asthma prevalence, severity, and access to care are important measures of how well the health care system is responding to the health care needs of young children. This is important not just for monitoring asthma prevalence and care, but also because access and quality of asthma care are potentially important indicators of the access and quality of health care for other less common chronic health conditions.

Prevalence of Disabilities (Activity Limitations)

Restriction in physical activity is a traditional measure of disability. Disabilities due to health problems can impair a child's ability to learn and to develop other kinds of abilities. These disabilities affect children's participation in daily activities—such as play and going to school and other events—that can affect the development of their relationships with others. Children who are unable to engage in age-appropriate play, or interact with their peers in normal activities, may experience other delays in cognitive, social, or emotional function in addition to the physical limitation. Interruption of age-appropriate activities reduces a young child's chances of being ready for school and succeeding in school. Like disparities in health status, disparities in disabilities reflect a complex set of higher health risks, and lower access to health care.

- ✓ About 3.7% of California children age 0-5 years have a condition that limits normal childhood activities. Disability increases with age and affects nearly 5% of children age five years.

From national studies we know that surveys of parents tend to underestimate the prevalence of disabilities, especially prior to school entry. Upon school entry disabilities become more obvious to parents and teachers alike. Therefore, the CHIS 2001 estimates of disabilities in young children are likely to be conservative.

Getting Children Covered: Health Insurance

Access to health insurance for young children has become a major policy and programmatic initiative statewide in California and a focus area for many First 5 commissions. CHIS 2001 provides the first statewide data on California's potential to close the gap for children who are eligible for health insurance but not enrolled.

- ✓ About 202,000 children under the age of six years are uninsured, representing 6.9% of young children in California. The vast majority of these young uninsured children (77.8%)—about 158,000—appear to be eligible for either Medicaid (Medi-Cal) or Healthy Families.

✓ One third (35.8%) of uninsured children did have coverage at some point in the last year, but lost it. This shows the need not just to enroll children in health insurance but to retain them once enrolled.

✓ CHIS 2001 provides the first data showing that even insured children experience gaps in coverage during the year. These gaps in coverage are important indicators of children's retention in health insurance, once enrolled. Nearly 20% of young rural children have a gap in coverage during the year with gaps also more frequent among low income and Latino children. These gaps undermine access to the continuity of care that is needed for pediatric guidance and education to be effective for parents of young children.

✓ Enrollment is important for health care access. Young children who are eligible for but not enrolled in public insurance have more delayed or missed care than children in either Medi-Cal or Healthy Families.

These new data on health insurance eligibility and enrollment provide important information as California attempts to extend health insurance to more children, and develop policies and programs to fill existing gaps. These findings show that targeted outreach and enrollment are needed, given the large number of children who are uninsured despite being eligible for Healthy Families or Medi-Cal. It also suggests the importance of improving the retention of children who are enrolled. Administrative requirements for periodic eligibility redetermination and monthly premium payments in the Healthy Families program are unraveling much of the effort expended to get young uninsured children enrolled.

Access and Sources of Health Care

While health insurance is a necessary component of access to health care, it is not sufficient to guarantee that children get care when they need it, *and* from a provider with the technical and interpersonal skills to provide high quality care. Indicators of access include whether children receive needed care, where they receive that care, when they receive it relative to need, and how frequently they receive care.

✓ About 98% of young children in California have a regular source of health care, a figure that is comparable to national estimates.

✓ Latino and rural children are less likely to have a usual source of care. When they do, they are more likely to receive care in community clinics rather than in physician offices.

✓ Most parents (97.4%) report that their young child has seen a physician within the last 12 months. Even most uninsured young children (92%) have visited a doctor in the past 12 months.

✓ There is a strong income gradient in where young children receive care, with children in higher income families almost twice as likely as children in lower income families to report receiving care in a physician's office.

While most children have access to some form of regular health care, the place where children receive care differs based on where they live, their ethnicity, and income and insurance status. While many community and hospital clinics provide good quality care, many of these institutions function as safety net providers, and their capacity to provide basic services (such as after-hours phone consultation for a child with asthma) can vary with the levels of funding that the provider has. For example, if parents of an asthmatic child cannot reach his or her community clinic doctor when acute exacerbation strikes at night, they are more likely to take the child to the emergency room. Real functional disparities exist in the content and quality of health care that children receive. California has important improvements to make in assuring that young children have equitable access to appropriate providers.

Gaps in Dental Care Coverage and Use of Services

Because dental caries are one of the most frequent as well as debilitating and untreated chronic health conditions in children, access to dental care is an important indicator of access to health care. Other studies suggest that access to and use of dental care is a good indicator of access to other preventive and health-promoting services in a community. While the 1993-1994 California Oral Health Needs Assessment evaluated tooth decay in children enrolled in preschool, CHIS 2001 provides the first statewide information on dental care coverage and use of services.

- ✓ Just over half of children age 2-5 years have ever seen a dentist. About 40% of children age 3-4 years and 14% of children age five have never seen a dentist. Few young children have had a visit within the last six months, including only 58% of children age five years.
- ✓ While only 6.8% of young children lack health insurance, about 24% of children age 2-5 years (478,000) have no dental insurance. Fewer children with Medi-Cal (79.6%) than private insurance (85.6%) have dental insurance, and some parents of Healthy Families' enrollees do not know that their child has dental insurance. Almost no children lacking dental insurance are using free community or public dental programs.
- ✓ Private insurance does not assure better access. Initiation of dental care is very low for privately insured children as well as those in Medi-Cal and Healthy Families.
- ✓ About 6.2% of young children are sleeping with a bottle at night, which greatly increases their risk of dental problems, as well as ear infections, and should be addressed through education from pediatric providers as well as information campaigns.

Improving the dental health of California's young children will require a broad range of interventions including better home health behaviors, greater availability of affordable dental insurance, more information and education about how to receive dental coverage, and how to access available services. Improving access to appropriate dental care for children requires overcoming barriers that include low payment rates for children's dental care and a shortage of well-trained pediatric dental providers, particularly in underserved communities, who are willing and able to take on low-income patients.

Nutritional Intake, Soda Consumption, and Sedentary Activity

Nutritional measures do more than assess the intake of nutrients that affect long term health outcomes. These measures also show the intake of foods that have little or negative nutritional value—such as soda—and may contribute to adverse health outcomes such as obesity, adult onset diabetes mellitus, and other child and adult health conditions.

- ✓ In California, most children age 2-5 years (86.1%) receive the recommended daily intake of fruit (at least two servings of fruit and/or 100% fruit juice).[1] Although California is a leading source of vegetables for the nation, few young children (17.7%) in California receive the daily-recommended servings of vegetables (at least three servings).
- ✓ While two-thirds (66.6%) of young children have the daily recommended intake of milk, soda begins to substitute for milk once children reach three years of age, with milk intake declining and soda intake increasing.
- ✓ About a quarter of preschoolers consume soda on a daily basis. Daily consumption of soda has a strong income gradient, with twice as many children in families below the FPL as above the 300% FPL drinking soda at age two (25% vs. 10%). Nearly half (46%) of children below the FPL drink soda compared to 22% of children above 300% of the FPL, of those age 5 years.
- ✓ Rates of television watching that exceed American Academy of Pediatrics (AAP) recommendations place young California children at risk for excessive sedentary activity, which is associated with overweight and later obesity. Two-thirds of preschoolers watch at least two hours of television on weekdays. More than one-third exceed AAP recommended limits on media exposure, watching more than two hours daily.

Many children are not receiving the recommended nutritional intake that is associated with good health outcomes. Moreover, many young children are consuming useless and potentially harmful calories, including nearly half of children age five in households below the federal poverty level. The combination of children drinking soda with poor access and utilization of dental services indicates high risk for tooth decay as well as overweight. Given income gradients and disparities in health eating habits, it is important that public programs and health care providers serving low income families take up the charge of improving nutritional status and behaviors. Programs such as Women, Infants and Children (WIC) are an obvious starting point for educational interventions, especially since the majority of low-income

1 U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000

families participate in WIC. Culturally appropriate guidance in the pediatric office is also needed.

Young Children's Learning and Social Environment

An increasing body of research literature suggests that children's social environments can have a significant influence on their social and emotional development and learning. Measures of how often families participate in shared reading activities indicate whether a child is getting language and cognitive stimulation on a regular basis. Reading is also a measure of how well families are able to organize their routines and to control their child's social environment. Reading is important for early literacy, as well as for parent-child relationships, by promoting quality time between the parent and child. Yet barriers such as time, parental and caregiver literacy, and parent knowledge of when and how to initiate and sustain family reading time can create disparities in young children's access to this important school readiness enhancing activity.

✓ Fewer than half of parents (43%) read to their child daily. About 9% of children age 0-5 years are not read to in a given week by anyone in the household. Only one-third of children age 3-4 years in households below the 200% FPL are read to daily, compared to two-thirds in households above the 300% FPL.

✓ While reading to children increases as children grow from infancy into toddlerhood, rates of reading do not increase for two, three, and four year old children in households below the 300% FPL, creating substantial disparities based on income and parental education.

✓ Parents of most young children (68.4%) say they spend time with friends or relatives at least once per week. Lower income families and non-U.S. born parents are more socially isolated.

Many young children are not getting the reading exposure they need for appropriate language and literacy development. Reading should be an organized daily activity for young children. Large disparities in reading frequency by race/ethnicity, maternal education, and income are leaving California's most vulnerable children at a considerable disadvantage for school readiness.

While many families may be parenting in social environments with supportive family connections, many families have low social support. The large number of families who are recent immigrants to California might benefit from programs and services that provide family and community social connections. Family support is a major programmatic and policy focus of California's First 5, and it will be important to monitor social support and family connections to the community as the First 5 California program development continues.

Early Care and Education

An increasing proportion of young California children spend at least part of their day in a child care arrangement. Child care thus plays an important role in the early care and education experiences to which young children are exposed.

✓ While most parents are satisfied with the quality of their child's care arrangements, a substantial number (19.8%) are not completely satisfied, or not at all satisfied.

✓ Many preschool-age children are not in preschool. The rate of preschool participation is slightly higher for children age four years (at 31.8%) than for children age three years (at 18.4%).

✓ There are large racial/ethnic differences in preschool attendance among preschool age children. Only 13.8% of Latino children age 3-4 years are enrolled in nursery school or preschool, compared to one-third of Asian and Non-Latino White children, 40.2% of American Indian/Alaska Native children, and 44.4% of African-American children.

✓ Among preschool age children, those not in preschool have lower health status as well as less exposure at home to daily reading than children in preschool do. The trend toward higher rates of disability among children in preschool also suggests that as the First 5 universal preschool initiative advances, children and parents with substantial need for support and education will begin to participate.

CHIS 2001 illustrates the preschool attendance gap in California. Many preschool age children spend no time in structured preschool settings. The poorer health of children not yet enrolled in preschool shows that the First 5 universal preschool initiative should anticipate above average needs among newly participating children.

Summary

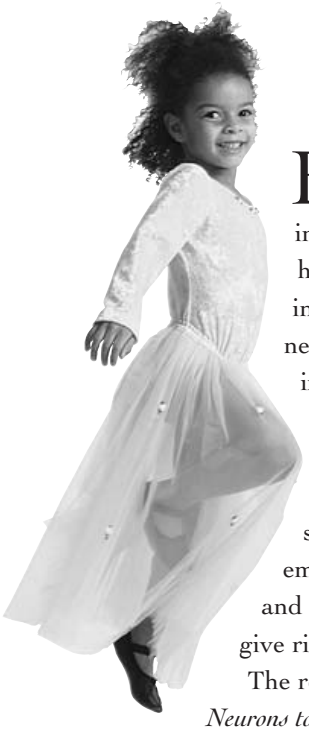
These new data on health outcomes, health access, health and developmental risks, and health promoting behaviors show that many young children could be healthier, have better access to health services, and be receiving health promotion and preventive services that would provide them with a much greater likelihood of succeeding in school and in life. Many children in California are not receiving the early childhood services they need, such as dental care or the development-promoting activities in the home, for instance reading. While the quality of health care was not directly measured in CHIS 2001, there are many indicators in the data presented that the quality of access and the quality of services available to many children reflect social, economic and ethnic disparities. Improving access to and the quality of health care is a priority for young children, given the impact of physical, oral, developmental, and emotional health for school readiness. Attention needs to be placed on targeted outreach and enrolling eligible children in Medi-Cal and Healthy Families; assuring that enrolled children retain their coverage; and improving the quality of health, developmental and dental health services that are available and provided.

The California Health Interview Survey

This report presents information about children age 0-5 years (under six) based on the CHIS 2001 random-digit dial (RDD) sample which included interviews in more than 55,000 randomly selected households drawn from every county in California. CHIS 2001 is the largest health survey ever conducted in any state and one of the largest in the nation. In each household, one adult was randomly selected for interview (the "sample adult"). In households with children, CHIS 2001 also interviewed one adolescent age 12-17 (the "sample adolescent") and obtained information for one child under age 12 (the "sample child") by interviewing the adult who is most knowledgeable about the child. The RDD survey began at the end of November 2000 and was completed in October 2001.

CHIS 2001 covers a broad range of public health concerns, including health status and conditions, health-related behaviors, health insurance coverage, and access to health care services. To make CHIS 2001 more inclusive and to capture the rich diversity of the California population, the questionnaires were translated and interviews were conducted in six languages: English, Spanish, Chinese (both Mandarin and Cantonese dialects), Vietnamese, Korean, and Khmer (Cambodian). Questionnaires were also reviewed by expert teams to ensure that question wording was culturally appropriate for a variety of population groups. In addition, special community outreach campaigns were conducted in appropriate languages targeting communities of color to encourage the participation of populations that often have low participation rates in surveys.

CHIS 2001 is a collaboration of the UCLA Center for Health Policy Research, the California Department of Health Services, and the Public Health Institute. (For more information on CHIS 2001, visit www.chis.ucla.edu.)



Early childhood is an increasingly important area of focus for improved health service delivery, program innovation and implementation, and new policy developments. Many important social goals and health objectives are linked to what happens early in a child's life: a healthy birth, experiences that support and nurture physical, emotional and cognitive development, and the early care and education that give rise to lifelong learning potential. The recent Institute of Medicine report *Neurons to Neighborhoods* summarizes research findings on the impact of children's early experiences on their long-term health and development. For example, research shows that maternal health is related to the mental and physical health of the child, especially during the early years. This information has important implications for how health and human services are organized and delivered. The growing knowledge base from neuroscience and child development as well as intervention research from early education and child care have spurred early childhood initiatives in many states including California. The First 5 California Children and Families Commission is funding state and county early childhood programs. Reflecting the growing recognition of the importance of the early years for children's growth and development, there is a new school readiness component plan within the state's Master Plan for Education. The Select Committee on California's Children's School Readiness and Health also is exploring ways to increase the number of young children statewide who are prepared for school at the time of school-entry.

Studies show the important role that risk factors and protective factors play in the early development of a child. Exhibit 1 shows examples of community and neighborhood, family, school/peer, and individual factors that contribute to children's physical, cognitive, social, and emotional capacities. This table maps key domains to specific contributing protective- and risk-factors, and provides a conceptual framework for the programmatic and policy initiatives.

This report is based on analyses of data from the 2001 California Health Interview Survey (CHIS 2001). This survey provides new population-based information on many of the health, early care and education, and family support outcomes outlined in the California Children and Families Commission's *Results to be Achieved*. The Commission identified the short- and long-term results believed to be needed to create a statewide system that promotes and improves early childhood development. These results include strong families, children learning and ready for school, and healthy children. Examples of long-term results include access to child care for children with developmental delays or special needs, incidence of injuries, and safety measures such as bicycle helmet use.

This report highlights differences in health outcomes, health access, health and developmental risk, and health promoting behaviors that are associated with differences in the economic characteristics of the child's family, ethnicity, place of residence and, where relevant, to characteristics like insurance coverage. The report also focuses on disparities across population groups and attempts to interpret what those disparities mean in relationship to a child's health, developmental trajectory, and prospects for school readiness. In addition to disparities that are apparent across population characteristics, the report also highlights gradients in outcomes that are related to gradations of income, types of health insurance coverage (e.g. none, public, private), and place of residence (urban to rural). When gradients occur, they suggest the possibility of a causal relationship between the outcome and the factors associated with the gradient.

Focusing on the health and developmental determinants of school readiness is important because school readiness has become a major program and policy focus of First 5 California, with a growing collaborative effort between state and county commissions to launch a statewide school readiness initiative. Each of the school readiness initiatives is addressing both the processes and services that are included in CHIS 2001 (e.g., health insurance, use of health care, access to care) as well as the ultimate health and well-being outcomes that are measured in the survey. Thus CHIS 2001 provides a valuable source of benchmarking, goal-setting, subpopulation analysis, and trend data that is so urgently needed by state and county commissions, as

well as by other public and private stakeholders in early childhood issues. CHIS 2001 is a particularly valuable resource to early childhood initiatives in California due to its planned periodicity (biannually).

School-readiness indicators and CHIS 2001 measures that relate directly to the First 5 school-readiness framework are summarized in Attachment 1. This provides First 5 Commissions with an easily accessible summary of these indicators. Attachment 2 compares selected CHIS 2001 indicators with national information on children age 0-5 years. Attachment 3 provides county level information for key school-readiness indicators. This report includes an overview of children's well-being, in addition to an analysis of elements of Children's Readiness for School (*Early Care and Education*), and Family and Community Supports and Services (*Parenting/Family Support*, and *Health and Social Services*). It also summarizes performance measures/indicators that relate to First 5 information needs and adopted performance measures around school readiness. Within each section, we give special focus to CHIS 2001 measures that have been adopted by First 5 California as indicators of results to be achieved (e.g., *Results to be Achieved, March 2000; California Children and Families Commission Guidelines, September 1999*). For example,

EXHIBIT 2 – FRAMEWORK FOR EARLY CHILDHOOD INITIATIVES: EXAMPLES OF RISK AND PROTECTIVE FACTORS INFLUENCING YOUNG CHILDREN'S HEALTH AND DEVELOPMENT

	PROTECTIVE FACTORS	RISK FACTORS
NEIGHBORHOOD/COMMUNITY	STRONG ECONOMIC CONDITIONS SAFE AND STABLE COMMUNITY ACCESSIBLE SERVICES	EXTREME ECONOMIC DEPRIVATION COMMUNITY DISORGANIZATION, INCLUDING HIGH MOBILITY COMMUNITY VIOLENCE MINORITY/IMMIGRANT STATUS
FAMILY	ADEQUATE FINANCIAL RESOURCES NURTURING, SUPPORTIVE FAMILY MEMBERS WHO ARE POSITIVE MODELS SAFE AND STABLE (ORGANIZED AND PREDICTABLE) HOME ENVIRONMENT FAMILY LITERACY SECURE ATTACHMENT IN EARLY YEARS	FAMILY POVERTY FAMILY CONFLICT/VIOLENCE FAMILY SUBSTANCE ABUSE FAMILY MODELS PROBLEM BEHAVIOR ABUSIVE PARENTING INSECURE ATTACHMENT
SCHOOL/CHILD CARE	PROVISION OF HIGH QUALITY CHILD CARE GOOD QUALITY PRESCHOOL POSITIVE RELATIONSHIPS	INADEQUATE QUALITY CHILD CARE POOR QUALITY PRESCHOOL NEGATIVE ENCOUNTERS
INDIVIDUAL/CONSTITUTIONAL	HIGHER COGNITIVE FUNCTIONING PSYCHOPHYSIOLOGICAL HEALTH EASY TEMPERAMENT AND POSITIVE BEHAVIOR	MEDICAL PROBLEMS LOW BIRTH WEIGHT OR NEURODEVELOPMENTAL DELAY PSYCHOPHYSIOLOGICAL PROBLEMS DIFFICULT TEMPERAMENT AND ADJUSTMENT PROBLEMS

Sources: Adelman H & Taylor L, UCLA Center for Mental Health in Schools; Huffman L, Mehlinger S, Kerivan A, 2000, Research on the Risk Factors for Early School Problems and Selected Federal Policies Affecting Children's Social and Emotional Development and Their Readiness for School, The Child and Mental Health Foundation and Agencies Network (*http://www.nimh.nih.gov/childp/goodstart.cfm*); Hawkins JD & Catalano RF, 1992, Communities That Care, Jossey-Bass.

indicators for Access to Quality Health Services include: assuring enrollment of eligible children in Medi-Cal, Healthy Families or other state programs; reporting on the relationship between health insurance type and obtaining access to care for children. Indicators identified in the First 5 California planning guidelines (1999) that are available in CHIS 2001 are discussed in the report.

Future cycles of CHIS can continue to benchmark key indicators that would be measured biannually. New content can also be incorporated every two years. This will be useful as the school readiness initiatives are implemented, and the target processes and outcomes defined, so that future versions of the survey can potentially address those processes and outcomes. For example, as new programs and services are made available or substantially increase in scope (e.g., family resource centers, school-based school-readiness programs), other content or access/utilization measures could be added. Because nearly all surveyed respondents agreed to be re-contacted, CHIS also provides the opportunity for "follow-back" surveys that could gather more extensive information about particular topics (e.g., use of early childhood services, access to child care or other services for children with developmental problems or chronic illnesses). This is a unique opportunity for data about children because the indicators are reflective of children across cultural, linguistic, and ethnic lines. Survey items were subjected to rigorous cognitive and cultural/linguistic appropriateness testing. This process is unique to CHIS 2001 and contributes to the value of this information for understanding the health and well-being of Californians.

CHIS is a new and comprehensive population-based survey that sheds light on the family, school/peer, and individual factors associated with young children's health and development. CHIS is the nation's largest state health survey. It is a collaborative project of the UCLA Center for Health Policy Research, the California Department of Health Services, and the Public Health Institute. CHIS 2001 was funded by the California Department of Health Services, First 5 California (the California Children and Families Commission), The California Endowment, the National Cancer Institute, the Centers for Disease Control and Prevention (CDC), and the Indian Health Service.

CHIS 2001 includes a sample of over 55,000 households randomly selected through a random-digit-dial (RDD) telephone survey. Independent county samples were drawn in the 33 most populous counties and in the cities of Pasadena, Long Beach and Berkeley, which have their own health departments. The remaining 25 counties were aggregated into eight separate sample groups. In addition to having a sample size that is large enough to produce local-level data, the CHIS 2001 RDD sample was also designed to provide health data on American Indians and Asians, with separate Chinese and Filipino samples. (In addition to the RDD sample, several oversamples of other Asian groups and rural and urban American Indians were interviewed, but due to the complex weighting issues for them and their small samples of young children, they will not be used in this analysis.) The questionnaires were translated and administered in five languages in addition to English: Spanish, Korean, Vietnamese, Khmer, and Mandarin and Cantonese dialects of Chinese. Survey content was subjected to rigorous linguistic, comprehension, and cultural appropriateness testing to improve the validity of reports from many major linguistic and cultural groups. Nearly all CHIS 2001 respondents agreed to be re-contacted for special topical "follow-back" studies.

Sampling

In each selected household, an adult aged 18 years or older was randomly chosen to participate in the adult interview. If the adult respondent was the parent or guardian of one or more children under age 18 in the household, one child age 0-11 years and one adolescent age 12-17 years were selected to be in the survey.

Survey of Young Children

This report provides results for the 4,733 children age 0-5 years, weighted to the population of young children in California. The adult who was most knowledgeable about the selected child was administered the child questionnaire. In most but not all interviews (about 90%), the most knowledgeable adult who completed the interview about the child was also the parent who completed the adult interview. About 37.4% of parent respondents were fathers while 60.9% were mothers. Because of children's rapid development in early childhood and varied needs by age, this report presents child health and well being indicators in relationship to potential First 5 school readiness measures for infants (less than 1 year), toddlers (1-2 years), children of preschool age (3-4 years), and children age 5 years. Exhibit 3 shows the distribution of the sample weighted to the California population.

Area of Residence

CHIS 2001 shows that the largest proportion of young children in California live in urban areas. Another 19.6% are in neighboring, semi-urban "second cities". About one-quarter live in suburban towns. About 7.5% of young children are in small towns, while the smallest percentage (4.9%) live in rural areas.

Family Structure

About 72% of young children in California live with married parents. Another 10% are in households with one parent living with a partner. About 9% of children's parents are widowed, divorced or separated while 9% have never been married. In total, 18% of children age 0-5 years live in single parent households. This is lower than the national percentage where 26% are in single parent families.[2]

2 Family Structure, ChildTrends Data Bank, http://www.childtrendsdatabank.org/demo/family/59FamilyStructure.htm

EXHIBIT 3 – CHIS 2001 SAMPLE, CHARACTERISTICS OF CHILDREN AGE 0-5 YEARS CALIFORNIA 2001

	%	(95% RANGE)	TOTAL YOUNG CHILDREN (AGE 0-5)
AGE			
< 12 MONTHS	15.6	(14.3-17.0)	470,000
12-23 MONTHS	16.8	(15.4-18.2)	505,000
24-35 MONTHS	15.8	(14.5-17.2)	475,000
36-47 MONTHS	16.1	(14.7-17.5)	483,000
48-59 MONTHS	17.5	(16.0-19.0)	525,000
60-71 MONTHS	18.1	(16.7-19.6)	544,000
RACE/ETHNICITY			
NON-LATINO WHITE	42.1	(40.3-43.8)	1,264,000
LATINO	39.7	(37.8-41.6)	1,191,000
AFRICAN-AMERICAN	5.6	(4.7-6.5)	168,000
ASIAN	9.8	(8.7-10.8)	293,000
PACIFIC ISLANDER	0.3	(0.13-0.45)	9,000
AMERICAN INDIAN/ALASKA NATIVE	0.3	(0.2-0.4)	10,000
OTHER/MULTIRACIAL	2.3	(1.8-2.8)	69,000
EDUCATION OF MOTHER			
LESS THAN HIGH SCHOOL	23.2	(21.4-25.0)	647,000
HIGH SCHOOL DIPLOMA	23.8	(22.1-25.4)	662,000
SOME COLLEGE	14.0	(12.8-15.3)	391,000
COLLEGE GRADUATE OR HIGHER	39.0	(37.2-40.8)	1,087,000
MARITAL STATUS			
MARRIED	71.8	(70.1-73.9)	2,139,000
LIVING WITH PARTNER	9.7	(8.5-10.9)	289,000
SEPARATED	4.3	(3.4-5.3)	128,000
DIVORCED	4.2	(3.4-5.0)	124,000
WIDOWED	0.6	(0.3-1.0)	19,000
NEVER MARRIED	9.1	(7.8-10.5)	271,000
INCOME			
LESS THAN 100% FPL	23.3	(21.5-25.2)	701,000
100-199% FPL	23.6	(22.0-25.2)	709,000
200-299% FPL	14.5	(13.3-15.7)	436,000
300% FPL OR ABOVE	38.5	(36.8-40.2)	1,157,000

continued on next page

EXHIBIT 3 – CHIS 2001 SAMPLE, CHARACTERISTICS OF CHILDREN AGE 0-5 YEARS CALIFORNIA 2001 (CONTINUED)

	%	(95% RANGE)	TOTAL YOUNG CHILDREN (AGE 0-5)
WORKING HOURS (OF FATHERS)*			
NOT WORKING	6.6	(5.0-8.1)	73,000
UP TO 20 HOURS	1.1	(0.5-1.7)	12,000
20-40 HOURS	46.1	(43.1-49.1)	511,000
MORE THAN 40 HOURS	46.2	(43.3-49.2)	513,000
WORKING HOURS (OF MOTHERS)**			
NOT WORKING	48.5	(46.0-51.0)	892,000
UP TO 20 HOURS	4.8	(3.9-5.7)	88,000
20-40 HOURS	38.3	(35.9-40.6)	704,000
MORE THAN 40 HOURS	8.5	(7.3-9.6)	155,000
CITIZENSHIP STATUS			
CHILD AND BOTH PARENTS U.S. BORN CITIZENS	48.9	(47.0-50.7)	1,453,000
CHILD CITIZEN, PARENT NATURALIZED CITIZEN	21.5	(19.9-23.0)	639,000
CHILD CITIZEN, PARENT NONCITIZEN WITH GREEN CARD	16.0	(14.6-17.6)	478,000
CHILD CITIZEN, PARENT NONCITIZEN WITHOUT GREEN CARD	11.1	(9.7-12.5)	330,000
CHILD IS NONCITIZEN	2.5	(1.9-3.1)	74,000
PARENT ENGLISH PROFICIENCY			
SPEAKS ENGLISH WELL OR VERY WELL	67.0	(63.9-70.0)	2,010,000
SPEAKS ENGLISH NOT AT ALL OR NOT WELL	33.0	(30.0-36.1)	992,000
AREA OF RESIDENCE			
URBAN	41.8	(40.1-43.6)	1,255,000
SECOND CITY (SEMI-URBAN)	19.6	(18.4-20.8)	587,000
SUBURBAN	26.2	(24.5-27.8)	784,000
SMALL TOWN	7.5	(6.7-8.4)	226,000
RURAL	4.9	(4.3-5.4)	146,000

* Information for subpopulation of children whose father completed the child interview

** Information for subpopulation of children whose mother completed the child interview

Family Income

Family income is a key indicator of the overall well-being of a child, as material resources are needed for the care and support of young children. Young children in poverty are at risk for lower cognitive abilities and lower performance in school.

CHIS 2001 shows that about 23.3% of children age 0-5 years live in households with income below 100% of the federal poverty level (FPL). About 23.6% live in households between 100-200% of the FPL, 14.5% live in households between 200-300% FPL, and 38.5% live in households with income of 300% FPL or greater. A larger proportion of young children in California are in households with income below the FPL, than are children nationally

Education and Employment

Half of the mothers of young children (47%) have only a high school education/high school equivalent, or less than a high school education. About 23.2% have less than a high school education.

An important measure of the potential of young children to move out of poverty is secure parental employment. Most fathers and about half of mothers are working. About 6.1% of fathers and 45.3% of mothers are not working. Most working fathers report working 20-40 hours (46.1%) or more than 40 hours (46.2%) during the previous week. About 38.3% of mothers work 20-40 hours weekly. Fewer working mothers (8.4%) than working fathers work more than 40 hours per week.

National data show that the percentage of children in U.S. households where both parents or the only resident parent works increased to 68% in 2000. Nationally, labor force participation for single-parent, maternal-headed families has increased to 79%.[3]

Parents' English Language Ability and Citizenship Status

About two-thirds of parents of young children speak English well. About one-third (33%) report low English proficiency and speak English either not at all, or not very well.

About 48.9% of young children are U.S. citizens with U.S. born parents. About 21.5% are citizens with a naturalized parent. Another 27.1% have a non-citizen parent with or without a green card. Only 2.5% of young children are noncitizens.

3 Trends in the Well-Being of America's Children and Youth 2001, Office of the Assistant Secretary for Planning and Evaluation, U.S. DHHS, http://aspe.hhs.gov/hsp/01trends/index.htm

The World Health Organization defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."[4] A comprehensive view of health is increasingly important as organizations and agencies at the state and local levels tackle the challenges of optimizing young children's development and preparing them to enter school ready to learn. A child's health (including physical, mental, developmental, social and emotional health) is one of the fundamental building blocks of any school readiness program. All sections in this report build upon the general concepts of health and well-being.

Health Status

A child's health can be measured many ways. Overall health status is a good indicator of the child's ability to participate in activities that contribute to development of physical and social skills, learning, and ultimately success in school. Parent rating of overall child health status is an important indicator because it not only describes the child's health, but also the parental perception of the child. Ratings of health as "excellent," "very good," "good," "fair," and "poor" have been used as measures of child well being. In national data, this single rating correlates with the prevalence of acute and chronic medical, mental health, and developmental conditions. Consistent with common usage, this report uses parent ratings of excellent and very good health to indicate that a child is doing well and developmentally "flourishing". Parent reports of fair and poor health suggest that the child has compromised health and well-being.

CHIS 2001 shows that in California, most children (75%) age 0-5 years are in excellent or very good health. Good health status is reported for 18.4% of children and a small proportion of children (6.6%) are in fair or poor health. National data show that overall, health status declines in older children because the proportion of children in fair or poor health increases as children age. Reported health status of young children in California is lower than health status of young children nationally, where about 85% of children age 0-5 years are reported to be in very good or excellent health.[5, 6]

Health Status and Family Income

Exhibit 4 shows substantial differences in health status by household income. There is a pronounced gradient in health status rating across income levels, with the proportion of children rated in excellent or very good health increasing by 8 to 15 percentage points for each increment in family income. Conversely, the proportion of children in only fair or poor health falls from a rate of 15% to 2% between the lowest and the highest income children.

Health Status and Race/Ethnicity

Fewer Latino children are reported to be in excellent or very good health (59.3%) compared to children in other racial/ethnic groups. The proportion of Latino children in excellent or very good health is lower than all other races, including African American (77.4%), Asian/Pacific Islander (75.8%) and Non-Latino White (89%) children. Exhibit 5 shows that these significant racial/ethnic disparities in health status of young children are seen at every income level, although these disparities are lowest among the highest income children. There are greater disparities in health between Latino and Non-Latino White children in households with income less than 100% FPL than between Latino and Non-Latino White children in households with income of 300% FPL or greater.

4 Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.

5 Federal Interagency Forum on Child and Family Statistics, *America's Children: Key National Indicators of Well-Being, 2002*. Washington, DC: U.S. Government Printing Office.

6 Halfon N, Olson L, Inkelas M, et al. Summary Statistics from the National Survey of Early Childhood Health, 2000. National Center for Health Statistics.

Racial and Ethnic Disparities in Child Health Status

Measures of health are important, not only because health is important in its own right, but because it is an important determinant of school readiness, school performance, and the potential for life long learning. Research on disparities in children's health status shows that many disparities come from higher levels of risk, coupled with lower levels of "protective factors" such as social support and parent-child reading as a development-promoting activity that can reduce the impact of risk factors. In addition, higher levels of risk are often associated with poorer access to needed health care. A growing body of research also shows that disparities in health and development that begin early in life and are not sufficiently addressed are likely to increase as the child grows.

CHIS 2001 provides three important measures of the health of young children. They include a global measure of parent-reported health status; the prevalence and impact of childhood asthma, the most common chronic health condition in childhood (other than dental caries); and rates of child disability. While nearly three-quarters of all children in California are in excellent or very good health, there are substantial differences across racial and ethnic groups. Nearly 90% of Non-Latino White children are reported in excellent or very good health compared to only 77% of African-American, 76% of Asian/Pacific Islander, and 59% of Latino children. Much of this difference in health status appears to be associated with the negative impact of low family income. The gap in excellent or very good health between Non-Latino White and Latino children declines from 30 percentage points for children in low-income families to only six percentage points for families above 300% of the FPL.

Racial/ethnic disparities in health are associated with other social determinants of health. Children in poorer health are disproportionately in lower income families. Children in these families have other risks to development including fewer health promoting behaviors, lower participation in preschool and structured child care, greater food insecurity, and other hardships that arise from the struggle to maintain adequate resources to support a family. When a child is sick, access to medical care plays an important role in obtaining treatment for an acute illness as well as managing chronic conditions such as asthma. High quality primary care may also benefit children and families by encouraging health promoting behaviors and steps to prevent childhood injury. Yet children at risk for poorer health status are also less likely to have good access to health care. For example, more young Latino children than children in other racial/ethnic groups have delayed care.

CHIS 2001 also shows that the burden of chronic illness is not borne equally by children in different racial/ethnic groups. Young African-American children have more than double the reported rates of disability (10%) than Non-Latino White children (4%), Latino children (3%), and Asian/Pacific-Islander children (2%). Similar disparities exist for asthma. Asthma rates are twice as high among young African-American children as among children in other racial/ethnic groups.

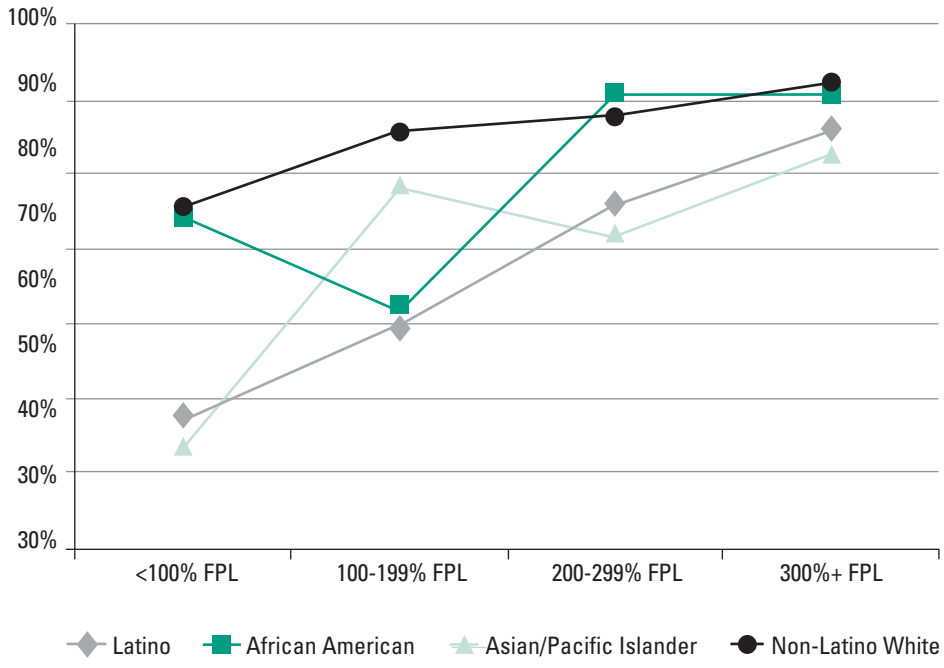
Eliminating racial and ethnic disparities in the health of California's children will require attention to both social and medical care determinants of health. Because race/ethnicity and low-income place children at risk for poorer access to health care, promoting high quality primary care for all children is essential for reducing these disparities.

EXHIBIT 4 – HEALTH STATUS BY POVERTY LEVEL AND RACE/ETHNICITY, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001

	EXCELLENT OR VERY GOOD	GOOD	FAIR OR POOR	TOTAL
INCOME				
LESS THAN 100% FPL	53.4%	31.3%	15.3%	100%
100-199% FPL	68.6%	23.0%	8.4%	100%
200-299% FPL	81.6%	15.8%	2.6%	100%
300% FPL AND ABOVE	89.7%	8.6%	1.7%	100%
ETHNICITY				
NON-LATINO WHITE	89.0%	9.1%	1.9%	100%
LATINO	59.3%	29.0%	11.7%	100%
AFRICAN-AMERICAN	77.4%	15.8%	6.8%	100%
ASIAN/PACIFIC ISLANDER	75.8%	18.1%	6.1%	100%
AMERICAN INDIAN/ ALASKA NATIVE	78.2%	17.3%	4.5%	
OTHER	82.4%	12.2%	5.4%	100%

Tests of the association of race/ethnicity and income with health status are statistically significant ($p<0.05$) (chi square).

EXHIBIT 5 – CHILDREN IN EXCELLENT OR VERY GOOD HEALTH BY POVERTY LEVEL, BY RACE/ETHNICITY, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001

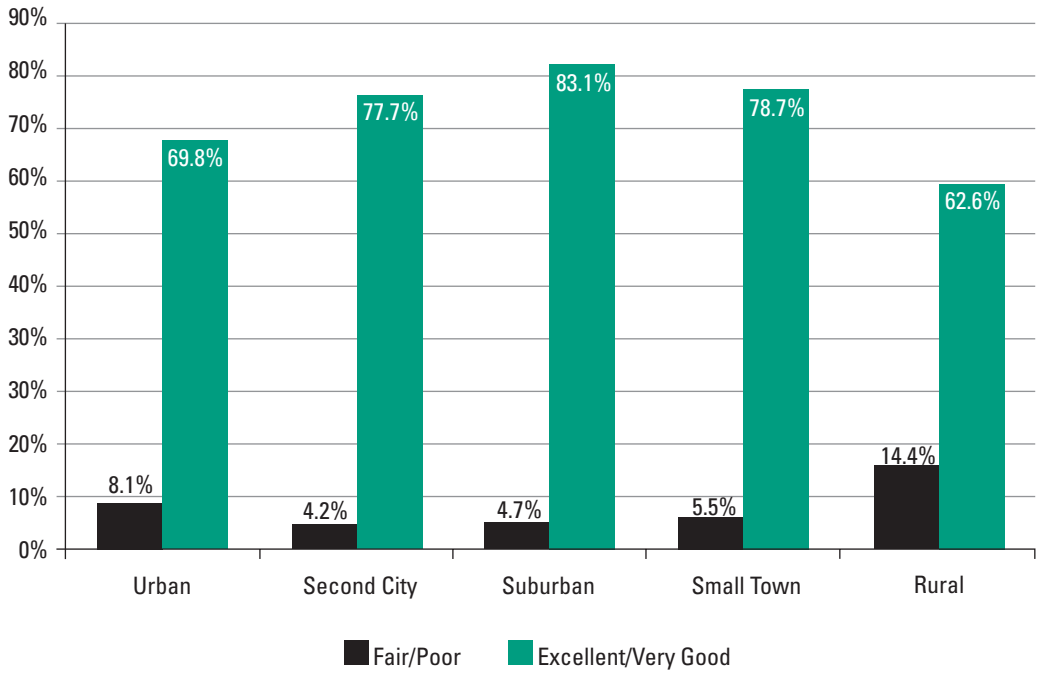


Tests of the association of race/ethnicity and health status are statistically significant at all income levels ($p<0.05$) (chi square).

Health Status and Area of Residence

Children in urban areas and in the most rural areas of California have the poorest reported health status among geographic areas in the state (Exhibit 6). Only about 69.8% of children in urban cities and 62.6% of children in rural California are in excellent or very good health. More children in second cities (semi-urban areas) (77.7%), suburban areas (83.1%), and small towns (78.7%) are in excellent or very good health compared to urban and rural children. These disparities result from children in urban and in rural areas having greater exposure to health risks. Children in rural areas may be adjacent to large farms with dust and pesticides. The fact that children in both rural and urban areas have experienced the greatest increase in asthma rates nationally points to environmental exposures as a contributing factor.[7] In addition to these environmental risks, children in urban and rural areas are more often in low-income households with poorer housing conditions and other social and family risks.

EXHIBIT 6 – HEALTH STATUS BY AREA OF RESIDENCE, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001



Tests of the association of race/ethnicity and health status are statistically significant at all income levels ($p<0.05$) (chi square).

7 Akinbami L, Schoendorf K. (2002) Trends in Childhood Asthma: Prevalence, Health Care Utilization and Mortality. *Pediatrics*; 100(2 Pt.1): 315-22.

Summary

In summary, CHIS 2001 shows lower overall health status of California's young children compared to children nationally. Latino children are reported in poorer health than other children. There are gradients in health across income levels, with racial/ethnic disparities diminishing only among the highest income children. Children in urban and in rural areas of California have poorer health than children in suburban areas and towns.

There are multiple causes for lower reported health among subgroups of children that range from prenatal exposures to greater burden of health risks and diseases leading to impairments. Greater access to quality health care might reduce some of these disparities in health status. Reduced exposure to poor air quality and environmental factors in urban and rural areas could also reduce disparities. The burden of poor health status clearly falls on socio-economically disadvantaged children. If this burden is not reduced, lower-income children will continue to be at a disadvantage compared to higher income children, due to the strong influence of health status on children's school readiness and school achievement.

Activity Limitations/Disabilities and Chronic Illness

Age-appropriate activities for young children include play, exploration, learning, and for many children, attending child care or preschool. A child who is unable to participate in these types of activities will miss early opportunities for healthy development-promoting experiences. In addition, young children with chronic diseases, or even frequent acute illnesses, cannot take full advantage of even the best learning and development environments if they are unable to participate in normal activities. Limitations caused by physical conditions (such as asthma or cerebral palsy) or behavioral or mental health conditions (such as attention deficit disorder or a learning disability) can impair normal development.

Limitations in Activity (Disability)

Activity limitation is a measure that was instituted as part of the National Center for Health Statistics, National Health Interview Survey in the 1960s, and continues to be an important indicator of children with chronic and debilitating health conditions, and developmental disabilities. It identifies children who have greater than normal needs for ongoing medical treatment and rehabilitation services. A new federal definition of children with special health care needs (CSHCN) includes not only children with disabilities, but also children who do not have a disability, but have chronic or mental health conditions and need more health services than usual. This more expansive definition of special health care needs was recently fielded for the first time and shows that about 10.2% of children in California and 12.8% nationally have a chronic condition.[8]

Parent reports of activity limitation (disability) are usually low in the first years of life and increase as children age. In other population-based studies, there is usually a significant increase in reporting at the time of school entry, since the challenges of school reveal previously unrecognized disabilities in children. There is also research that shows neither the health care system nor parents recognize many children with disabilities. If recognized earlier they could receive important and useful interventions. Therefore, in interpreting parent-reported assessment of early childhood activity limitations, it is likely that these figures represent an underreporting of the true prevalence of disability.

CHIS 2001 shows that approximately 3.7% of California children age 0-5 years have a physical, behavioral, or mental condition that limits or prevents them from participating in age-appropriate childhood activities.[9] This rate is similar to national estimates of 3% of children younger than age 5 having a chronic condition that limits normal activity.[10] It is not surprising that relatively few children have disabilities because this measure identifies a more severely impaired group of children and because of likely underreporting.

Disability is more common among preschoolers than toddlers. Only 2.9% of children age 1-2 years have an activity limiting condition, compared to 5% of children 3 to 4 years of age, and 4.8% of children age five.

8 Inkelas M. Access to Health Care for California's Children with Special Health Care Needs - Chartbook. Medi-Cal Policy Institute. Oakland: 2003 (Draft).

9 Limitations in usual childhood activity may be caused by time-limited, acute problems such as fractures, in addition to longer term, chronic conditions. For those children identified with an activity limitation, CHIS 2001 asked parents to identify the type of condition (physical, mental or emotional problem) that affects the child, as well as the specific condition from a list of the most common chronic conditions.

10 Federal Interagency Forum on Child and Family Statistics, *America's Children: Key National Indicators of Well-Being, 2002*. Washington, DC: U.S. Government Printing Office.

Disparities in Childhood Disability

About 3.7% of young children in California have a disability that limits the kind of play and interactions they have with other children and adults. This parent-reported rate of disability in California is similar to what has been found in national surveys for children age 0-5 years. What these national surveys also show is that when children enter kindergarten or first grade, the rates of disability nearly double, rising to approximately 6% after school entry. This near doubling in the rates of disability after school entry has been interpreted to mean that disability rates in children are actually higher than parents report. Upon school entry, many children who previously had unrecognized disabilities are identified, based on the demands for performance that come with school.

The CHIS 2001 data also show that children placed in a preschool setting prior to the age of five have a trend toward increased disability rates relative to their peers. The logic here is the same, suggesting that many young children have unrecognized disabilities that only become evident once they start school. The significance of this finding is that many children with disabilities are going unrecognized. Because these children are not identified, they will not benefit from early intervention. Such interventions could improve the long-term "developmental trajectories" of these children and further support their capacities for learning. What are the implications of these CHIS 2001 findings on disability for children, their parents, and for efforts to promote school readiness?

Not only are parents not identifying children with potential disabilities, but data from other studies suggest that children's health care providers probably have their screening "radar" set at too high a level. The routine screening for developmental disabilities that is supposed to take place at preventive well-child visits is not detecting all delays and disabilities in young children. This represents an important "missed opportunity" for detection, early intervention, and treatment that they need. Because nearly all young children see physicians at multiple points during the first five years of life, there are ample opportunities for children to receive appropriate periodic screenings for developmental, behavioral, and mental health problems. In fact, the recently proposed California Master Plan for Education recommends universal, periodic screenings for developmental, behavioral, and mental health problems to detect these problems early.

Yet there are many reasons why child health providers are not conducting developmental assessments. These include lack of training and expertise, lack of familiarity with appropriate and effective assessment tools, poor reimbursement for conducting these assessments, and physician concerns that there are often no places for treatment to refer children who are identified with problems.

These barriers to appropriate developmental health care are substantial, but are increasingly well understood and have been successfully addressed in other states. Several states have made it a priority to improve the assessment and referral of developmental disabilities, and have also sought to improve the connections between the child health delivery system and other community based early intervention programs for young children. For example, in Denver a program has been instituted in the public child health clinics to identify all children at risk for developmental, behavioral, or mental health problems and refer them to a specially designated assessment center. Connecticut has created a program called "Help Me Grow" that also helps coordinate assessment and interventions for child health providers.

As First 5 implements the universal preschool initiative in California, we can expect to see the rates of children with reported disabilities increase. At present, fewer than 25% of preschool age children are currently in a preschool setting. As more children move into formal preschool settings, rates of disability for young children may increase to levels seen for children after kindergarten entry.

Disability and Race/Ethnicity

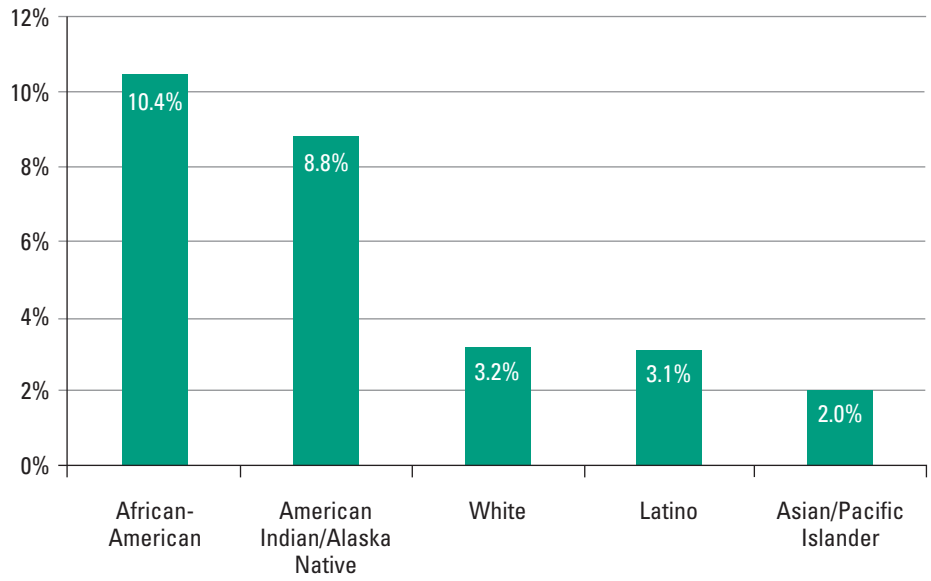
There are disparities in disability between young children of different races and ethnicities (Exhibit 7). Disability rates are higher for African-American children compared to Latino, Non-Latino White, and Asian/Pacific Islander children. The fact that Latino children have poorer reported health status but lower rates of disability shows that the burden of impairment falls more on African-American children.

The difference in rates of disability compared to the disparities and gradients in reported health status highlights the utility of multiple measures of child health, well-being and function in assessing children's readiness for school.

Disability and Family Income/Area of Residence

Rates of disability among young children are similar across income levels. The income gradient observed in children's reported health status (Exhibit 4) does not occur for disability. There is little difference in disability for young children based on area of residence. This highlights the difference between reported health status and activity limitations. Parents of children living in suburban areas report the highest rate of excellent and very good health status, yet do not differ in rate of disability. This discrepancy may underscore the difference in parent perception of what constitutes good health. It may also reflect the activity expectations for children in different environments, both socioeconomic and geographic.

EXHIBIT 7 – ACTIVITY LIMITATION BY RACE/ETHNICITY, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001



Tests of the association of race/ethnicity and disability are not statistically significant (p>0.05) (chi square).

Conditions Causing Disability

The majority of young children in California with an activity limitation (64%) have a physical condition. The most commonly reported condition is asthma, which affects 33% of children with a physical activity limitation. About one-quarter (23%) of young children with an activity limitation have a behavioral or mental health condition. Only a small percentage of children with an activity limitation (5%) have both a physical and mental condition.

Summary

Reported rates of disability are useful markers for those children who will have greater than normal health and developmental service needs. California parents report rates of disability in young children that are comparable to national rates. These rates probably represent a conservative estimate of true prevalence. The disparities among different racial/ethnic groups point to subgroups of children where greater preventive, treatment and rehabilitative interventions are warranted. Combined with better targeting of critical services to those who are known to be at risk, preventive care and health promoting activities must start before birth and continue throughout young children's lives. Disparities in reported rates of childhood disabilities demand a greater focus on the conditions and risk factors that contribute to disability in California's youngest children.

Asthma

Asthma is a disease that begins in early childhood. About 60-70% of those who ever have asthma develop the disease before their fifth birthday. Asthma is the most common chronic childhood illness among children in the United States and a cause of increasing disability.[11] Nationally, the prevalence of asthma has been rising dramatically over the last 20 years. This is substantiated by a 170% increase in asthma prevalence between 1980 and 1996 for children less than four years old.[12] Asthma can be controlled with adequate medical management. When poorly controlled, asthma influences children's general health and well being, their ability to do normal childhood activities, and ultimately their functional level in school.[13] Uncontrolled asthma is one of the leading causes of school absence.

Prevalence of Asthma

CHIS 2001 shows that about 10% of California children age 1-5 years have ever been diagnosed with asthma by a doctor. Somewhat fewer young children (3.7%) have been diagnosed and also have monthly asthma symptoms. Age-specific rates are 4.2% for children 1-2 years, 3.6% for children 3-4 years, and 3.1% for children age five. The California rates are not directly comparable to national asthma prevalence for children age 0-4 years (4.4%) largely because the National Health Interview Survey (NHIS) reports the percentage of children ever diagnosed with asthma who had asthma episodes in the past year, and because the NHIS measure includes children under 12 months of age.[14]

Some studies suggest that asthma is in fact an under-diagnosed condition,[15, 16] particularly among inner-city children.[17] The actual prevalence of the disease might be even higher than what parents report. While CHIS and national figures are not exactly comparable due to small differences in measurement, asthma is clearly a problem for young children in California.

11 Newacheck P and Halfon N. (2000) Prevalence, Impact, and Trends in Childhood Disability Due to Asthma *Archives of Pediatric and Adolescent Medicine*, 154(3): 287-93.

12 Akinbami L, Schoendorf K. (2002) Trends in Childhood Asthma: Prevalence, Health Care Utilization and Mortality. *Pediatrics*; 100:315-22.

13 Newacheck P and Halfon N. (2000) Prevalence, Impact, and Trends in Childhood Disability Due to Asthma *Archives of Pediatric and Adolescent Medicine*, 154(3): 287-73.

14 Akinbami L, Schoendorf K. (2002)Trends in Childhood Asthma: Prevalence, Health Care Utilization, and Mortality *Pediatrics*; 110(2): 315-322.

15 Grant E, Daugherty S, Moy J, Nelson S, Piorkowski J, Weiss K, (1999) Prevalence and Burden of Illness for Asthma and Related Symptoms Among Kindergarteners in Chicago Public Schools. *Annals of Allergy, Asthma Immunology*; 83(2): 113-20.

16 Silver E, Crain E, Weiss K. (1998) Burden of Wheezing Illness among U.S. Children Reported by Parents Not to Have Asthma. *Journal of Asthma*; 35(5): 437-43.

17 Crain E, Weiss, Bjur P, Hersh M, Westbrook L, Stein R. (1994) An Estimate of the Prevalence of Asthma and Wheezing Among Inner-city Children. *Pediatrics*; 94(3): 356-62.

Disparities in Childhood Asthma

CHIS 2001 provides dramatic evidence of the growing burden that asthma places on young children in California, and especially on African-American children. One of every five African-American children suffers from asthma, with half of these children having symptoms at least monthly. The fact that 9.4% of all young African-American children have at least monthly asthma symptoms is likely due in part to poorer access to needed medical care, which impedes good treatment. Other factors include the home environment, since exposures in the home serve as triggers for asthma. Genetics and family history also play a role. Health care has a key role to play because children need not only an occasional doctor visit but regular, high-quality health care.

It is often assumed that providing children with access to health insurance like Medicaid or Healthy Families is all that is needed to guarantee that children have access to appropriate medications and services. CHIS 2001 data suggest, however, that while this might be necessary, it is not sufficient. About 48% of young children covered by Medi-Cal, and 31% with private insurance, have frequent symptoms. Among children with at least monthly symptoms, a larger percentage of children in Medi-Cal than with private insurance have physical activity limitations due to asthma. Only half of young children with asthma take medication to control it.

Even though we know how to treat asthma in children, CHIS 2001 shows that young Californians are not receiving the kind of health care they need. This is suggested by national data indicating that only about 20 to 40% of all children with asthma are getting appropriate treatment and medications called for by national guidelines. Young children with uncontrolled asthma have more difficulty doing things that help them grow and develop—playing games with other children, exercising, and not feeling impaired in their daily activities.

Improving quality of health care in the clinics and community health centers where many low-income children are treated is important. Identification and treatment of childhood asthma, therefore, needs to encompass both individual and community-wide population approaches where prevention strategies are targeted to the entire child population. The potential for implementing programs in schools and in school-readiness centers must also be considered, since there is growing evidence that school-based asthma treatment and prevention programs can result in fewer symptoms, better asthma control, and less school days missed due to the disease.

Asthma disproportionately affects African-American children, who are diagnosed at twice the rate of any other racial/ethnic group (Exhibit 8). One in five African-American children age 0-5 years has been diagnosed. This difference is due in part to home exposures, community environmental factors, and genetic differences, although all factors leading to this disparity are not completely understood. Children in rural areas are also more likely to be diagnosed with asthma. This may reflect asthma-exacerbating factors present in more rural settings, such as dust and exposure to chemicals used in agricultural industries. Increased asthma rates in urban and rural areas have been found nationally.[18]

The rate of asthma diagnosis is similar among insured children (both public and private) and uninsured children. For example, 8.4% of uninsured children have ever been diagnosed compared to 9.4% of children in Medi-Cal and 11.4% of children with employer-based insurance. As asthma generally takes more than one visit to diagnose, it is important to monitor disparities in

18 Weitzman M, Gortmaker SL, Sobol AM (1990). Racial, Social, and Environmental Risks for Childhood Asthma. *American Journal of Disease in Children*. 144 (11): 1189-1194.

EXHIBIT 8 – ASTHMA DIAGNOSIS AND FREQUENCY OF SYMPTOMS, CHILDREN AGE 1-5 YEARS, CALIFORNIA 2001

	DIAGNOSIS	SYMPTOMS AT LEAST MONTHLY AMONG CHILDREN DIAGNOSED
TOTAL	**10.0%**	**36.2%**
ETHNICITY		
AFRICAN-AMERICAN	20.4%	46.3%
LATINO	9.2%	37.7%
ASIAN	9.4%	31.9%
NON-LATINO WHITE	10.4%	33.8%
INCOME		
LESS THAN 100% FPL	8.7%	43.2%
100-199% FPL	11.7%	37.5%
200-299% FPL	13.9%	43.3%
300% FPL AND ABOVE	9.5%	27.5%
AREA OF RESIDENCE		
URBAN	9.2%	34.8%
SECOND CITY	10.2%	43.5%
SUBURBAN	11.9%	31.8%
SMALL TOWN	9.9%	25.5%
RURAL	15.7%	53.0%

Tests of the association of race/ethnicity and income with health status are statistically significant ($p<0.05$) (chi square).

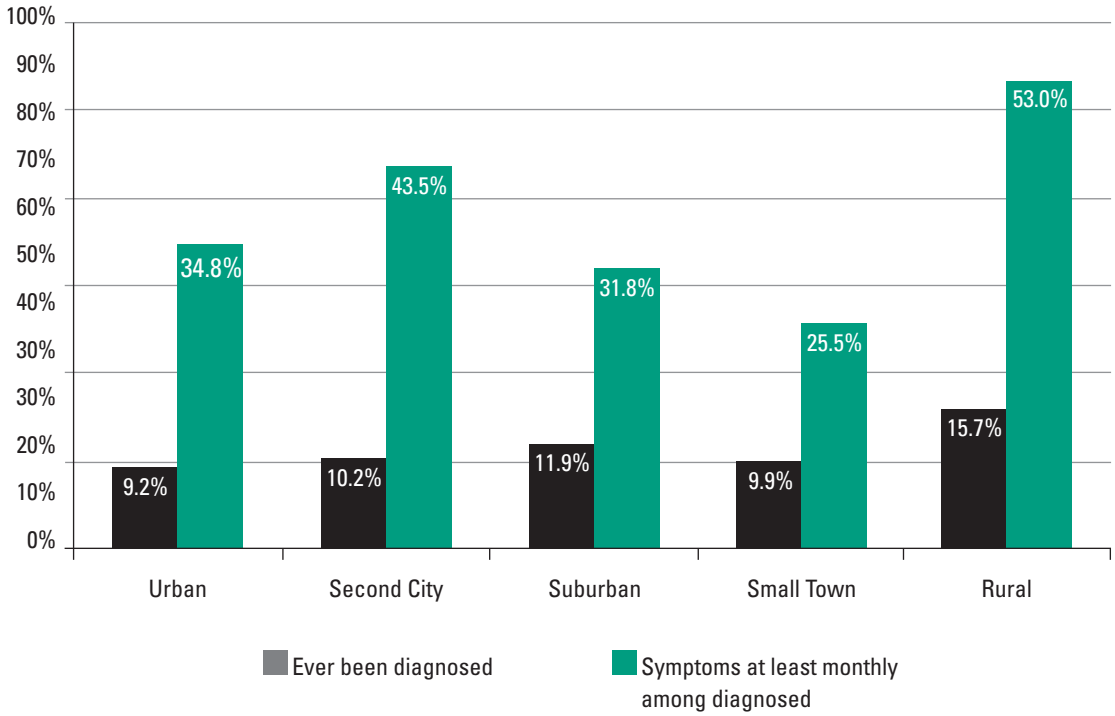
diagnosis rates that can stem from a difference in continuity with the same health care provider under different types of insurance. Children with less continuity of care may be under-diagnosed and therefore more symptomatic due to under-treatment.

Impact of Asthma

Control of asthma is reflected in the presence and frequency of symptoms. The more frequent the symptoms of asthma (i.e., coughing, wheezing, shortness of breath), the greater the disruption of normal daily activities and the greater consequences to young children's growth and development. Better control of symptoms can result from access to health care and quality health care received (i.e., continuity with a usual provider, after-hours care, and appropriate medications). Difficulties accessing quality medical care are part of the reason that not all children have good asthma control. Home and community environments, as well as genetic predisposition, also affect asthma symptoms.

About 36.2% of young children with asthma have symptoms at least once a month. Exhibit 8 shows that although young African-American children have twice the prevalence of diagnosis, the frequency of asthma symptoms is similar to children of other race/ethnicity. Still, nearly half of the African American children ever diagnosed with asthma have symptoms at least monthly. This means that 9.4% of young African American children suffer from asthma that affects them regularly compared to 3.5% of Non-Latino White, 3.4% of Latino, and 2.9% of Asian/Pacific Islander children. CHIS shows that diagnosis rates and the burden of asthma are no higher for rural residents than those in small towns and suburban areas (Exhibit 9), although sample size prevents small differences from being detected.

EXHIBIT 9 DIAGNOSED ASTHMA AND FREQUENT SYMPTOMS BY AREA OF RESIDENCE, CHILDREN AGE 1-5 YEARS, CALIFORNIA 2001



Tests of the association of area of residence with asthma diagnosis, and with asthma symptoms, are not statistically significant (chi square).

Limits to physical activity due to symptoms are another measure of asthma's impact. Among young children with at least monthly—or more frequent—asthma symptoms, 26.9% are limited by asthma at least some of the time, 31.6% are rarely limited by symptoms, and 41.6% report no physical limitation. African-American children have twice the rate of asthma diagnosis and have disease that is at least as severe as that of Latino and Non-Latino White children, as shown not only by frequency of symptoms but also by limited physical activity due to asthma (Exhibit 10).

There are disparities in physical activity limitations caused by symptomatic asthma according to the child's income level. Young children from the poorest families are more likely to "almost always" or "sometimes" have their activity limited due to asthma (41.3%) than children at 100-199% FPL (21.7%) and children with household income at 300% FPL or above (22.5%).

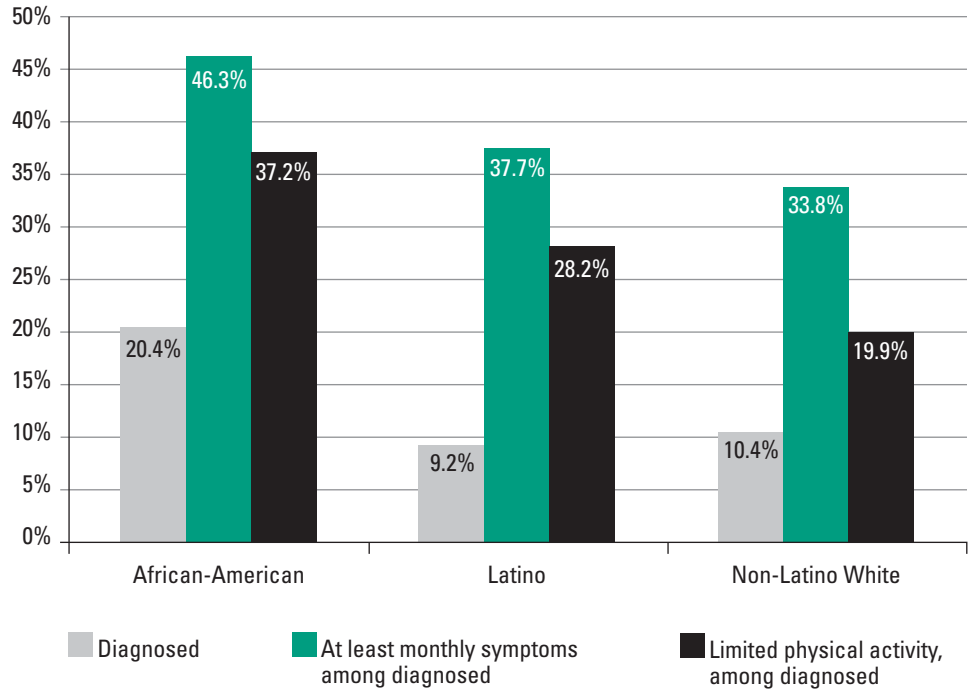
Management of Asthma

Most cases of mild to moderate asthma can be controlled with proper use of medications, avoidance of environmental allergens, adherence to medical treatment plans, and regular physician visits. Health insurance provides potential access to the ongoing medical management that is necessary for appropriate control of symptoms.

Among children age 1-5 years ever diagnosed with asthma, 52% currently take medication. There are no statistical differences in medication use between uninsured children (of whom 38% take medication) and children with Medi-Cal (52.3%) or employment-based insurance (52.4%) (Exhibit 11). Rates of medication use suggest under-utilization of effective medications among young children in all types of insurance.

There are "missed opportunities" for the use of medication even among children with frequent symptoms. Not all children with frequent symptoms or activity

EXHIBIT 10 – DIAGNOSED ASTHMA, FREQUENT SYMPTOMS, AND LIMITED PHYSICAL ACTIVITY BY RACE/ETHNICITY, CHILDREN AGE 1-5 YEARS, CALIFORNIA 2001



Tests of the association of race/ethnicity with diagnosis are statistically significant ($p<0.05$) (chi square).Tests of the association of race/ethnicity with symptoms and with activity limitations are not statistically significant.

limitations are using medication, although most children with monthly symptoms should be taking medication. About 76.7% of children age 1-5 years with at least monthly asthma symptoms take medication. Children with frequent symptoms who are not using medication may be underutilizing medications that could improve their functioning.

Among children ever diagnosed with asthma, there is a difference in activity limitations between children with different insurance types (Exhibit 11). Among those diagnosed with asthma, a larger percentage of children in Medi-Cal than with employer-based insurance have physical activity limitations. Exhibit 11 shows that children in Medi-Cal suffer from symptoms at a similar rate as children with employment-based insurance. Although use of medication varies little by insurance, children in Medi-Cal are more likely than children with employment-based insurance to suffer limitations in physical activity due to asthma (34.9% vs. 21.4%). This suggests that fewer children in Medi-Cal are receiving the medications they need, that compliance with prescribed medication is lower, or that housing conditions and environmental factors are causing a greater burden of illness.

Although African-Americans have the highest asthma diagnosis rate, there are few differences by race/ethnicity in children's symptoms, use of medication, or physical activity limitations. Among children with at least monthly symptoms, a similar proportion of Non-LatinoWhite, Latino, and African-American children are taking medications.

Better asthma management is needed for young children in both Medi-Cal and private insurance, and for children in all racial/ethnic groups, given that not all symptomatic children are taking medication and that many of them are limited in their physical activity, at least some of the time, due to asthma.

Other useful measures of access to health care include emergency department visits and hospital stays for asthma. CHIS data show that among young children with asthma, about 22.3% (59,000 children) have one or more emergency department visits during the year due to asthma. About

one-third (33.6%) of toddlers age 1-2 years with asthma have at least one emergency department visit due to asthma, with rates slightly lower for children of preschool age (19.2%) and for children age five years (11.5%). Fewer children with asthma have hospitalizations due to their disease. About 4.1% (11,000 children) have a hospitalization due to their asthma during the year.

Summary

The prevalence of asthma is rising among young children nationally. The rates of asthma diagnosis, symptoms, and limitations to physical activity identified in CHIS show that many young children in California are in need of diagnosis, treatment and preventive services. An astonishing one in five young African-American children in California have been diagnosed with asthma. The impact of asthma differs for children with different insurance coverage and disproportionately burdens children in Medi-Cal. Not all children with asthma are taking medication and managing their symptoms so that physical activity limitations can be avoided. The disparity in the burden of asthma shows the need to improve access and quality of health care to curb the development and exacerbation of asthma in very young children. Poor asthma management often results in costly services such as emergency department visits and hospitalizations. Because many of the consequences of asthma are preventable, improving access to health care is a high priority for children with this disease. Bolstering the quality of care and self-management support services for children enrolled in public insurance programs could reduce these disparities.

Activity limitations due to asthma can be a considerable barrier to a young child's development. Given the impact of asthma, and the potential impact of other chronic conditions on child health and development, it will be important to monitor changes in asthma prevalence, severity, and access to care as a measure of how well the health care system is responding to the health care needs of young children. This is important not just for monitoring the asthma and asthma care, but because the access and quality of asthma care is potentially an important indicator of the access and quality of health care for other less common chronic health conditions.

EXHIBIT 11 – ASTHMA DIAGNOSIS, SYMPTOMS, MEDICATION USE, AND IMPACT BY HEALTH INSURANCE TYPE AND RACE/ETHNICITY, CHILDREN AGE 1-5 YEARS, CALIFORNIA 2001

		AMONG CHILDREN DIAGNOSED		
	ASTHMA DIAGNOSIS	ASTHMA SYMPTOMS AT LEAST MONTHLY	TAKING MEDICATION FOR ASTHMA	ACTIVITY LIMITED DUE TO ASTHMA
MEDI-CAL	9.4%	47.6%	52.3%	34.9%
EMPLOYMENT-BASED	11.4%	31.0%	52.4%	21.4%
LATINO	9.2%	37.7%	49.5%	28.2%
AFRICAN AMERICAN	20.4%	46.3%	66.8%	37.2%
NON-LATINO WHITE	10.4%	33.8%	47.1%	19.9%

Tests of the association of health insurance with diagnosis, symptoms, and medication use are not statistically significant while the association of health insurance and activity limitation is statistically significant ($p<0.05$) (chi square). Tests of the association of race/ethnicity with diagnosis is statistically significant ($p<0.05$) while the associations of race/ethnicity and symptoms, medication use, and activity limitations are not statistically significant.

Selected insurance and race/ethnicity categories are shown due to small sample size.

Access to health care is essential for the healthy development of children. Without the ability to easily obtain health care services there is the potential for health problems to go undiagnosed and untreated. Such problems impair a child's capacity to participate in developmentally appropriate activities. This reduces a child's chances to start school ready to learn.

Health Insurance Coverage

Health insurance coverage provides financial access to the range of health care that children need, including physical, mental, and developmental health services. Recent expansions of Medi-Cal and the Healthy Families program have substantially improved young children's financial access to health care.

About 6.8% of young children (or 202,000) in California are uninsured. Reflecting a national trend of eroding employer-sponsored insurance coverage, fewer than two-thirds of insured young children in California (57.1%) are covered by an employer-based plan. Publicly-funded insurance programs have filled some of the gap in employer-based coverage. Nearly one in every three insured young children are covered by a public insurance program. About 28% of young children have Medi-Cal coverage, and 4.1% are enrolled in Healthy Families.

Stability of Coverage: Gaps for Insured Children, and Periods of Coverage for Uninsured Children

Measuring current health insurance coverage does not provide the entire picture because it does not capture the stability of coverage. Continuous insurance coverage is an important determinant of continuity in health care. For some families, maintaining health coverage for a young child is difficult because eligibility fluctuates with changes in parental employment and income.

Among insured young children in California, 4.3% (about 124,000 children) lacked health coverage at some time in the past year. Though these gaps in insurance may ultimately be temporary for most young children, changes in coverage can disrupt ongoing services and cause the child to switch providers.[19] In total, 11% of young children are either uninsured or had a gap in health coverage in the past year. Exhibit 12 shows that five times as many children under 100% FPL (18.5%) as those 300% FPL and above (3.3%) are not covered or had any gap in coverage in the past year. Thus low-income children in California are not only more likely to be uninsured, but when insured they are more likely to have gaps in coverage.

Although increasing the number of children with private or public coverage options is an important goal in California, retaining children is just as important because uninsured children can enroll and then lose coverage. Retention of coverage once a child is signed up assures an ongoing relationship with a provider, which is important for health care continuity, quality of care, patient adherence to medical advice, and parent self-management of children's conditions, such as asthma. Retaining coverage for insured children is just as important as extending coverage to currently uninsured children. Children can lose private insurance coverage when their parents lose a job or change to an employer without benefits. Other children become

19 Kogan MD, Alexander GR, Teitelbaum MA, Jack BW, Kotelchuck M, Pappas G. The effect of gaps in health insurance on continuity of a regular source of care among preschool-aged children in the United States. *JAMA*; 274(18): 1429-35

Eligible for, but Not Enrolled in, Public Coverage

In 2001 there were 202,000 children age 0-5 years who were not insured. Yet most uninsured young children in California should not lack coverage, given that most are eligible for health insurance coverage through either Medi-Cal or the Healthy Families program. In California, children living in the lowest income families (from 0-133% FPL) are eligible for Medi-Cal, while children in families with incomes just above the poverty level (133-250% of FPL) are eligible for Healthy Families. Even though California has recently expanded public coverage, 80% of uninsured children age 0-5 years (158,000) are eligible but not enrolled. This includes children who did enroll but lost eligibility due to premiums or small income fluctuations, which is a "retention" problem.

Lacking health insurance creates several significant consequences for these children, their families and the health care system. Uninsured young children are more likely to receive their care in community clinics and public health centers and are less likely to have a regular health care provider, and therefore less likely to receive age-appropriate health education and guidance, or periodic assessments of development and behavior. National data show that parents of uninsured children are also less likely to receive counseling about psychosocial issues that influence the child's health and development. In addition to receiving poorer-quality health care, uninsured children must be cared for in overburdened public facilities and community health centers. The overall health care system also suffers since California is not receiving the federal matching dollars that are available if public coverage were extended to more uninsured children. In fact, California is sending money back to the federal government due to low enrollment in the Healthy Families program.

Despite a number of new outreach and educational efforts designed to stimulate enrollment, California's outreach efforts are still falling short. Data from CHIS 2001 make it clear that given the large number of children who are eligible but not enrolled in these public insurance programs, there is great need to not only to expand outreach and education efforts, but to consider other innovative ways to improve enrollment. CHIS 2001 shows that most parents of children who are eligible but not enrolled in these programs report not knowing about the program or didn't know that their child would qualify. Outreach efforts should be targeted to certain population groups and geographic locales. CHIS 2001 shows that among all children who are eligible for public insurance programs, there are racial/ethnic disparities in the percentage of children who enroll. This suggests that outreach efforts need to more effectively target Latino and Non-Latino White children in California and need to address their particular barriers to enrolling, through worksite education and other means.

California has recently begun several initiatives to increase enrollment of eligible children in Medi-Cal and Healthy Families. Parents have to jump through multiple hoops to enroll their children in public programs. The concept of "express lane" eligibility is one way of reducing the barriers to enrollment. Families often enroll in one public assistance program that has similar income eligibility as Medi-Cal or Healthy Families. Because so many young children can be found in the Women, Infants and Children (WIC) program and in Head Start, enrolling children in public insurance based on information from these other program applications could go a long way toward reducing the number of young uninsured children. While the "express lane" concept is being piloted in schools, budget cutbacks have scaled down a planned statewide "express lane" program for school-age children to limited pilot projects. For young children, linkages to the WIC program, preschools, and child care centers would create a parallel "express lane" process that could bring thousands of uninsured children into available programs.

Because many county First 5 commissions have identified expansions of health insurance or universal coverage as a programmatic and policy goal, many innovations in outreach, retention, and health care quality are likely to emerge, given the flexibility of First 5 to implement what works. A promising area for First 5 is to embed enhanced outreach, enrollment and retention efforts in other community based programs and community building efforts, such as school readiness centers. Linking enrollment and retention with other community-based services holds great promise for reducing the rate of uninsurance.

EXHIBIT 12 – STABILITY OF INSURANCE COVERAGE BY CHILD POVERTY LEVEL, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001

	CURRENTLY INSURED		CURRENTLY UNINSURED		
	A. COVERED DURING THE ENTIRE PAST 12 MONTHS	B. NOT COVERED AT ANY POINT DURING PAST 12 MONTHS	C. COVERED AT SOME POINT DURING PAST 12 MONTHS	D. NOT COVERED AT ANY POINT DURING PAST 12 MONTHS	E. TOTAL WITH ANY GAP IN COVERAGE (B+C+D)
TOTAL	**89.0%**	**4.2%**	**2.4%**	**4.3%**	**10.9%**
LESS THAN 100% FPL	81.6%	5.4%	3.7%	9.4%	18.5%
100-199% FPL	83.0%	6.1%	4.0%	6.9%	17.0%
200-299% FPL	90.6%	4.6%	2.7%	2.1%	9.4%
300%FPL AND ABOVE	96.7%	2.2%	0.6%	0.6%*	3.3 %

* This percentage is not reliable due to small sample size
Test of the association of health insurance coverage with income is statistically significant ($p<0.05$) (chi square).

uninsured after losing Medicaid or Healthy Families. This loss of coverage can result from burdensome re-enrollment processes, not paying premiums on time, or from small income fluctuations that cause parents to join the ranks of the "working poor" who do not qualify for public programs.

CHIS 2001 shows that one third (35.8%) of uninsured young children were covered by some form of insurance in the past year but then lost coverage. About 6.6% of young children are uninsured, with 2.4% covered at some point (Exhibit 12). About half of these children had Medi-Cal but lost it. Few of the children who had been insured and lost coverage had been in Healthy Families, although growth in Healthy Families enrollment may increase this rate, over time. Tracking this rate will show how well Healthy Families and other public insurance programs retain eligible children.

Exhibit 13 shows that coverage is least stable for Latino children. Non-citizen children are most likely to be uninsured or have a gap in coverage during the year. Gaps in coverage are more frequent in rural areas, where 20% of young children are uninsured or have a gap, than in suburban areas.

Disparities in Health Insurance Coverage

There are disparities in insurance coverage according to family income, race/ethnicity, and area of residence. Latino children and those in low-income families are less likely to have health insurance. There is a large gradient by income with a ten-fold difference between children in the highest and lowest income households. About one in ten children in families with incomes below the FPL and at 100-199% FPL, and one of every 100 children in higher income families (300% FPL and above) lack insurance.

Latino children are much more likely to be uninsured. About 11.9% of Latino children are uninsured compared to 3.5% of Non-Latino White, and a small percentage of African-American and Asian/Pacific Islander children. Latino and African-American children are more likely than Asian/Pacific Islander and Non-Latino White children to be covered by Medi-Cal (with 45.5%, 45.2%, 18.1%, and 11.6% covered, respectively). Among Non-Latino Whites, 77.1% of children are covered by health insurance obtained through an employer, compared to 69.3% of Asians/Pacific Islanders and only 33.9% of Latinos and 47.3% of African-Americans.

Children in urban and in very rural areas are more likely to be uninsured than children in suburban areas. Differences in average income, eligibility for public programs, and enrollment contribute to these rates.

EXHIBIT 13 – STABILITY OF INSURANCE COVERAGE BY CHILD RACE/ETHNICITY, CITIZENSHIP, AND AREA OF RESIDENCE, CALIFORNIA 2001

	COVERED DURING THE ENTIRE PAST 12 MONTHS	TOTAL WITH ANY GAP IN COVERAGE
RACE/ETHNICITY		
NON-LATINO WHITE	92.7%	7.3%
LATINO	83.0%	17.0%
AFRICAN-AMERICAN	95.3%	4.7%
ASIAN/PACIFIC ISLANDER	93.7%	6.3%
CITIZENSHIP STATUS		
CHILD AND BOTH PARENTS U.S. BORN CITIZENS	93.4%	6.6%
CHILD CITIZEN, PARENT NATURALIZED CITIZEN	91.4%	8.6%
CHILD CITIZEN, PARENT NONCITIZEN WITH GREEN CARD	82.6%	17.4%
CHILD CITIZEN, PARENT NONCITIZEN WITHOUT GREEN CARD	80.0%	20.0%
CHILD IS NONCITIZEN	63.5%	36.5%
AREA OF RESIDENCE		
URBAN	88.4%	11.6%
SECOND CITY	89.2%	10.8%
SUBURBAN	92.8%	7.2%
SMALL TOWN	86.0%	14.0%
RURAL	79.5%	20.5%

Tests of the association of health insurance coverage with race/ethnicity, citizenship, and area of residence, are statistically significant ($p<0.05$) (chi square).

Children Eligible for Medi-Cal and Healthy Families But Not Enrolled

Some low-income working families earn too much for their child to qualify for public insurance but also too little to purchase private coverage if their employer does not offer it. CHIS 2001 shows that most uninsured young children in California are eligible for public coverage. Nearly 80% of uninsured young children (or about 158,000) are eligible to enroll in the Medi-Cal or Healthy Families program. There are several reasons for this. Some parents do not know that their child is eligible for the program. Other parents may want to avoid assistance programs because of the welfare stigma that has been attached to these programs. Some parents of many Latino children fear that participation in these government-supported programs will adversely impact their immigration status or lead to deportation.[20] CHIS 2001 shows that based on reported income, family size, and child citizenship, about 59% of uninsured young children are actually eligible for Medi-Cal coverage, and 19% are eligible for Healthy Families. The remaining 22% are ineligible; 11% are not eligible due to incomes above eligibility thresholds, and 11% are not eligible because they are not citizens.

Parents give many different reasons for why the eligible child was not enrolled. CHIS 2001 shows that the two most common reasons for not enrolling in Medi-Cal are that parents did not know if the child was eligible or thought their income was too high to qualify. For the Healthy Families program, parents most commonly reported they did not know about the program. This speaks clearly to the need for greater parent outreach and education, and to

20 Barreto P, Bourque LB, Halfon N. 2003. Understanding the dynamics of enrollment in Medi-Cal and Healthy Families among low-income children accessing safety net providers. Los Angeles, CA: University of California, Los Angeles.

EXHIBIT 14 – INSURANCE COVERAGE AND TYPE BY FAMILY INCOME, RACE/ETHNICITY, GEOGRAPHY, AND CITIZENSHIP, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001

	UNINSURED	MEDI-CAL	HEALTHY FAMILIES	EMPLOYMENT -BASED	OTHER
LESS THAN 100% FPL	13.1%	73.5%	0%	11.4%	2.1%*
100-199% FPL	10.9%	32.9%	12.0%	40.1%	3.2%
200-299% FPL	4.8%	10.0%	7.5%	74.4%	3.4%
300% FPL AND ABOVE	1.1%	4.3%	0.4%	88.7%	5.5%
RACE/ETHNICITY					
NON-LATINO WHITE	3.5%	11.6%	1.9%	77.1%	6.0%
LATINO	11.9%	45.5%	5.7%	33.9%	2.9%
AFRICAN-AMERICAN	2.5%*	45.2%	3.4%*	47.3%	1.6%*
ASIAN/PACIFIC ISLANDER	2.6%*	18.1%	7.8%	69.3%	2.3%*
AREA OF RESIDENCE					
URBAN	8.0%	36.2%	5.4%	46.8%	3.6%
SECOND CITY	6.4%	25.2%	2.9%	61.8%	3.7%
SUBURBAN	3.7%	17.7%	2.5%	71.6%	4.6%
SMALL TOWN	8.8%	18.1%	4.5%	61.9%	6.8%
RURAL	10.4%	40.8%	5.6%	40.7%	2.6%*
CITIZENSHIP STATUS					
CHILD AND BOTH PARENTS U.S. BORN CITIZENS	2.9%	17.1%	2.3%	73.1%	4.5%
CHILD CITIZEN, PARENT NATURALIZED CITIZEN	4.9%	26.2%	5.6%	60.2%	3.2%
CHILD CITIZEN, PARENT NONCITIZEN WITH GREEN CARD	12.9%	36.3%	7.1%	39.8%	3.8%
CHILD CITIZEN, PARENT NONCITIZEN WITHOUT GREEN CARD	13.3%	61.9%	5.1%	16.2%	3.5%*
CHILD IS NON-CITIZEN	31.9%	32.9%	3.0%*	23.6%	2.2%*

* This percentage is not reliable due to small sample size
Tests of the association of type of health insurance coverage with income, race/ethnicity, area of residence, and citizenship status are statistically significant ($p<0.05$) (chi square).

consideration of processes, such as linking enrollment with WIC and other public programs that can potentially identify and enroll low-income children without large additional costs. Such "express lane" eligibility programs have already been launched in California schools based on free- and reduced-lunch eligibility.

Exhibit 15 shows that among uninsured young children, the majority under 200% FPL is eligible for Medi-Cal while the majority between 200-299% FPL is eligible for Healthy Families. Because of income-based eligibility criteria, uninsured children in the lowest income families are generally eligible for Medi-Cal while children in higher income families are generally eligible for Healthy Families. Children in families with incomes greater than 300% FPL are not eligible for either program, although Medi-Cal does extend coverage to a small number of children who have costly medical conditions.

Currently uninsured Latino and African-American children are more likely than Non-Latino Whites and Asians to be eligible but not enrolled in these public insurance programs. Among uninsured children, 83.3% of Latino and 66.7% of Non-Latino White children are eligible. Much of this difference is attributable to family income differences, but it also shows that Latinos may be less informed about these programs or encounter greater barriers to enrolling.

Given the large number of children who are eligible but not enrolled in these public insurance programs, there is a need to improve outreach and education efforts. Rates of

EXHIBIT 15 – ELIGIBILITY OF UNINSURED CHILDREN FOR MEDI-CAL AND HEALTHY FAMILIES PROGRAMS, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001

	ELIGIBLE FOR MEDI-CAL	ELIGIBLE FOR HEALTHY FAMILIES	NOT ELIGIBLE	TOTAL
LESS THAN 100% FPL	78.3%	3.8%*	17.9%	100%
100-199% FPL	59.9%	28.1%	12.0%*	100%
200-299% FPL	9.3%*	60.6%	30.1%	100%
300% FPL AND ABOVE	0%	0%	100%	100%
RACE/ETHNICITY				
NON-HISPANIC WHITE	42.3%	24.4%	33.3%	100%
LATINO	65.5%	17.8%	16.7%	100%
AFRICAN-AMERICAN	65.8%	10.4%*	23.8%*	100%
ASIAN/PACIFIC ISLANDER	30.9%*	8.5%*	60.6%	100%
AREA OF RESIDENCE				
URBAN	58.6%	18.3%	23.1%	100%
SECOND CITY	63.9%	13.6%	22.5%	100%
SUBURBAN	47.1%	31.7%	21.2%*	100%
SMALL TOWN	65.8%	17.5%*	16.7%*	100%
RURAL	69.1%	10.8%*	20.1%*	100%
CITIZENSHIP STATUS				
CHILD AND BOTH PARENTS U.S. BORN CITIZENS	49.5%	23.7%	26.8%	100%
CHILD CITIZEN, PARENT NATURALIZED CITIZEN	56.7%	28.4%	14.9%	100%
CHILD CITIZEN, PARENT NONCITIZEN WITH GREEN CARD	73.3%	17.2%	9.5%*	100%
CHILD CITIZEN, PARENT NONCITIZEN WITHOUT GREEN CARD	81.2%	16.9%*	1.8%*	100%
CHILD IS NON-CITIZEN	–	–	97.3%	100%

* This percentage is not reliable due to small sample size
Tests of the association of eligibility for health insurance with income, race/ethnicity, and citizenship are statistically significant ($p<0.05$) (chi square). The association of eligibility and area of residence is not statistically significant.

insurance "uptake" are another way of depicting which children are eligible but not enrolled in public coverage. Rates of "uptake" show that 17% of all Latino and 17% of Non-Latino White children who are eligible for Medi-Cal or Healthy Families are not enrolled, compared to 7% of Asian and 6% of African-American children who are eligible.

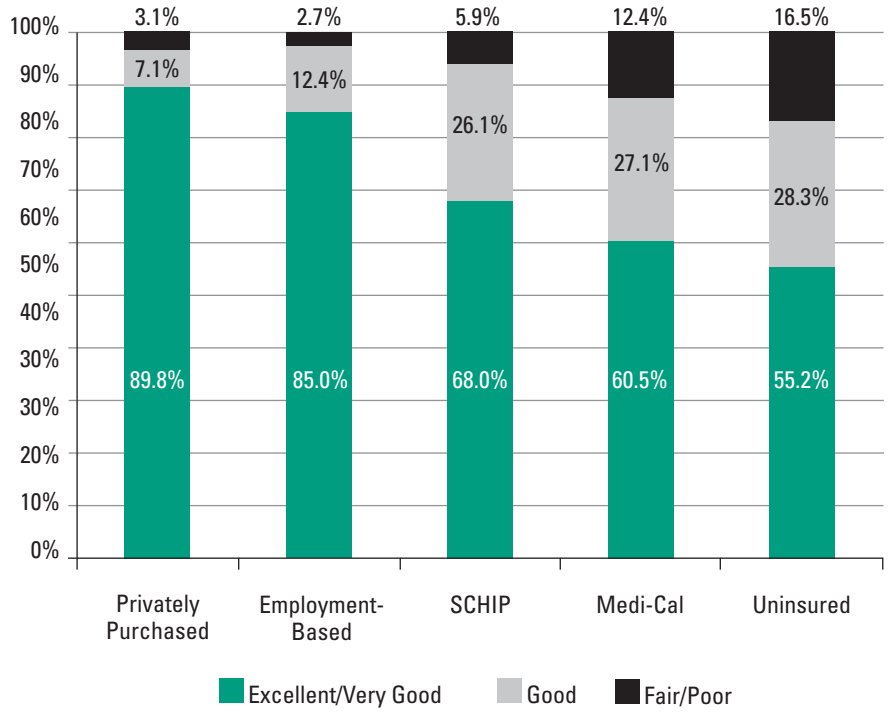
Health Status and Insurance

Exhibit 16 shows that fewer uninsured young children (55.2%) and children in Medi-Cal (60.5%) than children with employer-based insurance (85%) have excellent or very good health. These differences suggest that disparities in health outcomes may be related to disparities in the quality of health care. There is a role that improved access to health care can have in overcoming these disparities. The difference between children in Medi-Cal and children with employer-based insurance also demonstrates the persistent disparities between public and private types of insurance. Enrolling most uninsured but eligible young children into Medi-Cal and Healthy Families may not by itself produce substantial improvements in health status.

Summary

CHIS 2001 provides important new information on insurance coverage, continuity, and retention, which are critical issues for public insurance programs including

EXHIBIT 16 – HEALTH STATUS BY TYPE OF INSURANCE, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001



Test of the association of health insurance type and health status are statistically significant (p<0.05) (chi square).

uninsured young children in California are eligible for either Medi-Cal or Healthy Families. Outreach to get these children enrolled will not solve the problem, given that even among those children who do enroll, a sizable percentage lose coverage during the year. Retaining eligible children in public insurance programs is an important policy goal in California if the benefits of health coverage—having a usual source of care, reduced financial barriers, better access, and ultimately, improved health and well-being—are to be achieved for young children.

Usual Source of Health Care

Having a usual source of care is an important measure of health care access. It represents continuity in care and is the most fundamental component of the "medical home" concept promoted by the American Academy of Pediatrics (AAP). A continuous relationship with a provider and a place that the parent considers the child's usual source of care are important elements of the medical home. Continuity of care is an important precursor to the quality of care that young children receive.

Most young children in California (97.9%) have a usual source of care. This is nearly the same as the national rate (97%) from the National Health Interview Survey (NHIS) for children age 0-3 years.[21] CHIS 2001 shows that among children without a usual source, the most common reason given by the parents for not having a source of care is that the child is seldom or never sick.

The predominant health care setting of children in California is a physician's office. Among children with a usual source of care, 79.4% of parents report a physician's office or Health Maintence Organization (HMO) as the child's usual source and 20.2% report a community clinic. For young children, the setting of care remains a very important issue. There are unanswered questions about the quality and content of early childhood care in clinics where

21 Newacheck P, Hung YY, Hochstein M, Halfon N. (2000) Access to Health Care for Disadvantaged Young Children. *Journal of Early Intervention*; 25(1):1-11.

EXHIBIT 17 – USUAL SOURCE OF CARE BY POVERTY STATUS, RACE/ETHNICITY, GEOGRAPHIC SETTING AND INSURANCE STATUS, CALIFORNIA 2001

	MD OFFICE	CLINIC	NO USUAL SOURCE	TOTAL
LESS THAN 100% FPL	55.1%	42.0%	2.9%	100%
100-199% FPL	68.9%	27.3%	3.8%	100%
200-299% FPL	86.7%	11.4%	1.9%*	100%
300% FPL AND ABOVE	94.3%	5.1%	0.6%*	100%
RACE/ETHNICITY				
NON-LATINO WHITE	91.1%	7.1%	1.8%	100%
LATINO	60.2%	37.1%	2.7%	100%
AFRICAN-AMERICAN	83.8%	14.8%	1.3%*	100%
ASIAN/PACIFIC ISLANDER	90.2%	8.2%	1.7%*	100%
AREA OF RESIDENCE				
URBAN	74.8%	23.0%	2.2%	100%
SECOND CITY	79.9%	17.8%	2.3%*	100%
SUBURBAN	85.6%	12.7%	1.7%	100%
SMALL TOWN	73.9%	24.0%	2.1%*	100%
RURAL	65.6%	32.5%	1.9%*	100%
INSURANCE STATUS				
UNINSURED	39.7%	45.9%	14.4%	100%
MEDI-CAL	58.2%	39.9%	1.9%	100%
HEALTHY FAMILIES	73.2%	24.3%	2.5%	100%
EMPLOYMENT-BASED INSURANCE	92.7%	6.6%	0.7%	100%
CITIZENSHIP STATUS				
CHILD AND BOTH PARENTS U.S. BORN CITIZENS	89.9%	8.7%	1.4%	100%
CHILD CITIZEN, PARENT NATURALIZED CITIZEN	77.9%	20.7%	1.5%	100%
CHILD CITIZEN, PARENT NONCITIZEN WITH GREEN CARD	67.5%	29.7%	2.9%*	100%
CHILD CITIZEN, PARENT NONCITIZEN WITHOUT GREEN CARD	50.7%	46.5%	2.8%*	100%
CHILD IS NONCITIZEN	40.4%	46.1%	13.5%*	100%

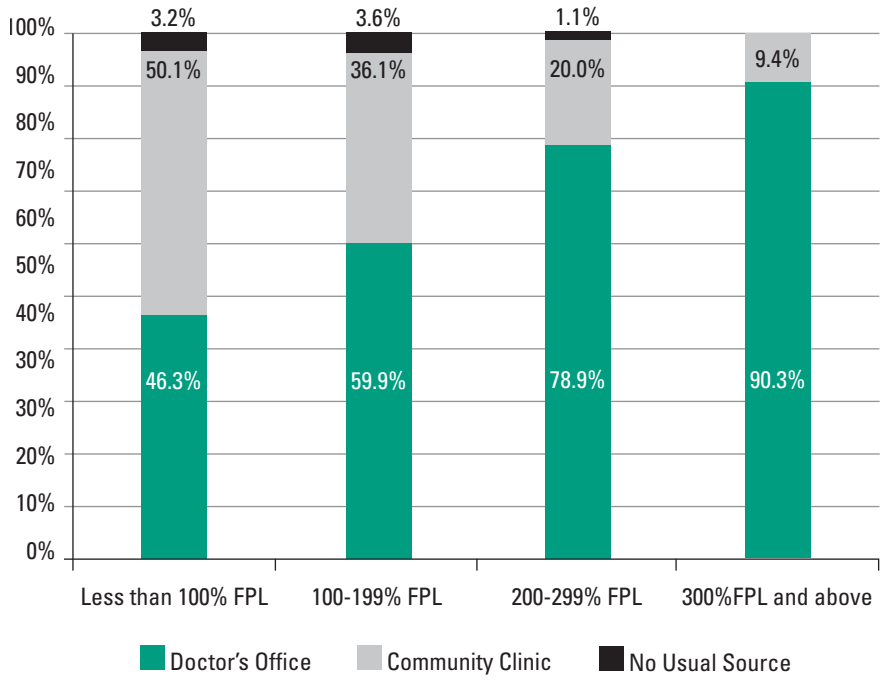
* This percentage is not reliable due to small sample size
Tests of the association of usual source of care with income, race/ethnicity, area of residence, health insurance type, and citizenship are statistically significant ($p<0.05$) (chi square).

quality and content of early childhood care in clinics where a family may be less likely to receive continuous care from a single provider.

Disparities and Gradients in Having a Usual Source of Care

There is an income gradient in the setting of health care. Children in higher income households are more likely than other young children to have a usual source of care (Exhibit 17). These children also generally receive care in private physician offices rather than community or hospital clinics. Children in households with income greater than 300% FPL are almost twice as likely as children in families below the FPL to report a physician's office as the child's regular source of care (94.3% vs. 55.1%, respectively). Differences in health care setting stem from income disparities, disproportionate use of "safety net" clinics by uninsured children, and variation in the availability of private

EXHIBIT 18 – HEALTH CARE SETTING FOR LATINO CHILDREN, BY INCOME, CHILDREN AGE 0-5 YEARS



Test of the association of usual setting of care with income among Latino children is statistically significant (p<0.05) (chi square).

office-based, primary-care providers in different communities. There is a similar gradient in having a usual source of care according to insurance status and type. Children who are uninsured are more likely than privately insured children to lack a usual source of care (14.4% vs. 0.7%). Few children in Medi-Cal (1.9%) and Healthy Families (2.5%) lack a usual source of care. Community clinics are the usual source for many more uninsured children (45.9%) and children in Medi-Cal (39.9%) than children in Healthy Families (24.3%) or private-insured children (6.6%).

Young children in rural areas use community clinics substantially more than suburban children (32.5% vs 12.7%). Children with citizen parents more frequently have a usual source, and use a physician office, than non-citizen children and those with non-citizen parents.

CHIS 2001 shows a clear gradient in the type of health care setting for Latino children by household income (Exhibit 18). Community and hospital clinics are the usual source of care for 50.1% of Latino children in households below 100% FPL and only 9.4% in households at 300% FPL and above. Children in community clinics may not always see the same provider, and may not receive the same level of quality care that children in physician offices receive. The highest-income Latino children use private physician offices as often as Non-Latino White children. Latino children in families living below poverty are five times more likely to use community health centers than Latino children in families with incomes at or above 300% FPL. Given the poorer health status of low-income Latino children and their much greater use of community clinics, ensuring that these settings have adequate health-promotion and disease-management programs could reduce health status disparities.

Use of Health Services

The use of health services is a commonly reported measure of access to care. Preventive care guidelines recommend that children have at least one physician checkup per year while children under age two should have multiple visits. Guidelines such as these are frequently used to measure appropriate access to and quality of preventive care.

Geographic Disparities in Access to Health Care: Barriers for Rural Children

CHIS 2001 shows that across the board, children living in rural areas have poorer access to health care and also suffer from poorer health status. The combined effects of lacking insurance coverage, not having a regular source of care, and having to delay or miss needed services is likely to take a substantial toll on the health and long-term development of rural children.

While many studies have documented geographic disparities in access to health care, CHIS 2001 is one of the first to comprehensively document these disparities in access for young children in California. Children in rural areas are more than twice as likely as children living in suburbs to be uninsured (10% vs. 4%). Children in rural areas also have twice the rate of any other group of children in experiencing gaps in coverage. These gaps threaten continuity of health care, which is important for treatment of chronic illnesses, such as asthma, as well as for health promotion and preventive care. Reflecting income differences in part, children in rural areas are much more likely to be covered by Medi-Cal or by Healthy Families (with nearly 50% covered by public insurance) than children in suburban areas (20%) or towns (22%).

These differences are important given the disproportionate burden of illness in these children. Only two-thirds of rural children have excellent or good health, and they have the highest rate of fair or poor health at 14%. Asthma is also a problem in rural areas. About 8.3% of all rural children in California have asthma symptoms at least monthly, compared to 3.2% of urban children and 2.5% of children in small towns.

While there are few disparities in having a regular source of care, there are large geographic differences in the type of source. Children living in rural areas are almost three times as likely (32%), and children living in small towns are about twice as likely (24%), as children living in suburbs (13%) to use a clinic or health center as the regular source of care. There are some concerns about receiving care from these clinic settings because they may provide less continuity of care with individual clinicians. In addition, many community clinics and health centers are encountering substantial financial difficulties that challenge their ability to maintain high quality care for their patients.

Children in rural areas of California are also more likely to delay or forego needed health care. About 11% of children in rural areas delayed or did not obtain needed care compared to 8% of suburban and 6% of urban children. While these numbers may seem small, each percentage point reflects about 30,000 young children in California. The reasons for delays among rural children may be partially explained by lower insurance coverage, reliance on a network of Medi-Cal and Healthy Families providers, and income disparities among the families living in rural areas. Availability of primary care providers is also generally much lower in rural areas. While families in urban areas also struggle with socioeconomic difficulties, primary care providers and hospitals tend to cluster in urban areas, making it easier to obtain needed services, regardless of ability to pay.

Effort should not only be made to improve financial access to care through aggressive insurance enrollment, but through expansions wherever possible. Assuring an adequate primary care workforce in rural areas is critical to improving access to care for young children.

CHIS 2001 shows that nearly all young children (97.4%) have seen a physician within the last 12 months. Younger children are more likely to have had a physician visit, and a greater number of visits because of the frequency of recommended well-child visits. About 16.4% of young children have one visit, 47.3% have two to four visits, and 32.2% have five or more visits. The CHIS 2001 findings are similar to nationally representative statistics showing that 93.5% of children have had a physician visit in the past year.[22]

Uninsured children are almost twice as likely as insured children to have gone at least 12 months without having a physician visit. About 7.6% of uninsured children have not had a physician visit in the past 12 months compared to 1.9% of children in Medi-Cal, and 2.2% of children with employment-based insurance.

Seeking care from an emergency department (ED) is a commonly used measure of poor access to care. Frequent use of an ED for primary care shows poor access to primary care, while use for conditions such as asthma can indicate poor management of a chronic condition in the primary care setting. Primary care access problems result from lower availability of providers in certain communities, including both readily-available primary care physicians, and non-ED urgent care options. Because of poorer access to primary care, uninsured children nationally are more likely to seek care in EDs for services that are considered inappropriate for the ED such as basic primary care.[23]

CHIS 2001 shows that about 22.4% of children age 0-5 in California have had at least one ED visit in the past year. According to nationally-representative data from the 1996 Medical Expenditure Panel Survey, only 16.8% of children age 0-4 years had an ED visit in the past year. CHIS 2001 shows that 24% of children age 0-4 years in California had an ED visit. These differences underscore the problem of appropriate health care access for young children in California.

Both having insurance and the type of insurance is associated with greater use of EDs. CHIS 2001 shows that a similar proportion of children in Medi-Cal (27.8%) and with employment-based coverage (21.1%) had an ED visit in the past year. Fewer uninsured children (19.1%) than children in Medi-Cal have ED visits. National studies show that uninsured children use fewer ED services than low-income, publicly-insured children due to the costs of ED use for those without insurance.[24] CHIS 2001 findings also point to the problem of ED use among children in Medi-Cal. Greater use of EDs among Medi-Cal covered children may stem from poorer health status, use of emergency departments instead of primary care providers when a convenient appointment cannot be obtained, low availability or knowledge of "nurse advice lines" that some Medi-Cal managed care plans offer, and poor access or use of other urgent care options.

Immunizations

Immunizations for children are the most well-studied indicator of access to care for children. Immunizations are of critical public health importance and the most cost-effective preventive services available. Financial barriers to immunization have declined in recent years because they are becoming universally-covered health benefits, regardless of health insurance type. Children who experience difficulty obtaining immunizations are assumed to be experiencing non-financial barriers to care stemming from shortage of primary care providers, and poor quality and continuity of care. Difficulty obtaining immunizations is an important indicator of potentially larger gaps in the receipt of other preventive services.

CHIS 2001 shows that only 2.8% of parents of young children report difficulty obtaining immunizations for their child. Though CHIS does not collect information on the immunization status of children, recent national estimates for young children (age 19-35 months) suggest that most children (74%) received the series of recommended immunizations and as many as 90% have received the

22 National Center for Health Statistics data, 2000, http://www.cdc.gov/nchs/data/hus/tables/2002/02hus075.pdf

23 McCormick MC, Weinick RM, Elixhauser A, et al. (2001) Annual report on access to and utilization of health care for children and youth in the United States—2000. *Ambulatory Pediatrics*. 1(1): 3-15.

24 Halfon N, Newacheck PW, Wood DL, St. Peter RF. (1996) Routine emergency department use for sick care by children in the United States. *Pediatrics*; 98(1): 28-94.

complete Hepatitis B series.[25] Remaining pockets of under-immunization in California may stem not only from difficulties accessing health services, but also from "missed opportunities" to vaccinate children during well-child or sick visits. The national Vaccines for Children (VFC) program has sought to improve provider vaccine practices, but there still remains much room for improvement in vaccine delivery and in avoiding periodic vaccine shortages.

Parent knowledge of the child's immunization status is important, and CHIS 2001 shows that most (94%) parents have their child's official yellow immunization card at home. Recent statewide and national efforts to improve pediatric provider delivery of immunizations include reminder and recall systems. Such systems remind parents when to obtain immunizations for their child and can prompt providers to offer immunizations during visits. About half of parents of young children in California (57.6%) receive reminders from a physician or medical person about the immunizations that the child needs. Greater use of such reminders could help reduce the pockets of under-immunization among children who have a usual source of care but whose parents do not always adhere to the recommended schedule of visits.

Delayed and Missed Care

Delaying or foregoing needed health care services is a more direct way of measuring access to health care services. It captures the receipt of health care in relation to the parent's perceived need for care, which is the driving force behind most child health care use. Delayed or missed care can affect children's health and well-being. Delays in obtaining asthma medications for young children can potentially lead to a greater duration or course of illness, greater severity of the disease, more urgent care contacts, and greater emergency department utilization.[26]

Approximately 7.3% of all young children in California (218,000) have not received care or received care later than desired by the parent. About 3% (90,000 children) received a delayed prescription or did not have it filled at all. About 1.8% (55,000 children) delayed or missed a test or treatment. About 3.1% (92,000 children) delayed or did not receive needed medical care other than prescriptions or tests and treatment.

For children with chronic health conditions, delayed or foregone prescriptions are frequently related to the management of the chronic illness. Children with asthma have delayed or missed care more frequently than children without asthma. About 2.9% of children with asthma have a delay in receiving a prescription for this disease.

Disparities in Delayed or Missed Care

Having a usual source of care, having insurance coverage, and the child's race/ethnicity are associated with delayed or missed health care (Exhibit 19). A possible disparity of greater delays and missed care in rural areas where 10.8% of young children have delayed or missed care is not statistically significant. Young children without a usual source of care delay or forego care at about the same rate as children with a usual source (10.5% vs. 7.2% respectively). Receiving care in a physician's office rather than a community clinic is not related to having missed or delayed care.

More children with private insurance (7.3%) than with Medi-Cal (6.5%) or Healthy Families (3%) delay or forego care, though the difference between private insurance and Medi-Cal is not significant. Fewer children with Medi-Cal or Healthy Families than children who are eligible for but not enrolled in these programs experience delayed or missed care. About 13% of uninsured children miss or delay care during the year.

Disparities in access are evident for children of different race/ethnicity. Although Latino children are more likely than Non-Latino White children to be uninsured, about 9.6% of Non-Latino White parents report delayed or missed care compared to 5.5% of Latino children. The fact that delayed or missed care is no more frequent for higher income than for lower income children suggests that while uninsured children are at greater risk for missed care and delays, delays are not always due to coverage issues or financial problems. Inconvenient provider hours and waits for appointments can occur for children in all insurance types and income groups.

25 Centers for Disease Control and Prevention. National Center for Health Statistics and National Immunization Program, 2000 (Table 73); U.S. National Immunization Survey. 1999.

26 National Heart, Lung, and Blood Institute. Guidelines for the Diagnosis and Management of Asthma. NIH Publication No. 97-4051. July, 1997.

EXHIBIT 19 – DELAYED OR FOREGONE CARE ACCORDING TO POVERTY LEVEL, RACE/ETHNICITY, GEOGRAPHIC SETTING, HEALTH INSURANCE COVERAGE, AND CITIZENSHIP, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001

	ANY DELAYED OR FOREGONE CARE
LESS THAN 100% FPL	7.5%
100-199% FPL	6.5%
200-299% FPL	9.1%
300% FPL AND ABOVE	6.9%
RACE/ETHNICITY	
NON-LATINO WHITE	9.6%
LATINO	5.5%
AFRICAN-AMERICAN	7.8%
ASIAN/PACIFIC ISLANDER	4.3%
AREA OF RESIDENCE	
URBAN	5.9%
SECOND CITY	8.6%
SUBURBAN	7.5%
SMALL TOWN	8.3%
RURAL	10.8%
HEALTH CARE SETTING	
HAVE USUAL SOURCE	7.2%
NO USUAL SOURCE	10.5%
INSURANCE STATUS	
UNINSURED	13.0%
ELIGIBLE FOR MEDI-CAL OR HEALTHY FAMILIES	12.4%
NOT ELIGIBLE	15.2%
MEDI-CAL	6.5%
HEALTHY FAMILIES	3.0%
EMPLOYMENT-BASED	7.3%
CITIZENSHIP STATUS	
CHILD AND BOTH PARENTS U.S. BORN CITIZENS	9.0%
CHILD CITIZEN, PARENT NATURALIZED CITIZEN	5.5%
CHILD CITIZEN, PARENT NONCITIZEN WITH GREEN CARD	4.3%
CHILD CITIZEN, PARENT NONCITIZEN WITHOUT GREEN CARD	7.1%
CHILD IS NONCITIZEN	10.3%

Tests of the association of delayed or missed care with race/ethnicity, health insurance type, and citizenship status are statistically significant ($p<0.05$) (chi square). Tests of the association of delayed or missed care with income, area of residence, and having a usual source of care are not statistically significant.

EXHIBIT 20 – INITIATION AND PERIODICITY OF DENTAL CARE BY AGE OF CHILD, CHILDREN AGE 2-5 YEARS, CALIFORNIA 2001

	EVER VISITED DENTIST	VISIT IN PAST 6 MONTHS	VISIT IN PAST 12 MONTHS
2 YEARS	21.3%	14.2%	20.6%
3-4 YEARS	60.1%	39.6%	55.6%
5 YEARS	85.7%	58.2%	81.0%

Tests of the association of child age with ever visiting a dentist, having a visit in the past 6 months, and having a visit in the past 12 months are statistically significant ($p<0.05$) (chi square).

DENTAL HEALTH

Dental disease is common, preventable, and can have significant impact on children's physical growth and development. In young children, tooth loss caused by dental decay can impair speech development. Nutritional problems can develop when tooth decay impairs a child's ability to eat nutritious foods. Premature loss of primary teeth can prevent permanent teeth from entering normally. Premature loss of teeth can also cause psychological problems when children feel self-conscious about their unusual appearance. The tooth decay that often begins in early childhood is a major cause of missed school days among school-age children. Missing school interferes significantly with learning.

Access to dental care in early childhood can prevent these problems by instilling good dental health behaviors and protecting young children's teeth from dental decay. Dental providers can identify problems before they impair a child's physical or emotional growth. Early treatment of dental decay in young children can prevent a worsening condition.[27] Pediatric dentists now recommend a visit at 12 months of age to assess dental risk and begin preventive home behaviors. The AAP also recommends an initial visit aa early as age 12 months.[28]

The 1993-1994 California Oral Health Needs Assessment (OHNA) showed substantial unmet need for dental treatment among young children enrolled in preschool programs.[29] About 27% of California's preschool children were found to have untreated tooth decay while 9% needed urgent dental care. CHIS 2001 provides the first population-based data on dental care initiation and use for young children in California.

Dental Visits

CHIS 2001 shows that many young children in California are not receiving preventive dental services or treatment. Exhibit 20 shows that children age two are least likely to have seen a dentist with only 21.3% ever having a visit. Initiating dental care is not only a problem for the youngest children. Fewer than two-thirds of preschool age children (3 and 4 years) have ever seen a dentist, and a small but important number of children age five years (14.3%) have never had a dental visit.

Standards for dental care have changed in recent years as new preventive care and treatments became available for young children. Bright Futures guidelines recommend visits every six months in early childhood once children have grown out of infancy. CHIS 2001 shows not only that parents of most of California's young children are not initiating dental care at the recommended age but also that the majority of young children are not receiving visits at the recommended periodicity. Few children age two years (14.2%) have had a recent visit in the past six months. A larger percentage of children age 3-4 years (39.6%) have had a recent visit. This suggests little progress since the 1993-94 OHNA estimated that 44% of children in preschools had been to a dentist.[30] Only half of children age five years, the age group that is preparing to enter school, have had a visit in the past six months. Nationally 36.4% of children age 2-4 years have had a dental visit in the past year, compared to 54.6% age 2-4 in California.[31]

27 Platt LJ and Cabezas MC, *Early Childhood Dental Caries*. In Halfon N, Shulman E, Shannon M and Hochstein M, eds., Building Community Systems for Young Children. UCLA Center for Healthier Children, Families and Communities, 2000.

28 American Academy of Pediatric Dentistry. *Handbook of Pediatric Dentistry*. Chicago, IL: the Academy, 1999.

29 The California Oral Health Needs Assessment of Children, 1993-94, The Dental Health Foundation, San Rafael 1997.

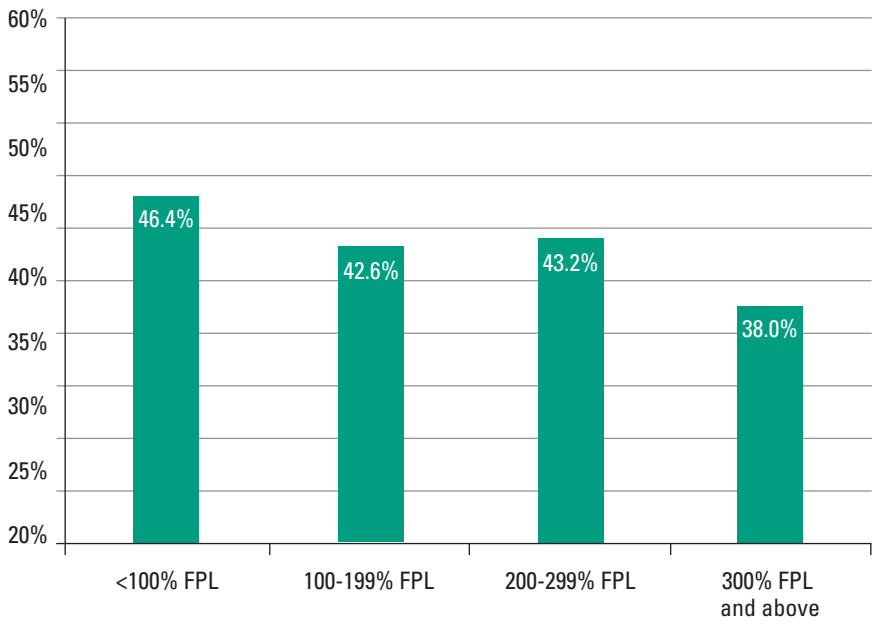
30 The California Oral Health Needs Assessment of Children, 1993-94, The Dental Health Foundation, San Rafael 1997.

31 The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control.

Ever having a dental visit is associated with household income and with race/ethnicity. Dental care initiation is earlier among higher income children (Exhibit 21). About 46.4% of children in households below the FPL and 38% of children in households above 300% FPL have never had a dental visit. California has slightly better dental access for low-income children than the U.S. overall, although figures are not directly comparable. About 14.2% of children age 0-5 years in the U.S. below 100% FPL have had a preventive visit, while 58.2% of an older group in California (2-5 years) have had any dental visits. Exhibit 22 shows that about half of young Asian/Pacific Islander children (42.6%) and American Indian/Alaska Native children (45.9%) have never had a visit, compared to 39.9% of White and 33.6% of African-American children.

Bright Futures and AAP guidelines also suggest a role for pediatric health care providers, recommending that pediatric providers assess dental risk in young children starting as early as one year of age, and refer children to dental care. This is an important strategy in California since young children receive periodic well-child care from a regular provider. Most young children in California who have never seen a dentist do have a usual source of health care. Only 2.1% are lacking a usual source of care. This outreach should happen in all primary care settings for children, since a similar proportion in the predominant health care settings—about 40% of young children in physician offices and 46.9% in community clinics—have never had a dental visit. This suggests that outreach to parents about starting dental care early is important in private physician offices as well as in community health centers.

EXHIBIT 21 – NEVER HAVING A DENTAL VISIT BY HOUSEHOLD INCOME, CHILDREN AGE 2-5 YEARS, CALIFORNIA 2001



Test of the association of ever visiting a dentist with household income is statistically significant ($p<0.05$) (chi square).

Access to Dental Care: Gaps in Care and Coverage

Oral health in early childhood is essential to overall growth and development. Early child development depends upon good oral health because the infection or pain associated with dental caries and disease can lead to failure to thrive, impaired speech development, absence from preschool (limiting social development), inability to concentrate, and ultimately, reduced self-esteem and other psychosocial problems. Early childhood caries can result in severe oral decay in young children. By conservative estimates, this problem affects more than one out of seven preschoolers and over half of California's elementary school children. The 1993-1994 California Oral Health Needs Assessment found that one-third of children in preschool had at least one dental filling or untreated decay. Children in Head Start had substantially higher rates of dental need than other preschoolers.

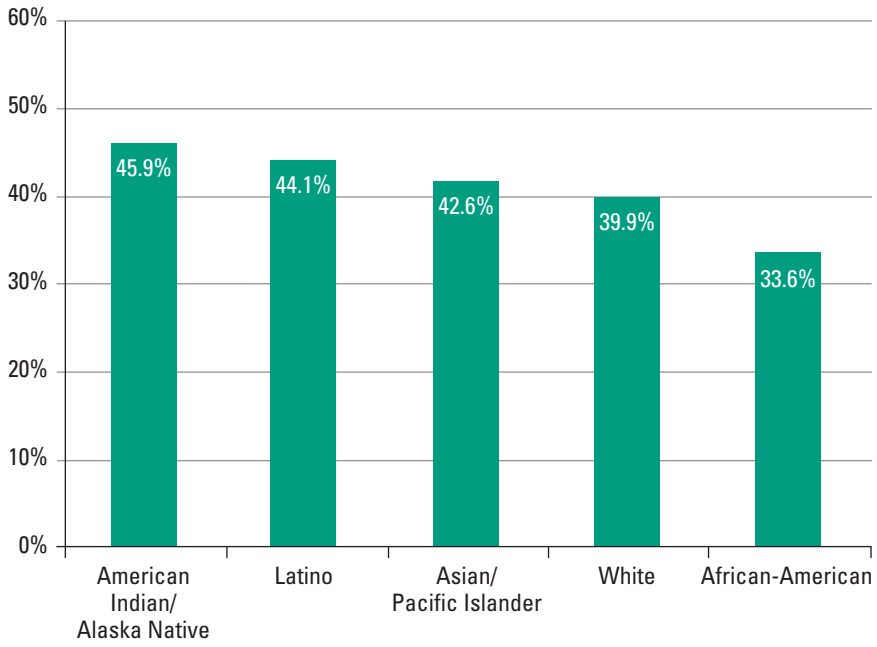
Good oral health in early childhood includes prevention such as parenting routines with no night-time bottles with milk or juice. Environmental factors are also important. Although fluoridated water has been shown to be an effective, population-based strategy to improve oral health, only about one-third of Californians receive fluoridated water. Nutrition in early childhood is also important. Soda intake among young children is a potential culprit in exacerbating risk for dental problems. Soda provides no nutritional value and places children at greater risk for dental decay. CHIS 2001 shows that about one-quarter of young children drink soda daily, and there is a large income disparity in soda consumption. Among children living in households with income below the federal poverty level, about 25% of children age two consume soda, and this rate increases to 33% of children 3-4 years of age and to 46% of children age five. These rates are double the rates of children above 300% FPL.

Access to high quality dental care is a necessary component of overall health care to prevent and treat tooth decay, and maintain good oral health. Yet CHIS 2001 shows that just over half (58%) of all children 2-5 years of age have ever received dental care. Initiation of dental care varies greatly by age even though current recommendations call for an initial visit even for young toddlers. The youngest children (age 2 years) are least likely to have a dental visit in the past six months (the recommended interval), but rates are not much better among preschoolers age 3 to 4 years (40%) or even among children age five years (58%). It is of great concern that 40% of children age 3-4 years and 14% of children age five have never seen a dentist.

As with medical care, the likelihood of having a dental visit varies with family income, race/ethnicity, and insurance coverage. While most young children in California (93%) have health insurance coverage, only 76% have dental insurance. Even Medi-Cal coverage does not guarantee that a child will have dental coverage, with only 80% of young children with Medi-Cal having dental insurance. Yet, the problem of initiating dental care occurs for privately-insured as well as publicly-insured children with only about half in each group initiating dental care before age five years.

A number of strategies will need to be used to improve access to dental care for young children. The shortage of pediatric dentists will need to be addressed statewide. Payment for dental services also is a problem in California. Some dental packages provide very limited benefits, and low payment rates for dental providers has worsened the problem of dental provider availability. Encouraging pediatricians and family physicians to refer children to dental providers could improve parent awareness and initiation of care. Finally, it is important to integrate dental services with existing general health and social welfare services. Since oral health is often the last domain of health to be addressed, coordinating these services with many other early childhood programs, such as public health nursing, WIC, and child care, may be an important mechanism for assuring that dental needs are addressed. In fact, Head Start has a federally-mandated dental component and could serve as a model for strategies attempting to link dental care with other early childhood services.

EXHIBIT 22– NEVER HAVING A DENTAL VISIT BY RACE/ETHNICITY, CHILDREN AGE 2-5 YEARS, CALIFORNIA 2001



Test of the association of ever visiting a dentist with race/ethnicity is statistically significant

Use of Pediatric Dental Care

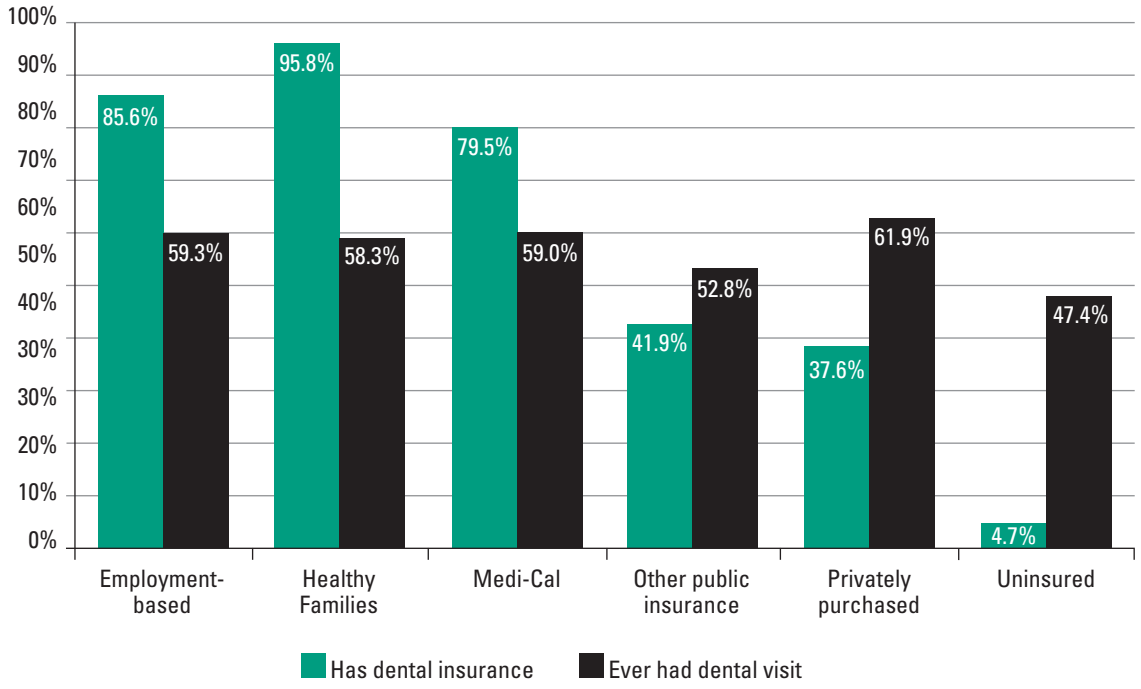
Ideally most young children using dental care would be receiving preventive care rather than treatment for a problem. About half of children (48.2%) receiving dental care received only routine preventive care in their last dental visit. Younger children receiving dental care are more likely to be receiving care for a problem than for prevention. About 16.5% of children age 2, 49.8% of children age 3-4, and 71.9% of children age 5 received early preventive care at their last visit.

Dental Insurance

Having dental insurance should reduce the cost barrier to dental care for children. Earlier estimates for children in preschool suggest that only three quarters have dental insurance. CHIS 2001 confirms that fewer young children in California have dental insurance than health insurance. While 93.2% of young children have health insurance, only 76.4% of children age 2-5 years have some type of dental insurance. In total, 478,000 young children age 2-5 in California have no dental coverage. Clearly lack of dental coverage is not only a problem for medically uninsured children. Little progress has been made since the early 1990s.

The likelihood that a child has dental insurance varies with the type of health insurance they have (Exhibit 23). Most parents of children insured by Healthy Families report that the child has dental coverage (95.8%). Rates of dental insurance are also high, although not universal (85.6%), for children with employment-based insurance. Relatively few children with privately-purchased insurance that is not job-based have dental coverage (37.6%). There is also a gap for children in Medi-Cal. About 79.5% of children with Medi-Cal are reported to have dental insurance. Only 41.9% of children with other public insurance (such as California-Kids or other public programs) are reported to have coverage. Expanding dental coverage to more young children through their health insurance would close some of the financial gap.

EXHIBIT 23 – DENTAL INSURANCE AND DENTAL VISIT INITIATION BY HEALTH INSURANCE TYPE, CHILDREN AGE 1-5 YEARS, CALIFORNIA 2001



Test of the association of health insurance type with having dental insurance is not statistically significant. Test of the association of health insurance type with ever visiting a dentist is statistically significant ($p<0.05$) (chi square).

CHIS 2001 also shows that not all parents may be aware that their child has dental coverage. For example, although all children in Healthy Families have dental coverage as a basic benefit, about 5% of their parents report no dental insurance for the child. This shows that it is important for parents to know what dental services their child is entitled to. Assuring that parents know what dental care costs are covered could reduce the financial barrier to access.

Exhibit 23 shows that initiating dental care is a concern for children, irrespective of their health insurance type. The percentage of children who have initiated dental care varies slightly at 41% of children in Medi-Cal, 41.7% in Healthy Families, 40.7% with employment-based insurance, and 53.6% of uninsured children. This reflects the U.S. pattern where use of preventive dental services for children below 100% FPL is equally low among privately- and publicly-insured children. Parent knowledge about the importance of dental care or willingness to take the child to the dentist—common access problems across insurance types that stem from pediatric dentist shortages, or inadequate benefit packages, or payments to dentists—are creating a problem across many California communities.

Improving access to dental care for medically uninsured children is a bigger problem. Virtually no uninsured children (about 4.7%) have dental insurance. CHIS 2001 shows that free dental programs are not filling the gap for these children. Among the 23.6% of children who do not have dental insurance, very few (8.5%) have used a free community or public dental program. Greater use of the Child Health and Disability Prevention (CHDP) program might improve access for many of these children.

Dental Health Behaviors in the Home

Positive dental health behaviors in the home can prevent dental disease in early childhood and into adulthood. Infants and toddlers are at increased risk if their teeth are

exposed to sugary substances (such as milk, formula, or fruit juice) for long periods of time. Dental problems in very young children are often caused by sleeping with a bottle that has milk or a sugary substance. Up to 14% of Children assessed in preschool had symptoms of "baby bottle tooth decay" in the 1993-94 assessment. Sleeping with a bottle with water is also not recommended due to increased risk of ear infections.

Of the 6.2% of young children who sleep with a bottle, most have milk or a sugary drink in the bottle (91.7%) and very few have water (8.3%). CHIS 2001 shows that about six percent of all young children age 0-5 years are exposed to the inappropriate practice of sleeping with a bottle of milk or a sugary drink such as fruit juice. The percentage of children ever affected by this practice as infants and toddlers may be higher. These young children are at risk for serious dental problems due to inappropriate patterns of sleeping with a bottle. Sleeping with a bottle should be discouraged as part of parent education and anticipatory guidance in pediatric health care visits.

Summary

CHIS 2001 provides the first population-based information for California on use of dental services in early childhood. We now know that many young children have never seen a dentist and are not receiving frequent dental exams. About half (58.2%) of children age 2-5 years have never seen a dentist or other dental provider, and most children age 2-4 years have never seen a dentist, despite prevailing professional guidelines that call for early initiation of dental care. While there are income disparities and a particular gap for uninsured children, initiating dental care and periodicity fall far below professional recommendations and Healthy People 2010 objectives for young children. Given the known prevalence of dental problems, utilization of dental services is much lower than what is needed to promote good dental health.

Improving the dental health of California's young children will require a broad range of interventions, including better home health and preventive measures, greater availability of affordable dental insurance, more information and education about how to receive dental coverage, and how to access available services. Because most young children have a usual source of medical care, and see a doctor regularly, greater outreach to parents by pediatric providers—including community health centers and clinics—might improve the use of dental care significantly. Improving access to dental care for children will also require that policy makers confront the shortage of pediatric dental providers who are able and willing to take on low income patients. Low payment rates for dental care and the financial incentives of managed dental health plans also likely impair young children's access to dental care.

Overweight and Sedentary Activity

Obesity in childhood is an epidemic that affects more than one in eight children nationally. About 13% of children age 6-11 (up from 6% in the early 1970s)[33] and 12% of adolescents age 12-17 are overweight.[34] The association between early childhood height and weight, sedentary time, and physical exercise with obesity in adolescence and adulthood has become better understood in recent years. In childhood, overweight can produce physical health problems that impair a child's health. Overweight can also cause problems in children's socialization and interaction with peers that in turn can undermine the social and emotional capacities required for children to start school ready to learn. Weight in early childhood is also important because it sets the stage for overweight in childhood and adolescence. Studies show that weight for length during early infancy predicts weight for height in childhood. Similarly, children who are overweight in early childhood have a higher risk of being overweight as adults. Overweight in infancy and early childhood may signify problems with feeding practices or family behaviors that may contribute to poor diet and inactivity in adolescence and adulthood.[35]

Overweight for children has been defined as weight above the 95th percentile on national growth charts, adjusted for age and gender.[36] CHIS 2001 data show that a significant number of young children are at risk for obesity.[37] About 17.8% of infants are at risk for overweight. Rates are similar for toddlers age 1-2 (17.3%) and for children age 3-4 (14.3%) and are slightly lower for children age five (8.8%). Although these rates do not indicate obesity, they do show that a substantial number of young children in California are at risk for overweight.

Exhibit 24 shows that overweight is a problem for children in low-income as well as in higher income households. Pediatric providers in all settings have a role to play in addressing overweight. Rates of overweight vary little by the predominant source of the child's health care.

Given the impact of obesity on physical as well as social and emotional dimensions of child health, it is important to educate parents about the importance of proper nutrition and exercise for their children. This is particularly important because parents can be poor judges of whether their children are overweight. Parents are essential to obesity prevention efforts with preschoolers because mothers play such a critical role in forming diet and physical activity patterns of young children.[38]

Physical Exercise/Sedentary Time

Many lifestyle patterns develop in childhood. Obese children are at greater risk of becoming obese adults,[39] and physical inactivity has a significant impact on obesity. Greater physical activity and less time spent in sedentary activities are major recommendations to combat obesity in children and adolescents. Additionally, physical activity has many inherent benefits for children that include improving endurance, strengthening growing muscles and bones, developing motor skills, reducing fat, and increasing overall

33 Centers for Disease Control and Prevention. 2001. Health E-Stats: Prevalence of overweight among children and adolescents: United States. Atlanta, GA: CDC, National Center for Health Statistics. http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm

34 USDHHS. 1998. Trends in the well-being of America's children and youth, 1998. Washington DC: Department of Health and Human Services and Office of the Assistant Secretary for Planning and Evaluation. www.aspe.hhs.gov/hsp/98trends/intro.htm

35 Institute of Medicine: WIC Nutrition Risk Criteria: A scientific assessment; 1996; p118-122 and Hamil PVV, Drizard TA, et al. Physical growth: National Center for Health Statistics Percentiles. *American Journal of Clinical Nutrition*; 1979; 32: 607-629

36 Most studies of overweight and underweight in young children use physical measures taken through the NHANES or other direct measurement surveys. In contrast, CHIS 2001 (like the NHIS) asks parents to report the height and weight of the child. Although body mass index (BMI) calculated from weight and height/length is used for children, youth, and adults, this measure is more problematic for young children.

37 This report provides estimates of overweight using only weight-for-age. Most national surveys use the Body Mass Index (BMI) that accounts for both weight and height and are thus not directly comparable to the overweight rates in this report. Nationally, the Pediatric Nutrition Surveillance System (PNSS) shows that the prevalence of overweight for children under two years old in 1997 was 11.3% and was 8.6% among children age 2-5 years. Prevalence of overweight also varies nationally by race/ethnicity of the child. The National Health and Nutrition Examination Survey (NHANES) data shows that about 3.4% of children 2-3 years of age and 7.9% of children 4-5 years of age are overweight. Overweight among boys 2-3 years of age ranges from 1.1% of Non-Latino White to 2.8% of African-American and 6.2% of Mexican-American boys. Among girls, the rates range from 2.8% of Non-Latino White to 5.6% of African-American and 10.5% of Mexican-American girls.

38 Jain AS. (2001). Why Don't Low Income Mothers Worry About Their Preschoolers Being Overweight? *Pediatrics*, 107(5): 1138-46.

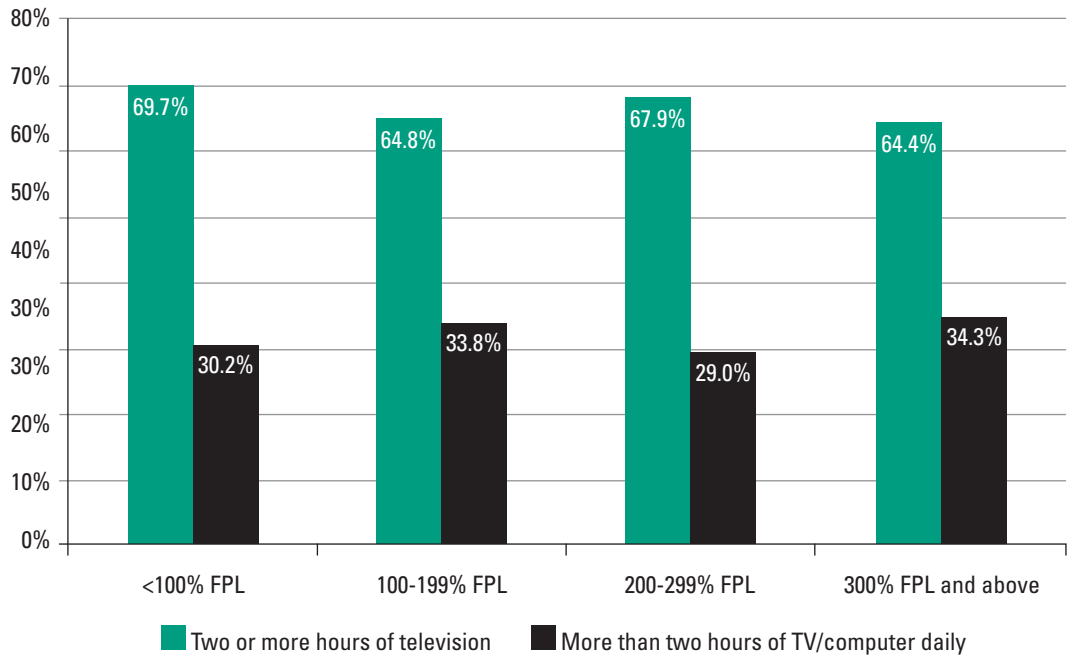
39 Serdula M, Ivery D, Coates R, Freedman D, Williamson D, Byers T. (1993) Do Obese Children Become Obese Adults? A Review of the Literature. *Preventive Medicine*, 22(2): 167-77.

EXHIBIT 24 – OVERWEIGHT BY CHILD AGE, RACE/ETHNICITY, INCOME, HEALTH CARE SETTING, AND HEALTH INSURANCE, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001

	> 95% PERCENTILE WEIGHT FOR AGE AND GENDER
AGE	
LESS THAN 12 MONTHS	17.8%
1-2 YEARS	17.3%
3-4 YEARS	14.3%
5 YEARS	8.8%
ETHNICITY	
NON-HISPANIC WHITE	13.5%
LATINO	16.3%
ASIAN/PACIFIC ISLANDER	10.6%
AFRICAN-AMERICAN	18.0%
AMERICAN INDIAN/ALASKA NATIVE	18.7%
INCOME	
LESS THAN 100% FPL	15.8%
100%-199% FPL	17.2%
200-299% FPL	14.5%
300% FPL AND ABOVE	12.9%
HEALTH CARE SETTING	
NO USUAL SOURCE	21.8%
PHYSICIAN OFFICE	15.0%
COMMUNITY CLINIC	13.7%
HEALTH INSURANCE	
EMPLOYMENT-BASED	13.6%
MEDI-CAL	17.4%
HEALTHY FAMILIES	12.8%
UNINSURED	17.3%

Tests of the association of overweight with income and with health care setting are not statistically significant. Tests of the association of overweight with child age and race/ethnicity are statistically significant ($p<0.05$) (chi square).

EXHIBIT 25 – TELEVISION WATCHING AND TOTAL MEDIA EXPOSURE, BY HOUSEHOLD INCOME, CHILDREN AGE 4 AND 5 YEARS, CALIFORNIA 2001



Tests of the association of television watching with income, and total media with income, are not statistically significant.

physiological health and well being.[40] Physical activity is important for promoting overall health and development in children. Yet in the past 10-20 years, children's physical activity has declined nationally. Disparities among communities in the availability of safe parks and playgrounds may contribute to differences in exercise and play outside of the home throughout California.

The time children spend in physical activity declines when children spend excessive time watching television. The amount of television viewing is an important school readiness indicator because excessive television viewing is associated with lower physical activity as well as lower academic attainment for children.[41] The American Academy of Pediatrics (AAP) recommends that infants and toddlers younger than two years of age should be discouraged from any television viewing. The AAP also recommends that children age two and older have total media time (television, video games, and computer use) limited to less than one to two hours per day.[42]

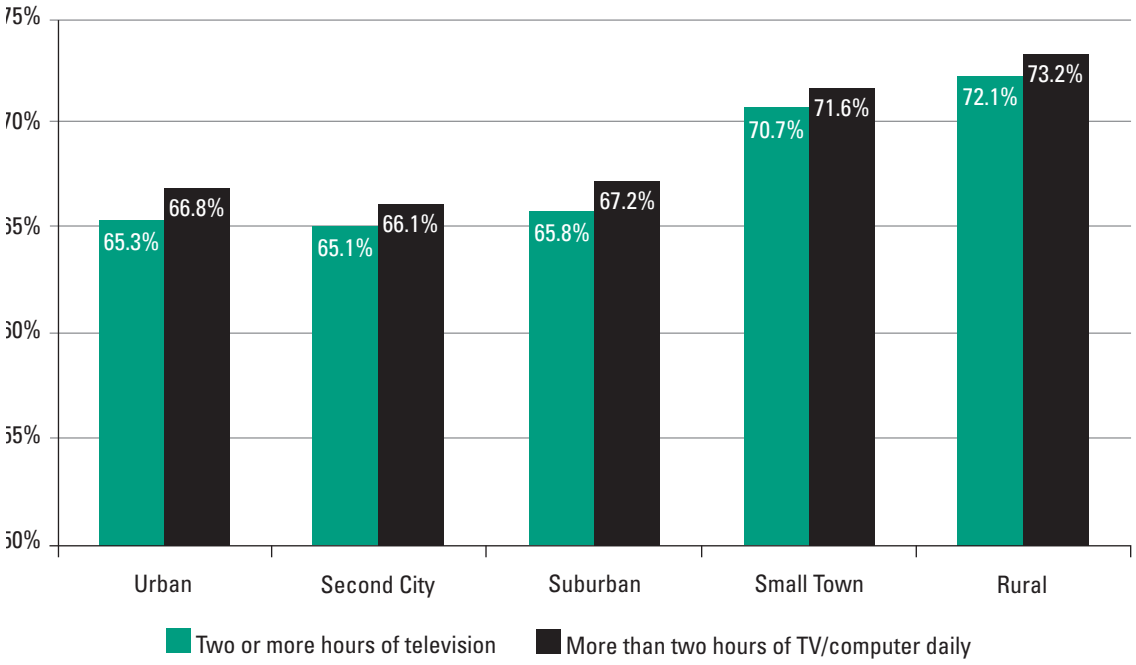
CHIS 2001 shows that many preschool children are exceeding AAP recommendations for television and media exposure. One indicator is the proportion of children watching at least two hours of television (and/or video games) each weekday, and the second indicator is the proportion of children being exposed to more than two hours of television, video games, and/or other media such as computers. About 67.1% of young children age four years and 65.4% of children age five years spend at least two hours per weekday (Monday through Friday) watching television. Slightly fewer children watch this much television on weekends. Somewhat fewer children exceed two hours of media exposure during the week. About 32.5% of four and five year olds spend more than two hours daily on weekdays watching television or using computers.

40 Mary Story, Ph.D., R.D., Bright Futures in Practice: Nutrition (2nd ed.)

41 Trends in the Well-Being of America's Children and Youth, 2001. Office of the Assistant Secretary for Planning and Evaluation, US DHHS, http://aspe.hhs.gov/hsp/01trends/index.htm

42 Committee on Public Education. (2001) Children, Adolescents, and Television. Pediatrics Policy Statement (RE0043). *Pediatrics*; 107(2): 423-6.

EXHIBIT 26 – TELEVISION WATCHING AND COMPUTER USE, CHILDREN AGE 4 YEARS, CALIFORNIA 2001



Tests of the association of television watching with area of residence, and total media with area of residence, are not statistically significant.

Exhibit 25 shows that young children in low income as well as in higher income households spend a similar amount of time in these sedentary activities. Rates of both television watching and total media exposure are similar. Exhibit 26 shows that children throughout California spend a similar amount of time watching television or using the computer, with rates of 65.3% in urban areas and 72.1% in rural areas.

Summary

Television viewing and recreational computer use can be educational. However, it takes the place of other development-promoting activities such as reading, exercising, and outdoor play. Parents can help by providing encouragement and opportunities for physical activity. Communities can support physical activity by providing alternatives to television viewing through recreation programs, and by improving the safety of local parks and recreation areas. Promoting physical activity within early care and education programs, including family day care as well as preschool, is one way of reducing television viewing and increasing physical activity during the day.

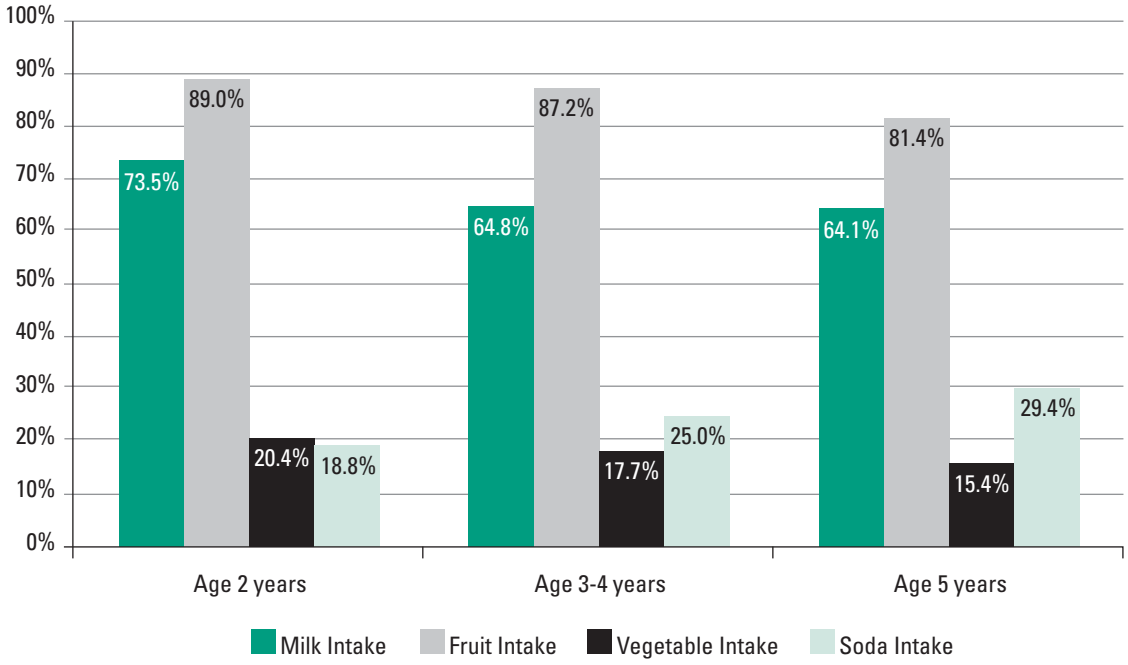
NUTRITION

Healthy eating is an essential part of the growth and development of infants and young children. Proper nutrition can guard against health problems in childhood, such as iron deficiency, obesity, eating disorders and dental problems. Developing healthy eating habits can also prevent chronic illnesses in adulthood, such as heart disease and diabetes.[43] The U.S. Department of Agriculture estimates that 24% of children age 2-5 years have a good diet, while 68% need an improved diet and 8% have a poor diet.

Measuring and comparing nutritional intake from CHIS 2001 to national estimates is difficult because U.S. data come from detailed nutrition surveys that precisely measure servings as well as intake. In addition, the U.S. Department of Agriculture considers tomatoes and tomato products as vegetables. These measurement issues limit the comparability of California and U.S. statistics.

43 Mary Story, Ph.D., R.D., Bright Futures in Practice: Nutrition (2nd ed.)

EXHIBIT 27 – RECEIVING RECOMMENDED NUTRITIONAL INTAKE, AND SODA CONSUMPTION, CHILDREN AGE 2-5 YEARS, CALIFORNIA 2001



Tests of the association of milk intake, fruit intake, and soda drinking with child age are statistically significant ($p<0.05$) (chi square). Test of the association of vegetable intake with child age is not statistically significant.

Eating Healthy: Fruits and Vegetables

CHIS 2001 shows that most children age 2-5 years (86.1%) consume enough fruit according to national nutrition recommendations. A similar proportion of toddlers (89%) and preschoolers (87.2%) receive the recommended two daily servings of fruit and/or 100% fruit juice, with slightly fewer five year olds (81.4%) meeting the recommendation. Although intake of fruit does not quite meet national recommendations, it is much higher for California's young children than for children nationally. Only 44% of children age 2-5 years in the U.S. receive the daily recommended intake of fruit.

While young children in California do well on this important Healthy People 2010 objective, the AAP recommends that children eat whole fruits to meet their recommended daily fruit intake.[44] CHIS 2001 shows that fruit consumption rates are much lower when fruit juice is excluded from daily servings. About one third of California children age 2-5 years (38.1%) consume at least two servings of fruit. Fewer toddlers (27.8%) than preschoolers (57.7%) and five year olds (53.4%) receive two servings of fruit daily.

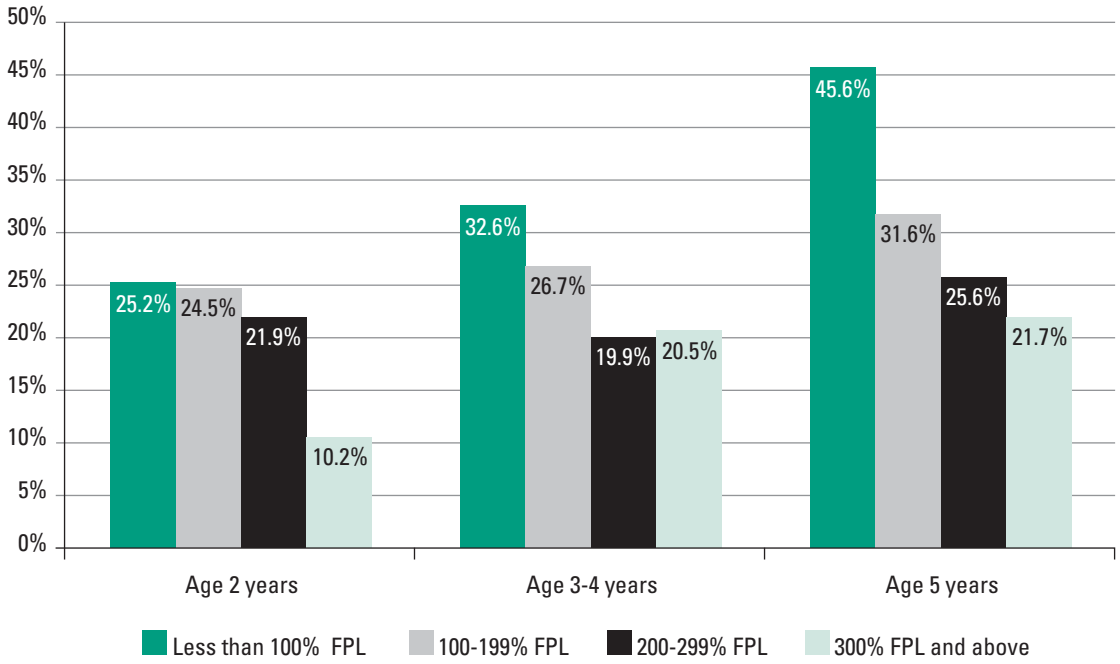
CHIS 2001 shows that few young children in California (17.7% of children age 2-5 years) eat enough vegetables. Vegetable intake is low for young children of all ages. About 20.4% of toddlers, 17.7% of preschoolers, and 15.4% of five year olds meet the recommendation of three daily servings of vegetables (Exhibit 27). Young children in California appear to consume less vegetables than young children nationally. About 23% of children age 2-5 years nationally—compared to 18% in California—receive the daily recommended servings of vegetables.[45]

Potatoes are included in USDA nutrition recommendations for vegetable servings. About half as many children in California (8.1% of children age 2-5 years) would meet

44 American Academy of Pediatrics, Committee on Nutrition. (2001). The use and misuse of fruit juice in pediatrics. *Pediatrics*. 107(5): 1210-1213.

45 U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.

EXHIBIT 28 SODA INTAKE BY INCOME AND CHILD AGE. CHILDREN AGE 2-5 YEARS, CALIFORNIA 2001



Tests of the association of soda intake in prior day with household income, for each age group, are statistically significant (p<0.05) (chi square).

recommendations for vegetable intake if potatoes were not included, ranging from 10.3% of toddlers to 8.2% of preschoolers and 6.3% of children age five years.

Unhealthy Eating Habits: Drinking Soda

While intake of fruits and vegetables is important for young children's health, soda intake in early childhood is an indicator of poor nutritional habits. Drinking soda contributes to excess calorie consumption and tooth decay in children. Nationally, nearly all soda (91%) consumed by children age 2-5 years is regular (non-diet).[46] Soft drinks now provide 20-24% of daily calories for children age 2-19 years.[47] Because soda consumption reduces the milk that children drink, has no nutritional value, and increases risk of tooth decay, reducing soda intake for young children is an important goal.[48]

CHIS 2001 shows that about one-quarter (24.7%) of young children drink soda on any given day. However, soda consumption increases with age from about 18.8% of children age two to 25% of children age 3-4 years and 29.5% of children age five. Soda drinking is a particular problem for low-income children in California. About 45.6% of children age five years under 100% FPL drank soda in the prior day compared to 31.6% of children at 100-199% FPL, 25.6% of children at 200-299% FPL, and 21.7% of children at 300% FPL or above. Exhibit 27 demonstrates the significant income gradient in daily soda consumption by young children in California. For example, about 25.2% of children age two in households under 100% FPL drink soda daily, compared to 10.2% of those with household income of 300% FPL or above. Nearly half of children age five in households below the poverty level consume soda. This gradient in daily soda consumption suggests the need for greater education about the harms of regular soda intake to be especially targeted at low income families.

46 U.S. Department of Agriculture, Agricultural Research Service. 1999. Food and nutrient intakes by children 1994-96, 1998. http://www.barc.usda.gov/bhnrc/foodsurvey/home.htm

47 Cullen KW, et al. (2002). Intake of Soft Drinks, Fruit Flavored Beverages, and Fruits and Vegetables by Children in Grades 4 Through 6. *American Journal of Public Health*, 92(9): 1475-8.

48 ibid

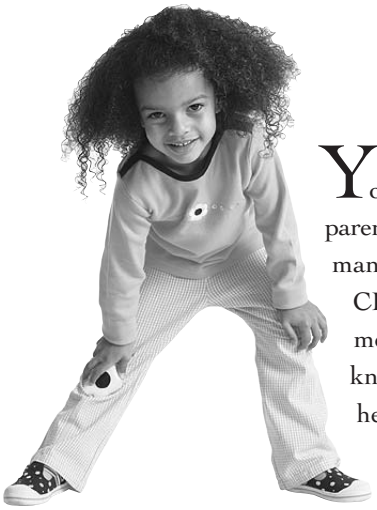
Soda consumption is a particular concern because many young children are not drinking enough milk. Only two-thirds of children age 1-5 years in California (66.6%) drink the recommended two or more glasses of milk daily. The proportion of children drinking the recommended amount of milk drops from 73.5% of children age two years to about 65% of children age 3-5 years. Exhibit 28 shows the apparent substitution of soda for milk as children grow from toddlers (two years) into preschool age (3-4 years). For children age 3-4 years, fewer children who drink soda (66.7%) than children who do not (58.7%) drink enough milk during the day.

Summary

Families with little time to prepare nutritious meals have trouble instilling good eating habits and meeting nutritional guidelines for their children. CHIS 2001 shows that many toddlers and preschoolers are not receiving recommended amounts of fruit, vegetables, and milk. Vegetable intake actually declines for preschoolers and toddlers, and in fact soda intake increases for preschoolers.

CHIS 2001 suggests that a range of nutrition issues require attention to promote optimal health of young children. Many children are not receiving the recommended nutritional intake that is associated with good health outcomes. Moreover, one-quarter of young children drink soda, which reduces their intake of healthier drinks and has no nutritional value. The combination of soda intake with poor access and utilization of dental health care shows that many children are at risk for tooth decay. CHIS 2001 shows that much more can be done to improve early childhood nutrition as part of a plan to improve health-promoting and disease prevention activities. Given income gradients and disparities in healthy eating behaviors, it would appear that public programs and health care providers that provide other health and social services to low-income families could take up the charge of improving nutritional status and behaviors. The WIC program is an obvious starting point for educational interventions since most infants and their mothers in low-income households participate in WIC.[49]

49 Whaley S, True L, California WIC and Proposition 10: Made for Each Other. In Halfon N, Shulman E, Shannon M, and Hochstein M, eds, Building Community Systems for Young Children. UCLA Center for Healthier Children, Families and Communities, 2000.



Young children depend on their parents for performing and modeling many positive health behaviors. CHIS 2001 includes several measures of parental behaviors known to directly impact child health outcomes. These behaviors serve as indicators of a general orientation toward prevention and also suggest where a large number of children are experiencing preventable risks. For example, use of sunscreen is an indicator of a positive health behavior for young children. Smoking parents can adversely affect their child's health when they expose their child to second-hand smoke. Excessive alcohol use is another example of parent behavior that places a young child's health and development at risk.

Sunscreen

Use of sunscreen is an important protective health behavior in California to avoid various forms of skin cancer. Most sun exposure (up to 80%) occurs before adulthood.[50] CHIS 2001 shows that about two-thirds of parents of young children in California (67.8%) say they apply sunscreen to their child "sometimes" or "always" when the child is outdoors on a sunny day. Sunscreen use increases with child age, which may be due to older children spending more time outside. Sunscreen is applied "always" or "sometimes" on a sunny day for 44.4% of infants, 68.9% of toddlers age 1-2 years, 72.7% of children age 3-4, and 76.2% of five year olds. Sunscreen use varies by race/ethnicity, but it does not reach recommended levels even for children with the lightest skin. About 90% of Non-Latino White children use sunscreen at least occasionally on sunny days, with 57% using it always and 32% using it sometimes.

Sunscreen use in California falls short of national recommendations but does exceed the national average. Nationally about 53% of parents use sunscreen on children younger than age two, and 58% apply sunscreen to 3-4 year olds.[51] Because parents who do apply sunscreen may not use it sufficiently or frequently enough to provide the recommended level of protection, this continues to be an important indicator of parent-home-health behaviors for young children.

Tobacco

Parent use of tobacco can have a lasting effect on young children's health and well-being. Young children with a parent or parents who smoke are at greater risk for developing respiratory illnesses and other disorders. Further, children who live in families where there is a smoker are more likely to begin smoking themselves.[52]

CHIS 2001 shows that about 15.1% of parents of children age 0-5 years currently smoke. About half of parents who have ever smoked (52.6%) do not currently smoke, while 30.3% report smoking daily and 17.2% smoke some days during the week. Among the parents who currently smoke, about 50.1% smoked six or fewer cigarettes daily in the past 30 days, while 17.2% smoke one or more packs of cigarettes a day.

Smoking is of special concern for young children due to its impact on asthma. Exposure to cigarette smoke is a well known cause of asthma exacerbation and overall severity for children. CHIS 2001 shows that parent smoking is just as common among children ever diagnosed with asthma (17.3%) as among children who do not have asthma (15.2%). Although reducing home allergens and smoking exposure is important for reducing triggers for children with asthma, parents of symptomatic children are not eliminating exposure. Parents of 24.5% of asthmatic children who have frequent symptoms (with at least monthly asthma symptoms) smoke.

Alcohol

The U.S. Department of Health and Human Services states that prenatal exposure to drugs and alcohol represent only a small proportion of the children affected and potentially endangered by parental substance abuse. While prenatal

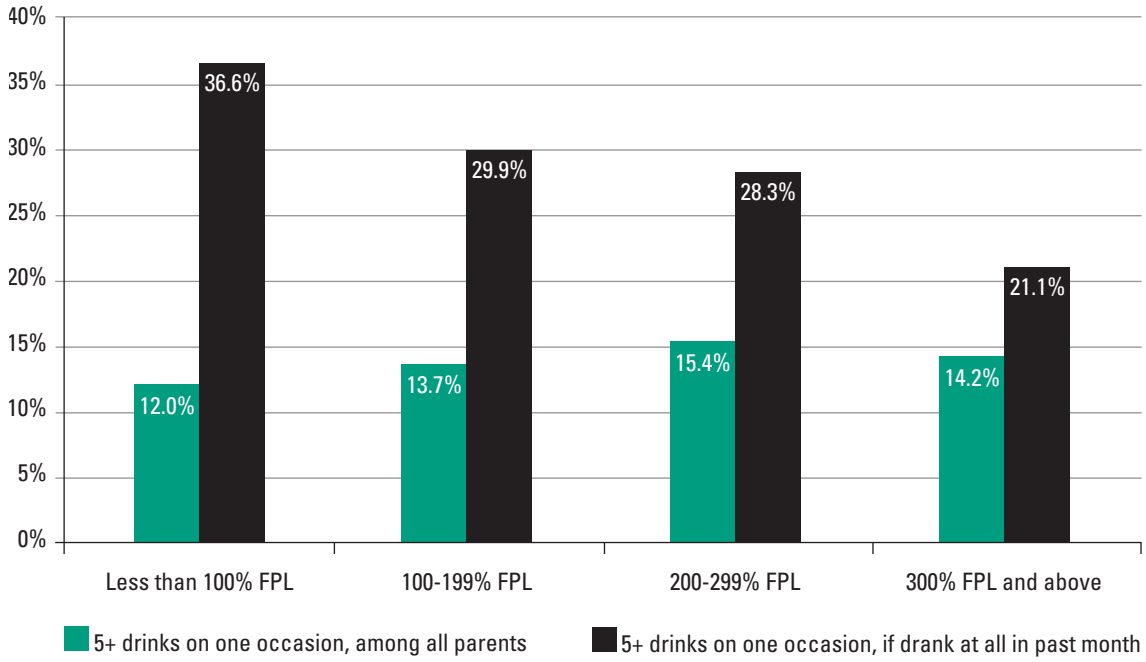
50 Preston DS, Stern RS. (1992) Non-melanoma Cancers of the Skin. *New England Journal of Medicine*; 327(23): 1649-62.

Vail-Smith K, Watson CL, Felts WM; Parrillo AV, Knight SM, Hughes JL. (1997). Childhood Sun Exposure: Parental Knowledge, Attitudes, and Behaviors. *Journal of Health Education*; 28: 149-155.

51 Robinson JK, Rigel DS, Amonette RA. (2000) Summertime Sun Protection Used by Adults for Their Children. *Journal of American Academy of Dermatology*; 42(5 Pt.1): 746-53.

52 Parental Smoking, ChildTrends Data Bank, http://www.childtrendsdatabank.org/health/drugs/49ParentalSmoking.htm

EXHIBIT 29 – HEAVY DRINKING AMONG ALL PARENTS AND PARENTS WHO DRINK, BY HOUSEHOLD INCOME, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001



Test of the association of heavy drinking among all parents, with income, is not statistically significant. Test of the association of heavy drinking among parents who consume alcohol, with income, is statistically significant ($p<0.05$) (chi square).

exposure has known physiological effects, excessive use of alcohol in the household can affect the young child's physical environment and emotional well-being.

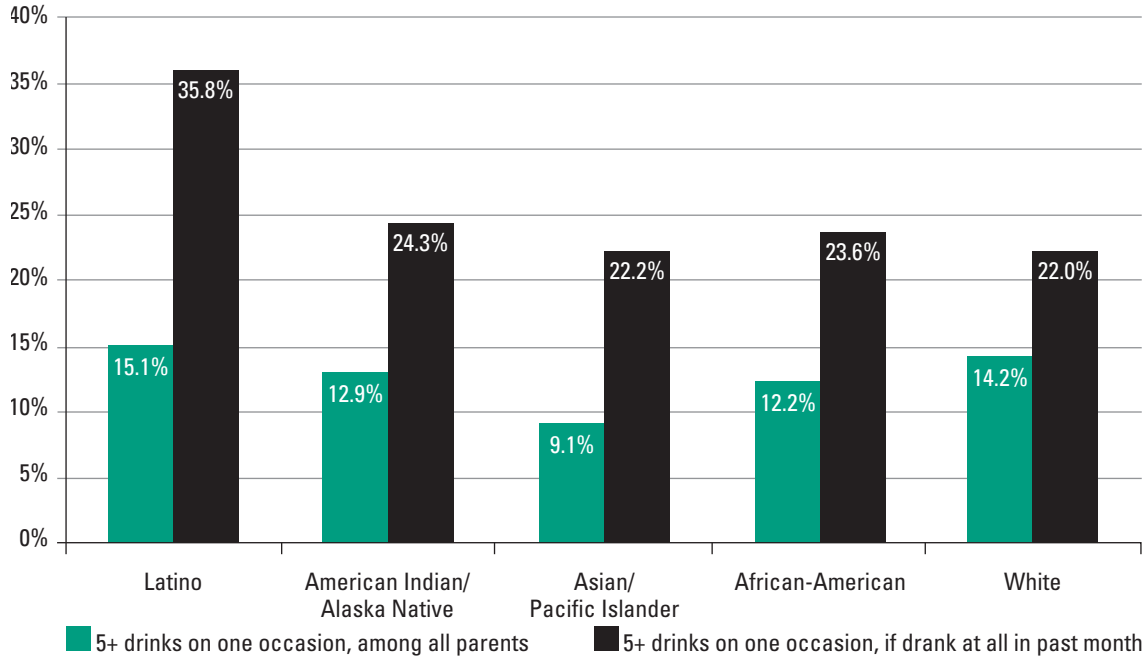
About 52.3% of parents reported drinking alcohol in the past month. Of parents who have consumed alcohol in the past month, most report having either one drink (44.7%) or two drinks (28.6%) on the days that they drink. A smaller proportion (13.8%) have on average three or more drinks on days in which they drink. Heavy drinking (five or more drinks on any one occasion) in the past month is reported by about 26.3% of parents who drink. In total, 13.7% of parents of children age 0-5 years (407,000) drank heavily at least once in the past month. These findings may actually be underestimates because they are self-reported negative behaviors that parents may not feel fully comfortable reporting.

Exhibit 29 shows that heavy drinking varies little with income, ranging from 12% of those below the poverty level to 14.2% of those at 300% FPL or above. Among parents who drink, however, heavy drinking is a bigger problem among lower income parents than among higher income parents. This is because parents who drink heavily are a larger proportion of parents who drink at all in the lowest income households, and a small proportion of parents who drink at all in the highest income households. One-third of parents in lower income households who consume alcohol drink heavily (36.6%) compared to one-fifth (21.1%) of parents in the highest income households.

Exhibit 30 shows that population rates of heavy drinking vary little by race/ethnicity. Among those parents who drink, however, a larger percentage of Latino parents than parents of other racial/ethnic groups drink heavily. Over one-third (35.4%) of Latino parents who consume alcohol at all say they drink heavily (at least once monthly), compared to about one-quarter of American Indian/Alaska Native, African-American, White, and Asian parents.

The frequency and intensity of reported alcohol use by California parents is of concern. Excessive (greater than five drinks at one time) alcohol use is associated with a range of mental health and parenting difficulties. This

EXHIBIT 30 – PARENT HEAVY DRINKING BY RACE/ETHNICITY, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001



Test of the association of heavy drinking with race/ethnicity is not statistically significant.. Test of the association of heavy drinking among parents who consume alcohol, with race/ethnicity, is statistically significant (p<0.05) (chi square).

shows a need for intervention and education. National studies suggest that up to 11% of U.S. children live with a parent who is alcoholic or needs treatment for abuse of illicit drugs. Only a small percentage of those children and families are identified or receive services.[53]

Summary

Exposure of children to second-hand cigarette smoke and to environments and care-giving-relationships plagued by heavy alcohol use are indicators of important and preventable risks. They may also be indicators of family environments where other parental behaviors may be less than optimal, including exposures to higher levels of violence, unstable care giving, poor nutrition, and lack of adequate emotional and learning supports. As First 5 expands family education and support services, attention should be paid to the role that these and other harmful behaviors can have on inhibiting healthy development of young children.

CHILD SAFETY

Neurons to Neighborhoods emphasizes that a safe and loving environment is critical for a child to develop and learn. Because many injuries for young children occur in the home, it is important to minimize risks to safety within the household. Unintentional injuries are the leading cause of death among all children. The Centers for Disease Control and Prevention (CDC) report that every year about 20-25% of all children sustain an injury that is severe enough to require medical attention, missing school, or bed rest. Nationally the two most common home injuries for young children are scalding injuries and falls.

53 Gardner S and Young N. Alcohol, Tobacco, and Other Drugs in the Lives of Young Children. In Halfon N, Shulman E, Shannon M and Hochstein M, eds, *Building Community Systems for Young Children*. UCLA Center for Healthier Children, Families and Communities, 2000.

Injury

CHIS 2001 shows that few young children (6.9%) sustain injuries within the year that are serious enough to require medical advice or treatment. Injuries are more common among toddlers and children of preschool age than among infants, affecting 1.6% of children under one year of age, 7.8% of children age 1-2 years, 7.5% of children age 3-4 years, and 8.6% of children age five years. These injuries result from many different types of accidents. The most common single reason for accidents (43%) is an accidental fall. About 4.4% of injuries requiring medical attention are caused by motor vehicles or by bicycle injuries. Most accidents occur in the home (57.7%). Other common locations for injuries are at school, day care, and recreation areas.

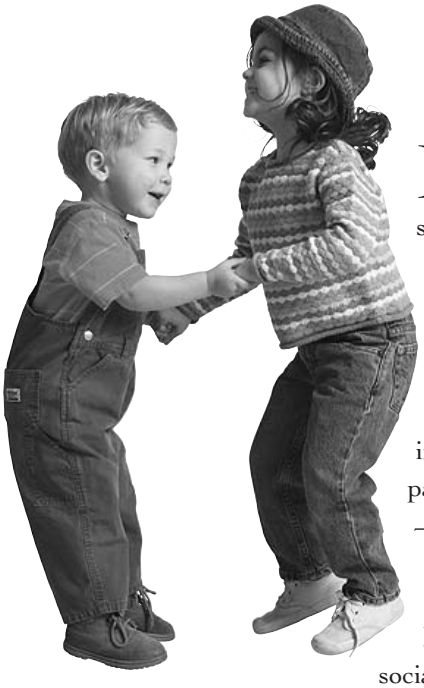
Children in higher income families have nearly twice the injury rate (9.2%) of children in the lowest income families (5.2%). Rates of injury are higher among Non-Latino White children (10.4%) than among Latino (3.8%), Asian/Pacific Islander (4.7%), and African-American (5.2%) children. Home safety measures—such as padding sharp corners, turning down the thermostat of the hot water heater, and locking cabinets—can reduce injuries for young children. National data show that parents of young children age 0-3 years more often take injury prevention precautions, such as protecting electrical sockets, that actually cause few injuries in children, but less often take precautions—such as padding furniture—that would actually reduce many more injuries in the home.[54]

Household Firearms

Firearms in the home are a danger to children. Children as young as 3-4 years are able to pull the trigger of most handguns. CHIS 2001 shows that about 15.8% of children age 0-5 years in California live in households in which there is a firearm. Of these households, about two-thirds (65.6%) have a handgun. This shows that a small (but not insignificant) number of young children in California are at risk for injury. Other studies show that in about 13% of households with children and with firearms, at least one firearm was unlocked or unloaded with ammunition often left nearby. These are simple measures that California parents can take to protect their young child from accidental firearm injuries at home.[55]

54 Stevens G, Kuo A, Inkelas M, Peek-Asa C, Olson LM, Halfon N. 2003. Injury prevention: Disparities in physician guidance and parent practice. Abstract presented at the Pediatric Academy Societies Annual Meeting. Seattle, WA.

55 Schuster M, et al., (2000) Firearm storage patterns in U.S. homes with children, *American Journal of Public Health*. 90(4): 588-94.



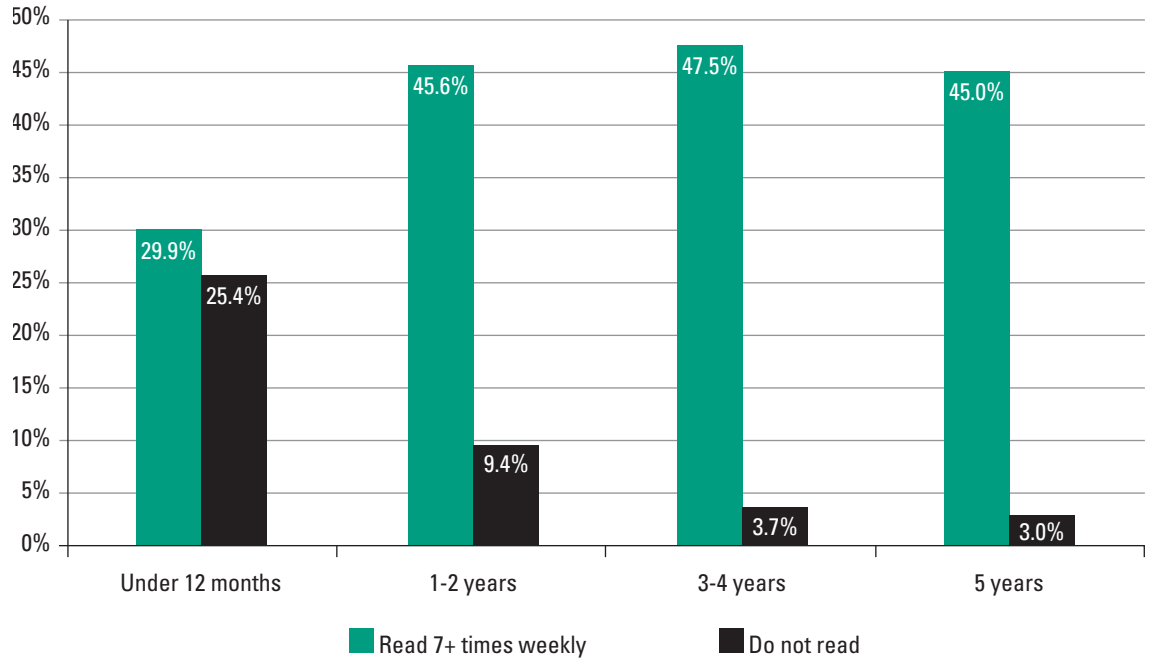
Parents have a significant impact on children's emotional development through their daily interactions with the child. Positive developmental interactions between parents and young children—such as reading together—can enhance children's development and learning.[56] The family's social activities are also important. Social isolation of the family is a marker for stress, and lack of social support leads to a greater risk of inadequate nurturing of the child's emotional development.

Parent-Child Interaction: Reading Together

Reading together—which includes sharing picture books in addition to reading stories out loud—is an important shared activity that focuses the parent's attention on the child and helps with parent-child attachment. Regular reading also promotes early literacy. Professional educators as well as the American Academy of Pediatrics recommend that parents read daily with young children.

Exhibit 31 shows that California parents are falling short of this recommendation. Only 43.6% of parents of children age 0-5 years report that someone in the household reads to the child at least seven times in a typical week. This is lower than the 55% of parents who reported reading to their child age 0-5 years in a recent First 5 survey on early care and education.[57] The lower rate may be due to no specific mention of picture books in the CHIS 2001 question; to the larger number of fathers who were

EXHIBIT 31 – READING TOGETHER BY CHILD AGE, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001

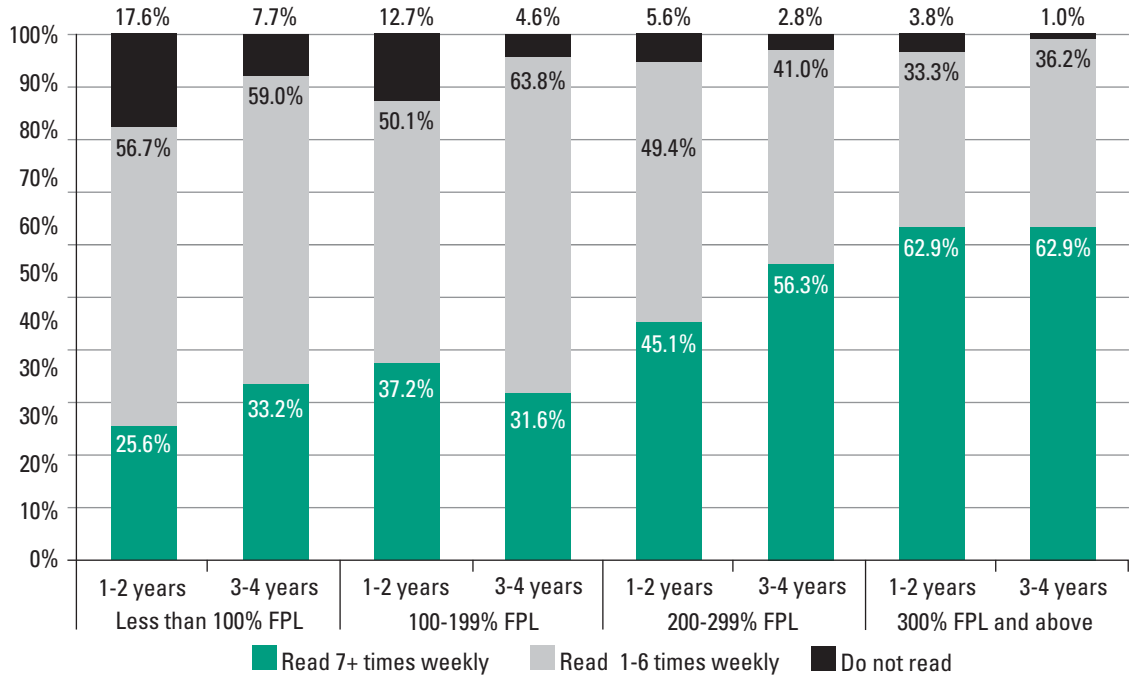


Test of the association of reading with child age is statistically significant (p<0.05) (chi square).

56 Shonkoff J, Phillips D, eds. *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, DC: National Academy Press; 2000.

57 Inkelas M, Tullis E, Flint R, Wright J, Becerra R, Halfon N. 2002. Public opinion on child care and early childhood education, California 2001. First 5 California.

EXHIBIT 32 – FREQUENCY OF READING BY HOUSEHOLD INCOME AND CHILD AGE, CHILDREN AGE 1-4 YEARS, CALIFORNIA 2001



Tests of the association of reading frequency with child age are statistically significant for each income group ($p<0.05$) (chi square).

interviewed in CHIS 2001; and to the special efforts of CHIS 2001 to reach households that are normally difficult to reach in telephone surveys. Comparison to national figures shows that fewer parents in California read to their child daily. Nationally about 52% of children under age three years are read to daily, and about 58% of children age 3-5 years are read to every day.[58]

Unlike children nationally, daily reading among most California children does not increase once children reach the age of 12 months. CHIS 2001 shows that about 45.5% of children age 1-2 years, 47.5% of children 3-4 years and 45% of five year olds are read to *daily*. The exception is that daily reading increases for preschoolers among higher-income families (Exhibit 32). The lower reading rates for lower-income children continue throughout early childhood.

About one-third of California parents read together with their young child several times a week or even less often. About 8.9% of children age 0-5 years are not read to by their parents or by anyone else in the household.

Reading at all, and reading frequency, increases with household income. Exhibit 32 shows that for children below 200% FPL, daily reading does not increase for children age 3-4 years, relative to children age 1-2 years, even though this is a critical time for parent-child reading. Rates of daily reading are substantially higher for children in households at or above 300% FPL.

Reading also varies with the race/ethnicity, citizenship, maternal education, and the age of the parent. Daily reading ranges from a low of 26% of Latino children to 40.9% of African-American, 42.4% of Asian/Pacific-Islander, 60.5% of Non-Latino White, and 61.2% of

58 Halfon N, Olson L, Inkelas M, et al. Summary statistics from the National Survey of Early Childhood Health, 2000. National Center for Health Statistics. Vital Health Statistics 15(3). 2002.

Promoting Early Literacy and School Readiness: Disparities in Reading with Young Children

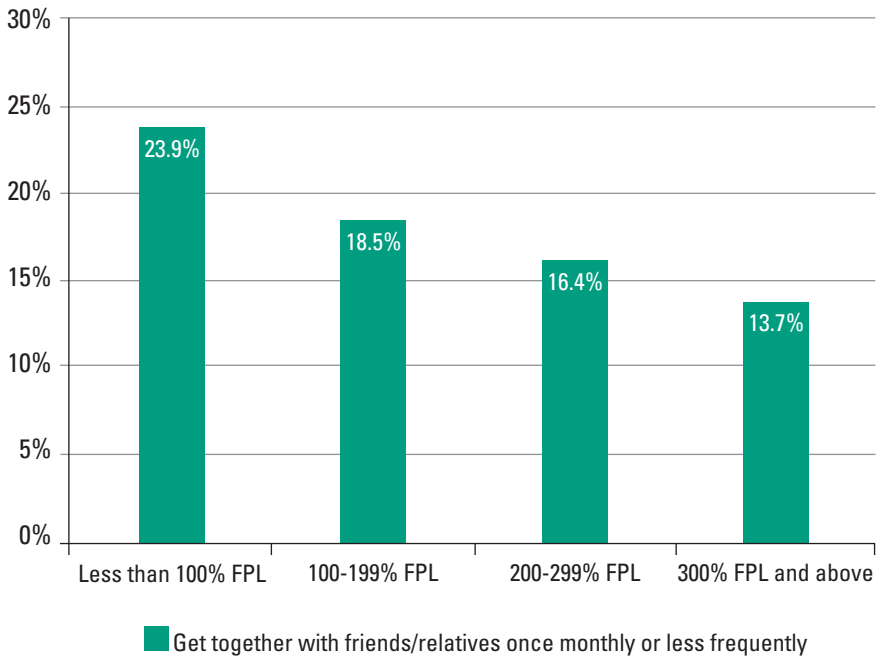
Reading is a simple development-promoting activity that parents can do with their young child to promote school readiness. Parents reading to their young child is an essential activity that focuses the parent's attention on the child and helps with parent-child attachment. A regular reading routine also gives parents protected, focused time with their young child. Regular reading promotes early literacy for children. Because of the association of reading with positive outcomes for young children, professional educators, as well as the American Academy of Pediatrics, recommend that parents read daily with young children.

CHIS 2001 shows that California parents are falling far short of what is recommended. Only 43.6% of parents of children age 0-5 years say that someone in the household reads to the child at least seven times in a typical week. Comparison to national data shows that parents in California are reading less than parents nationally. An important finding is that unlike children in other states, daily reading among most California children does not increase once children grow out of infancy and grow from being toddlers to preschoolers. Although the rate of daily reading increases for higher-income families, children in low-income households are no more likely to be read to daily as their interest in books, and the importance of reading, grows exponentially after infancy.

The large disparities in reading by income, race/ethnicity, and maternal education show that a subgroup of children are at significantly higher risk of not being ready for school. Only about one-third of children age 1-4 years in households below 200% FPL are read to daily. In contrast, two-thirds of children age 1-4 years in households above 300% FPL are read to daily. Disparities by race/ethnicity are quite substantial. Only about 26% of Latino children are read to daily. In contrast, about 40.9% of African-American and 42.4% of Asian/Pacific-Islander children are read to daily. A larger proportion of Non-Latino White children (60.5%) and American Indian/Alaska Native children (61.2%) are read to daily. The fact that U.S. born children are nearly twice as likely as foreign-born children to be read to daily shows the gap in development-promoting experiences that create disparities in young children's readiness for school.

Several strategies hold promise. Ensuring that parents know how important reading together is for young children's learning is important. Pediatric providers and programs that serve young children, such as WIC, Head Start, and child care programs, all have a role to play in emphasizing the benefits of reading. Although parent literacy is important in reading, it should not be a barrier since picture books and stories can still be shared. Pediatric providers and community-based programs can also refer parents to literacy programs. Parent literacy is an important predictor of children's school readiness and in their academic success.

EXHIBIT 33 – SOCIAL ISOLATION BY HOUSEHOLD INCOME, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001



Test of the association of social isolation with income is statistically significant ($p<0.05$) (chi square).

American Indian/Alaska Native children. U.S. born children are nearly twice as likely as other children to be read to daily. Children whose mothers have less education are substantially less likely to be read to daily, and more likely to not be read to at all. Older parents are more likely to read with their child, and they read more frequently than younger parents. About 69.1% of children with parents 40 years or above and 63.8% of children with parents 30-39 years are read to at least four times weekly, compared to 52.7% of children with parents under age 18 years and 55.3% of children with parents age 19-29 years of age.

These large gradients by income, education, and citizenship show that young children who are most at risk of starting school without being ready to learn are not getting the early literacy experiences that they need.

Reading is an important part of preparing children emotionally and academically for school. Young children in California who are at greatest risk for not being ready to start school are not getting the benefit of daily reading. It is important to emphasize to parents that daily reading improves their child's chances of being ready to learn. There is a growing body of evidence to suggest that frequent if not daily reading can be encouraged by children's health care providers, early care and education providers, and programs such as WIC, to reduce disparities in this important parent-child activity.

Socialization with Friends and Relatives

Social activities of the family are a key measure of socialization and social support. Parents of most young children in California (82.4%) say that they spend time with friends or relatives at least every other week. About 17.6% are more isolated and get together with friends or relatives only once a month, or even less frequently.

Lower-income parents are more socially isolated than higher-income parents. This income gradient shows that as income increases, social isolation declines. Exhibit 33 shows that while 86.3% of parents at 300% FPL and above get together frequently with family or friends, fewer (76.1%) of parents below the FPL get together frequently. Parents and

their young children also appear to be more socially isolated when they are not U.S. citizens or when they are less acculturated. For example, about 85.2% of families of U.S. born children, and only 70.2% of families of non-citizen children, get together with family or friends at least twice monthly. This suggests that social isolation is a bigger problem for lower income, less acculturated parents. Given the stress of child-rearing, these parents may not be receiving the social support they need.

Early Care and Education

While child care has always been an important part of child rearing, increased workforce participation now makes child care a necessity for most parents. Nationally, about 60% of children age 0-5 years are in some type of non-parental care arrangement, and 27% have more than one care arrangement. Child care thus plays an important role in the contribution of early care and education experiences to school readiness. High-quality, developmentally-appropriate experiences during early childhood have been linked to better cognitive and social-emotional outcomes in the school years. The California Joint Committee to Develop a Master Plan for Education–Kindergarten through University has acknowledged the importance of early experiences for short- and long-term educational outcomes by addressing early child development and school readiness in its plan.

CHIS 2001 shows that about 36.1% of children age 0-5 years have a regular child care arrangement for at least ten hours per week. Most children who have a regular child care arrangement spend more than 20 hours a week in child care. About 16.6% of young children spend more than 40 hours per week in child care. These rates are similar to recent First 5 survey data[59], although slight methodological differences make the rates not directly comparable.

Some young children have multiple care arrangements. Of children spending at least ten hours weekly in child care, nearly half (41.5%) receive child care from a grandparent or family member. About 29.2% receive child care in family day care. About 26.6% are in a child care center. About 17.9% of young children are cared for in their own home by a non-family member (a nanny). About 10.3% are in Head Start or state preschool, while 29.7% are in another type of preschool or nursery school.

Child Care Licensing and Parent Satisfaction

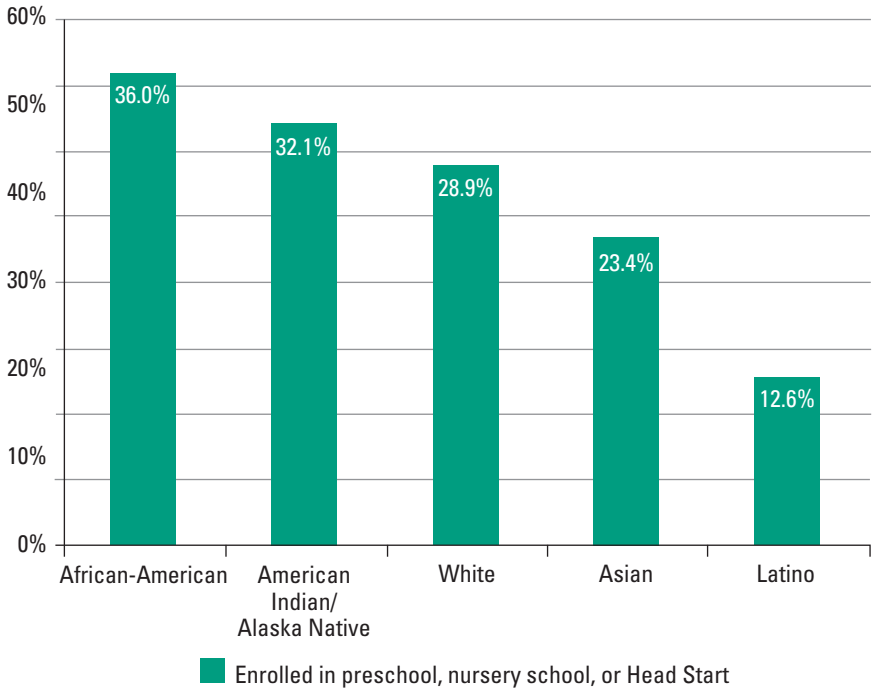
Children's enrollment in licensed—rather than unlicensed—care arrangements is one way of assessing access to quality child care. Because child care licensure is associated with many dimensions of child care quality, disparities in use of licensed arrangements may put some children at a disadvantage in terms of being prepared for school.

Among children in a child care arrangement that is not a family member or nanny, most are reported by their parents to have licensed providers. CHIS 2001 shows that about 85.2% of children spending more than ten hours weekly in a family day care or other child care program or preschool are reported to have licensed providers. Thus, few parents whose children are in centers, nursery schools, or family day care say that the child's provider (or providers if in multiple arrangements) is unlicensed. Fewer mothers (57.2%) with less than high school education report licensed arrangements, compared to 88% with a high school diploma, 85.3% of those with some college, and 90.7% of college graduates.

Parent satisfaction with child care is one way of gauging the quality of children's early care experiences. CHIS 2001 shows that most parents are satisfied with the quality of their child's care arrangements. A substantial number (19.8%) are only somewhat satisfied, or are not at all satisfied. Fewer parents whose child is in a structured child care center or preschool are dissatisfied (17.7%). About 20% of parents whose child is in a family day care arrangement and 31% of parents who do not use child care are dissatisfied with their arrangement. Some studies suggest that parents give high overall ratings of child care even when objective measurement of the child-care setting shows that it does not meet recommended standards, and thus parent ratings of satisfaction should be interpreted with this in mind.

59 Inkelas M, Tullis E, Flint R, Wright J, Becerra R, Halfon N. 2002. Public opinion on child care and early childhood education, California 2001. First 5 California.

EXHIBIT 34 – ENROLLMENT IN PRESCHOOL, NURSERY SCHOOL, OR HEAD START BY CHILD'S RACE/ETHNICITY, CHILDREN AGE 3-5 YEARS, CALIFORNIA 2001



Test of the association of preschool participation with race/ethnicity is statistically significant ($p<0.05$) (chi square).

Participation in Preschool

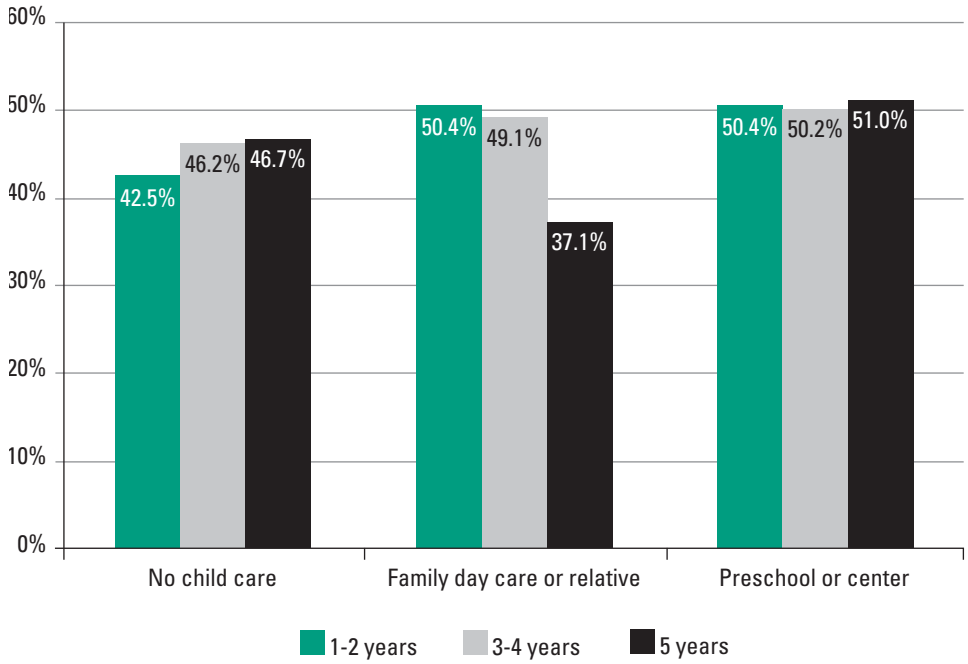
Preschool can help prepare children for school, not only through academic activities but through interaction and socialization. The First 5 California Universal Preschool Initiative is trying to increase access to preschool for all young children. Both California First 5 and local commissions will benefit from knowing which children are participating in preschool as the initiative unfolds. First 5 will also benefit from understanding the characteristics of preschool-age children who have not been in preschool so that the needs of these children can be anticipated and planned for.

CHIS 2001 shows that few children of preschool age (3-5 years) are enrolled in Head Start or a preschool program. About 22.4% of preschool age children are in a preschool program such as Head Start, preschool, or nursery school. The rate of preschool participation is slightly higher for children age four years (at 31.8%) than for children age three years (at 18.4%).

Enrollment in a preschool or Head Start program at age 3-5 years is lower for Latino children (12.6%) than for African-American children (36.0%) showing that Latino children enroll at about one-third the rate of African-American children (Exhibit 34). Enrollment for children age 3-4 years shows the same pattern with 13.8% of Latino and 44.4% of African-American children age 3-4 years enrolled in either preschool or Head Start. Enrollment increases with household income, from 10.4% of children age 3-5 years in households below 100% FPL to 13.3% at 100-199% FPL, 21.6% at 200-299% FPL and 35.1% at 300% FPL and above. The same pattern is found for children age 3-4 years with participation rates of 12.4% for 0-99% FPL, 14.8% at 100-199% FPL , 24.4% at 200-299% FPL, and 39.8% at 300% FPL and above.

Head Start is a key program for improving the school readiness of socio-economically disadvantaged children. Yet many children who are eligible for Head Start are not enrolled. Among income-eligible children, in households with income below 100% FPL, only 9.4% of 3-4 year olds

EXHIBIT 35 – DAILY READING BY CHILD CARE ARRANGEMENT, CHILDREN AGE 3-5 YEARS, CALIFORNIA 2001



Test of the association of child care arrangement with daily reading at home is statistically significant overall and for the age groups of 3-4 years and 5 years ($p<0.05$) (chi square). Test of the association is not statistically significant for the age group of 1-2 years.

are in a Head Start or state preschool program. Among eligible preschool-age children, African-American children are more likely than Latino children to be in Head Start.

Summary

Parents, policy-makers, advocates and researchers have all become increasingly concerned about the extent to which child care arrangements offer an environment that promotes growth and learning. Child care has an important and growing role in supporting optimal cognitive, social and emotional development of young children. Fewer than half of California's young children age 3-4 years are enrolling in preschool. Both income and race/ethnicity are associated with disparities in preschool enrollment. Enrollment among the lowest income children is only one-third the rate of enrollment for children at or above 300% FPL despite the availability of Head Start for young children in low-income households. Future CHIS surveys will make it possible to track changes in preschool enrollment with both state- and county-level preschool initiatives.

Characteristics of Children in Different Child Care Arrangements

Parents choose child care arrangements based on many factors, including cost, availability, preference for family or for center care, and views on the importance of different features of early care and education. Some parents view preschool and Head Start as programs that can help young children learn and become ready for school.

Patterns of reading for young children are described earlier in Section 7. Exhibit 35 shows that preschool age children who are not in a preschool or Head Start program are not getting the early literacy benefits they need. Daily reading is greater among children who are attending preschool (50%) with 45.9% of children in relative care or family day care and 44.8% of children who are not in child care reading daily with their parents. This shows that parents who want to or have been able to enroll their child in preschool or Head Start are also more likely to be doing these early-literacy activities at home. Yet even among

children enrolled in preschool or Head Start, only about half are being read to daily at home. This shows the importance of promoting reading in all early care and education programs, both in family day care and in center settings.

Exhibit 36 shows that health and well-being varies for children in different child care arrangements. Some of these characteristics differ across arrangements because different types of care are used as children grow. These characteristics are useful for understanding the kinds of needs that children have. For example, rates of the parent and child reading together are higher for children in structured programs than for children at home or in family day care settings. Children in structured settings are more likely to have lower rates of soda consumption than children at home or in family day care or relative care. These home activities and health behaviors may be important to address, as increasing numbers of young children enter structured preschool programs.

These characteristics also show how the population of children may change as increasing numbers of children age 3-4 years enter preschool programs through state and local First 5 preschool expansion initiatives. For example, fair or poor health is less frequent among children in preschool (3%) than among children in family day care or at home (6.9%). Asthma is more common among children in structured programs (15.7%) than for children at home (7.8%) due in part to exposure to allergens in these settings. Also, children in preschool or center programs are identified with activity limitation at nearly twice the rate of children who are in family day care, or at home with the parent, although—due to small sample size—this difference is not statistically significant in CHIS 2001. Greater identification of limitations may result not only because children in preschool are (on average) older, but because many learning and motor disabilities are only identified once children move into these structured settings. Thus, as universal preschool initiatives are launched throughout California, it will be important to anticipate greater identification of disability in children not previously known to have problems.

EXHIBIT 36 – CHILD CHARACTERISTICS BY CARE ARRANGEMENT, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001

	NOT IN CHILD CARE, OR LESS THAN 10 HOURS*	FAMILY DAY CARE OR RELATIVE**	PRESCHOOL OR CHILD CARE CENTER***	TOTAL
AGE				
LESS THAN 12 MONTHS	76.3%	22.5%	1.3%	100%
1-2 YEARS	63.3%	31.9%	4.9%	100%
3-4 YEARS	58.1%	28.2%	13.6%	100%
5 YEARS	65.1%	22.7%	12.2%	100%
CHILD CARE EXPERIENCES				
VERY SATISFIED WITH CHILD CARE	69.1%	80.1%	82.3%	
PHYSICAL WELL-BEING				
EXCELLENT/VERY GOOD HEALTH	72.0%	80.3%	81.3%	
ACTIVITY LIMITATION	3.3%	3.8%	5.6%	
DIAGNOSED WITH ASTHMA	7.8%	14.2%	15.7%	
SYMPTOMS AT LEAST MONTHLY	39.3%	32.9%	35.3%	
TAKE MEDICATION	49.0%	53.1%	55.6%	
UNINSURED BUT ELIGIBLE FOR PUBLIC PROGRAM	6.2%	4.1%	2.2%	
NUTRITION				
2+ SERVINGS OF FRUIT DAILY	86.3%	85.0%	87.4%	
3+ SERVINGS OF VEGETABLES DAILY	18.4%	17.2%	15.3%	
DRINK SODA (1-2 YEARS)	19.2%	20.2%	8.6%	
DRINK SODA (3-4 YEARS)	26.0%	25.3%	19.5%	
DRINK SODA (5 YEARS)	30.3%	31.3%	20.6%	
LEARNING AND DEVELOPMENT				
2+ HOURS OF TELEVISION/COMPUTER USE	67.9%	70.1%	61.6%	
READING DAILY (1-2 YEARS)	42.5%	50.4%	50.4%	
READING DAILY (3-4 YEARS)	46.2%	49.1%	50.2%	
READING DAILY (5 YEARS)	46.7%	37.1%	51.0%	
ECONOMIC WELL-BEING				
RECEIVING FOOD STAMPS	19.3%	18.9%	12.8%	

*Children who spend no time or fewer than 10 hours weekly in child care

**Children who spend at least 10 hours in child care but are not in preschool, nursery school, Head Start, or child care center

***Children who spend at least 10 hours in child care and are in preschool, nursery school, Head Start, or child care center

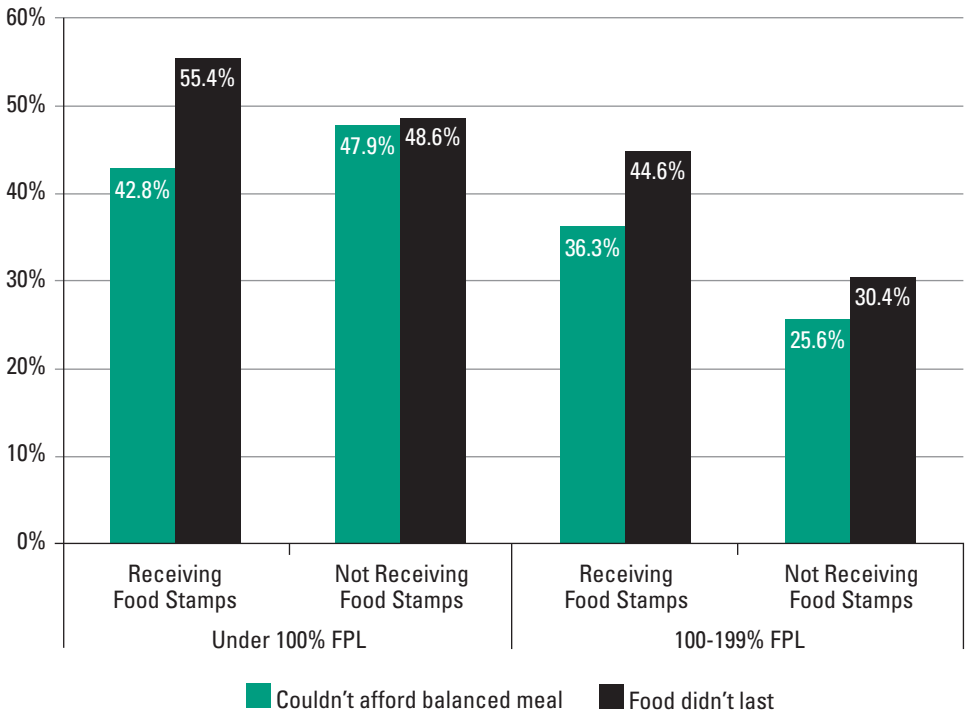
Tests of the association of child care arrangement are statistically significant ($p<0.05$) (chi square) for child age, satisfaction with child care, child health, asthma diagnosis, health insurance, soda intake (overall, and age 1-2 years) and reading (overall, age 3-4 years, age 5 years).

The well-being of children is affected by the material and economic well-being of their families. The ability of families to provide children with their basic physical needs is an important component of child well-being. Children from low-income families have poorer health and fare less well than higher-income children on other well-being indicators. School-age children in lower-income families are more likely to have difficulty in school and are at greater risk of becoming teen parents and having low income as adults.[60]

Food Insecurity

Children's physical health and development are jeopardized when they do not receive appropriate nutrition and health care. Households with food insecurity have poorer quality meals and suffer from anxiety about their food supply.[61] CHIS 2001 shows that many California households with young children have been unable to provide balanced meals for financial reasons. Among young children in California households with income below the Federal Poverty Level (FPL), about 51.2% of parents report that their food did not last and they could not afford to get more, either "sometimes" or "often" over the past 12 months.

EXHIBIT 37 – FOOD INSECURITY IN HOUSEHOLDS WITH INCOME LESS THAN 200% FPL, BY USE OF FOOD STAMPS, CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001

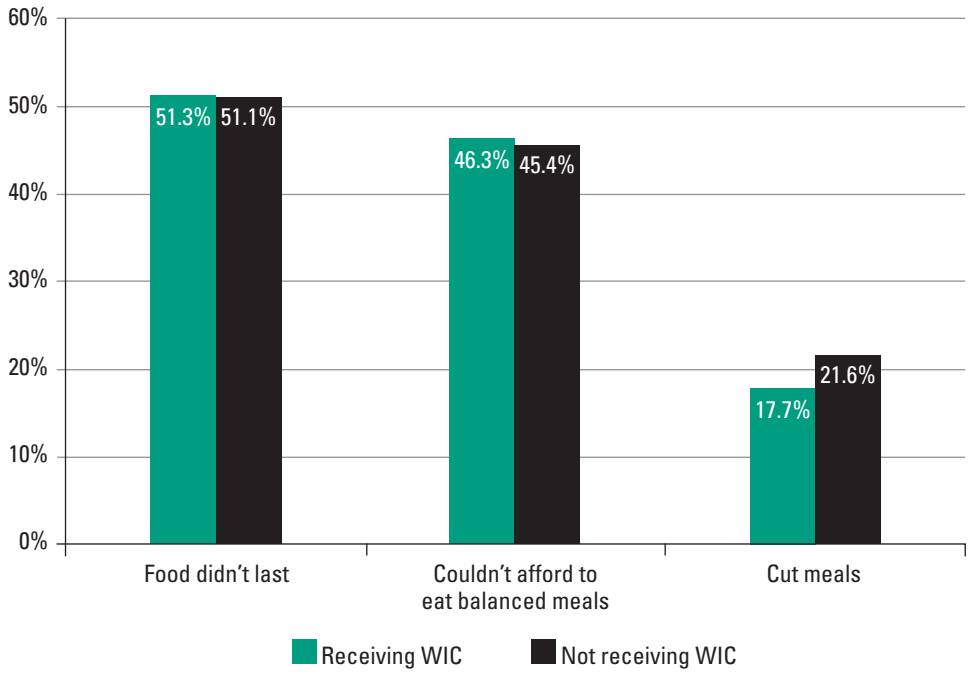


Tests of the association of food insecurity with receipt of Food Stamps, for each income group, are not statistically significant.

60 Federal Interagency Forum on Child and Family Statistics, America's Children: Key National Indicators of Well-Being, 2001. Forum on Child and Family Statistics, Washington, DC: U.S.Government Printing Office.

61 ibid

FIGURE 38 – FOOD INSECURITY IN HOUSEHOLDS WITH INCOME LESS THAN 100% FPL, BY PARTICIPATION IN WIC, PARENTS OF CHILDREN AGE 0-5 YEARS, CALIFORNIA 2001



Tests of the association of food insecurity with WIC participation are not statistically significant.

Food insecurity affects the quality of meals more often than it causes hunger or eating less. Parents of 45.9% of young children in these low-income households report not being able to afford balanced meals. Somewhat fewer parents have cut the size of meals or skipped meals (19.1%), or eaten less than they should (25.9%). Just as for children nationally,[62] food insecurity is a significant problem but hunger affects only some of the food-insecure households.

Although many low-income households report problems affording balanced meals and adequate amounts of food, not all low-income households receive Food Stamps or participate in the Women, Infant and Children (WIC) Supplemental Food Program. Only 14.9% of households under 300% FPL with young children are receiving Food Stamps, including 39.7% of children below the FPL and very few children above the FPL. CHIS 2001 shows that the low-income families receiving Food Stamps are experiencing the greatest food insecurity. Many families who are not receiving this support are also having trouble. About half of families below 100% FPL with children age 0-5 years who are receiving Food Stamps report occasionally or often being unable to afford a balanced meal (42.1%) or food not lasting (55.4%), with fewer reporting that they cut the size of or skipped meals (21.4%). Exhibit 37 shows that similar food-insecurity problems affect low-income families whether or not they receive Food Stamps.

WIC participation is high among income-eligible children. Overall, WIC participation declines with child age. In low-income households about 45.8% of infants, 35% of toddlers age 1-2, and 28.5% of children age 3-4 years are reported to be receiving WIC. Yet many low-income households in which the child is receiving WIC continue to

62 Federal Interagency Forum on Child and Family Statistics. *America's Children: Key National Indicators of Well-Being*, (2001). Washington, DC: U.S.Government Printing Office.

have food insecurity (Exhibit 38). Of the lowest income households, food insecurity affects a similar proportion of families receiving and not receiving WIC. While WIC improves the child's nutrient intake, it does not fully address the fundamental problem of food insecurity.

Income Assistance

Key public assistance programs for mothers and young children include Temporary Aid to Needy Families (TANF) and WIC. Since welfare reforms were enacted in 1996, the number of families using TANF has fallen. Nationally the proportion of children who are living in families receiving TANF income assistance has dropped to 5.8% of all children.[63] The proportion of young children in California who are receiving TANF, or CalWorks (5.9%) is similar to the national proportion.

63 ChildTrends Data Bank, Social Support Benefits AFDC/TANF, http://www.childtrendsdatabank.org/income/benefits/50AFDCTANF.htm

ATTACHMENT 1
SCHOOL READINESS MEASURES IN CHIS 2001

SCHOOL READINESS MEASURES IN CHIS 2001	INFANT (LESS THAN 1 YEAR)	TODDLER (1-2 YEARS)	PRESCHOOLER (3-4 YEARS)	PRE-KINDERGARTNER (5 YEARS)	OVERALL (0-5 YEARS)
1. GOOD HEALTH					
A. HEALTH STATUS					
IN EXCELLENT OR VERY GOOD HEALTH	80.6%	73.2%	74.8%	74.0%	75.1%
PHYSICAL, MENTAL, OR BEHAVIORAL CONDITION THAT LIMITS ABILITY TO DO CHILDHOOD ACTIVITIES NORMAL FOR AGE	1.1%	2.9%	5.0%	4.8%	3.7%
EVER DIAGNOSED WITH ASTHMA*	–	9.5%	10.5%	12.0%	10.5%
B. CHRONIC DISEASE MANAGEMENT					
TAKING PRESCRIPTION MEDICINE TO CONTROL ASTHMA, AMONG DIAGNOSED CHILDREN*	–	54.7%	49.9%	49.6%	51.5%
HAD ER VISIT DUE TO ASTHMA, AMONG DIAGNOSED CHILDREN*	–	33.6%	19.2%	11.5%	22.3%
HAD HOSPITAL STAY DUE TO ASTHMA, AMONG DIAGNOSED CHILDREN*	–	7.0%	2.5%	2.9%	4.1%
C. NUTRITION AND SEDENTARY ACTIVITY					
OVERWEIGHT (WEIGHT ABOVE 95TH PERCENTILE NATIONALLY)	17.8%	17.3%	14.3%	8.8%	14.8%
RECOMMENDED MILK INTAKE (AT LEAST 2 SERVINGS)**	–	73.5%	64.7%	64.1%	66.6%
RECOMMENDED FRUIT INTAKE (AT LEAST 2 SERVINGS)**	–	89.0%	87.2%	81.4%	86.1%
RECOMMENDED VEGETABLE INTAKE (AT LEAST 3 SERVINGS)**	–	20.4%	17.7%	15.4%	17.7%
ANY DAILY SODA INTAKE**	–	18.8%	25.0%	29.4%	24.7%
TWO OR MORE HOURS OF TV/VIDEO GAMES DAILY (WEEKDAYS)*****	–	–	67.1%	65.4%	66.2%
MORE THAN TWO HOURS OF TV/VIDEO GAMES AND/OR COMPUTER USE (WEEKDAYS)*****	–	–	31.2%	33.7%	32.5%

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*Excludes children younger than age 1
**Excludes children younger than age 2
***Excludes children 2 years and younger who do not yet have teeth
****Percentage for subsample of children
*****Among children spending at least 10 hours weekly in care by someone other than the parent
******Excludes children younger than age 4
*******Excludes children younger than age 3

ATTACHMENT 1
SCHOOL READINESS MEASURES IN CHIS 2001 (CONTINUED)

SCHOOL READINESS MEASURES IN CHIS 2001	INFANT (LESS THAN 1 YEAR)	TODDLER (1-2 YEARS)	PRESCHOOLER (3-4 YEARS)	PRE-KINDERGARTNER (5 YEARS)	OVERALL (0-5 YEARS)
D. HEALTH CARE ACCESS					
INSURED	94.7%	94.3%	91.3%	93.8%	93.2%
CURRENTLY UNINSURED OR ANY COVERAGE GAP IN THE PAST YEAR	9.8%	10.1%	12.9%	10.0%	11.0%
ELIGIBLE FOR MEDI-CAL OR HEALTHY FAMILIES, AMONG UNINSURED	96.9%	73.8%	78.8%	68.1%	77.8%
ELIGIBLE FOR MEDI-CAL, AMONG UNINSURED	82.5%	54.7%	62.6%	40.6%	59.2%
ELIGIBLE FOR HEALTHY FAMILIES, AMONG UNINSURED	14.4%	19.1%	16.1%	27.6%	18.6%
HAVE USUAL SOURCE OF HEALTH CARE	99.0%	98.0%	97.1%	98.6%	97.9%
AT LEAST ONE PHYSICIAN VISIT IN PAST YEAR	99.6%	99.1%	96.1%	95.2%	97.4%
ANY EMERGENCY ROOM VISIT IN PAST YEAR	21.6%	30.3%	19.3%	15.0%	22.4%
HAVE OFFICIAL HAND-HELD IMMUNIZATION RECORD	87.1%	95.3%	95.0%	95.7%	94.0%
ANY DIFFICULTIES IN GETTING SHOTS	2.7%	3.6%	2.3%	2.6%	2.9%
DELAY IN GETTING PRESCRIPTION	2.5%	3.1%	3.1%	3.0%	3.0%
DELAY IN GETTING TEST OR TREATMENT	0.7%	2.4%	2.0%	1.5%	1.4%
DELAY IN GETTING OTHER NEEDED MEDICAL CARE	1.4%	3.6%	2.6%	4.4%	3.1%
E. DENTAL HEALTH					
EVER VISITED DENTIST/ DENTAL HYGIENIST**	–	21.3%	60.1%	85.7%	58.2%
VISITED DENTIST/DENTAL HYGIENIST IN PAST YEAR**	–	20.6%	55.6%	81.0%	54.6%
DENTAL INSURANCE**	–	75.8%	75.5%	78.7%	76.4%
USE A FREE COMMUNITY OR PUBLIC DENTAL PROGRAM IF UNINSURED**	–	5.9%	6.0%	16.2%	8.4%
USE TOOTHPASTE WHEN BRUSHING TEETH***	16.2%	74.8%	97.3%	97.2%	83.4%
TAKE FLUORIDE SUPPLEMENT OR VITAMINS***	25.1%	24.5%	22.3%	22.3%	23.3%

continued on next page

*Excludes children younger than age 1
**Excludes children younger than age 2
***Excludes children 2 years and younger who do not yet have teeth
****Percentage for subsample of children
*****Among children spending at least 10 hours weekly in care by someone other than the parent
******Excludes children younger than age 4
*******Excludes children younger than age 3

ATTACHMENT 1
SCHOOL READINESS MEASURES IN CHIS 2001 (CONTINUED)

SCHOOL READINESS MEASURES IN CHIS 2001	INFANT (LESS THAN 1 YEAR)	TODDLER (1-2 YEARS)	PRESCHOOLER (3-4 YEARS)	PRE-KINDERGARTNER (5 YEARS)	OVERALL (0-5 YEARS)
F. EXPOSURE TO TOXIC SUBSTANCES					
PARENT SMOKES****	12.8%	17.3%	14.1%	14.6%	15.0%
PARENT HAD 5 OR MORE ALCOHOLIC DRINKS AT ONE TIME (PAST MONTH)****	11.2%	14.2%	13.5%	15.4%	13.7%
CHILD USES SUNSCREEN (SP15+) SOMETIMES OR ALWAYS ON A SUNNY DAY	44.4%	68.9%	72.7%	76.2%	67.8%
2. SAFETY AND SURVIVAL					
A. EXPOSURE TO VIOLENCE IN HOME AND COMMUNITY					
PARENT BEEN A VICTIM OF GUN VIOLENCE****	0.3%	0.9%	1.3%	1.7%	1.1%
B. INJURY					
INJURY IN PAST YEAR THAT REQUIRED MEDICAL TREATMENT	1.6%	7.8%	7.5%	8.6%	6.9%
C. ENVIRONMENTAL SAFETY					
FIREARM IN THE HOUSEHOLD****	14.8%	15.7%	16.2%	16.2%	15.8%
HAVE AT LEAST ONE HANDGUN, AMONG HOUSEHOLDS WITH ANY FIREARMS****	64.2%	61.0%	68.0%	69.1	65.5%
3. ECONOMIC WELL-BEING					
A. FAMILY INCOME					
HOUSEHOLD INCOME BELOW 100% FPL	24.3%	22.5%	26.3%	18.8%	23.4%
B. FOOD SECURITY FOR HOUSEHOLDS LESS THAN 200% FPL					
OFTEN OR SOMETIMES COULDN'T AFFORD TO EAT BALANCED MEAL****	35.1%	28.0%	38.9%	40.1%	34.9%
RECEIVING FOOD STAMPS (CHILD), IN FAMILIES BELOW 300% FPL	16.8%	18.4%	22.7%	15.5%	19.0%
RECEIVING TANF/CALWORKS	3.8%	5.9%	8.0%	4.0%	5.9%
RECEIVING WIC	45.8%	35.0%	28.5%	2.3%	28.6%
4. SOCIAL AND EMOTIONAL WELL-BEING					
A. FAMILY STRUCTURE					
MARRIED OR LIVING WITH PARTNER****	83.8%	83.0%	80.0%	81.0%	81.7%
PARENT HAS LIMITED ENGLISH PROFICIENCY	35.6%	32.4%	36.2%	26.3%	33.0%

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*Excludes children younger than age 1
**Excludes children younger than age 2
***Excludes children 2 years and younger who do not yet have teeth
****Percentage for subsample of children
*****Among children spending at least 10 hours weekly in care by someone other than the parent
******Excludes children younger than age 4
*******Excludes children younger than age 3

ATTACHMENT 1
SCHOOL READINESS MEASURES IN CHIS 2001 (CONTINUED)

SCHOOL READINESS MEASURES IN CHIS 2001	INFANT (LESS THAN 1 YEAR)	TODDLER (1-2 YEARS)	PRESCHOOLER (3-4 YEARS)	PRE-KINDERGARTNER (5 YEARS)	OVERALL (0-5 YEARS)
B. SOCIALIZATION AND NURTURING					
FAMILY GETS TOGETHER WITH FRIENDS AND RELATIVES AT LEAST BIWEEKLY	81.0%	82.6%	82.9%	82.5%	82.4%
PARENT READS 7+ TIMES WEEKLY WITH CHILD	29.9%	45.5%	47.5%	45.0%	43.6%
PARENT DOES NOT READ TO CHILD	25.7%	9.4%	3.8%	3.0%	8.9%
C. EARLY CHILDHOOD EDUCATION/CHILDCARE					
IN CHILD CARE ARRANGEMENT (10+ HOURS WEEKLY)	23.7%	36.7%	41.9%	34.9%	36.1%
40 OR MORE HOURS IN CHILD CARE	11.6%	18.8%	19.8%	11.4%	16.6%
IN LICENSED CHILD CARE ARRANGEMENT(S)*****	73.7%	75.8%	89.0%	87.8%	84.0%
SOMEWHAT OR NOT AT ALL SATISFIED WITH CHILD CARE ARRANGEMENTS	20.7%	21.6%	18.2%	19.1%	19.8%
ENROLLED IN HEAD START, PRESCHOOL, OR NURSERY SCHOOL*******	–	–	25.2%	17.0%	22.4%
ENROLLED IN CHILD CARE CENTER	2.4%	5.5%	16.0%	12.9%	9.9%
ELIGIBLE CHILDREN (LESS THAN 100% FPL) ENROLLED IN HEAD START OR STATE PRESCHOOL*******	–	–	9.4%	3.7%	7.8%

*Excludes children younger than age 1
**Excludes children younger than age 2
***Excludes children 2 years and younger who do not yet have teeth
****Percentage for subsample of children
*****Among children spending at least 10 hours weekly in care by someone other than the parent
******Excludes children younger than age 4
*******Excludes children younger than age 3

ATTACHMENT 2
COMPARISON OF SCHOOL READINESS INDICATORS IN CALIFORNIA AND NATIONAL DATA

SCHOOL READINESS MEASURES	NATIONAL DATA	CALIFORNIA CHIS 2001 DATA
GOOD HEALTH		
HEALTH STATUS		
IN EXCELLENT OR VERY GOOD HEALTH	85.0%[i]	75.1%
PHYSICAL, MENTAL, OR BEHAVIORAL CONDITION THAT LIMITS ABILITY TO DO CHILDHOOD ACTIVITIES NORMAL FOR AGE	3.0%[i]	3.7%
DIAGNOSED WITH ASTHMA	4.7%[ii]	10.0%*
HEALTH CARE ACCESS		
INSURED	88.9%[iii]	93.8%
HAVE USUAL SOURCE OF HEALTH CARE	95.4%[iv]	97.9%
AT LEAST ONE PHYSICIAN VISIT IN PAST YEAR	93.7%[i]	97.4%
ANY EMERGENCY ROOM VISIT IN PAST YEAR	16.8%[v]	22.4%
DENTAL HEALTH		
EVER VISITED DENTIST/DENTAL HYGIENIST	48%[vi]	58.2%†
VISITED DENTIST/DENTAL HYGIENIST IN PAST YEAR	36.5%[vii]	54.6%†
NUTRITIONAL AND SEDENTARY ACTIVITY		
OVERWEIGHT (WEIGHT ABOVE 95TH PERCENTILE NATIONALLY)	3.4% (AGE 2-3) 7.9% (AGE 4-5)[viii]	14.8%
RECOMMENDED MILK INTAKE (AT LEAST 2 SERVINGS)*	75.7%[ix]	66.6%†
RECOMMENDED FRUIT INTAKE (AT LEAST 2 SERVINGS)*	44.5%[ix]	86.1%†
RECOMMENDED VEGETABLE INTAKE (AT LEAST 3 SERVINGS)*	23.0%[ix]	17.7%†
ANY DAILY SODA INTAKE	26.6%[ix]	24.7%†
TWO OR MORE HOURS OF TV DAILY (WEEKDAY)	44.5%[x]	66.2%‡

*1-4 years, † 2-5 years, ‡ 4-5 years

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i Federal Interagency Forum on Child and Family Statistics, *America's Children: Key National Indicators of Well-Being, 2002*. Washington, DC: U.S. Government Printing Office.

ii National indicator is children, age 0-4 years, ever diagnosed with asthma by a doctor, with at least one episode in past year. California CHIS indicator is children age 1-4 years ever diagnosed with asthma by a doctor, with current symptoms at least monthly. Akinbami L, Schoendorf K. (2002) Trends in childhood asthma: Prevalence, health care utilization, and mortality. *Pediatrics*. 110(2): 315-322.

iii U.S. Census Bureau, Current Population Survey, March 2000 and 2001, accessed April 2003 www.census.gov/hhes/hlthins/hlthin00/dtable4.html

iv Newacheck P, Hung YY, Hochstein M, Halfon N. (2000). Access to health care for disadvantaged young children. *Journal of Early Intervention*; 25(1): 1-11.

v Elixhauser A, Machlin S, Zodet, et al. (2002). Health Care for Children and Youth in the United States: 2001 Annual Report on Access, Utilization, Quality and Expenditures, *Ambulatory Pediatrics*. 2(6): 419-37.

vi Bloom B. and Tothnat L. Summary Health Statistics for US Children: National Health Interview Survey, 1997 Vital Health Statistics 10(203). 2002. Percent is number of 2-4 year olds that have ever seen a dentist, or within the last 3 years.

vii The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

viii Ogden C, Troiano R, Briefel R. (1997). Prevalence of Overweight Among Preschool Children in the United States, 1971 Through 1994, *Pediatrics* 99(4): E1, 1-7.

ix U.S. Department Of Agriculture, Agricultural Research Service. 1999. Food and Nutrition Intakes by Children 1994-96, 1998.

x Certain L and Kahn R. (2002). Prevalence, correlates, and trajectory of television viewing among infants and toddlers. *Pediatrics*. 109(4): 634-42.

ATTACHMENT 2
COMPARISON OF SCHOOL READINESS INDICATORS IN CALIFORNIA AND NATIONAL DATA (CONTINUED)

SCHOOL READINESS MEASURES	NATIONAL DATA	CALIFORNIA CHIS DATA
ENVIRONMENTAL EXPOSURES		
CHILD USES SUNSCREEN (SPF15+) SOMETIMES OR ALWAYS ON A SUNNY DAY	58% (AGE 3-4)	72.7%
ECONOMIC WELL-BEING		
FAMILY INCOME		
HOUSEHOLD INCOME BELOW 100% FPL	19%[xi]	23.4%
SOCIAL AND EMOTIONAL WELL-BEING		
SOCIALIZATION AND NURTURING		
PARENT READS 7+ TIMES WEEKLY WITH CHILD	58%[xii]	46.6%†
EARLY CHILDHOOD EDUCATION/CHILDCARE		
ENROLLED IN CHILD CARE CENTER	28%[xiii]	9.9%

*1-4 years, † 2-5 years, ‡ 4-5 years

xi National Center for Children in Poverty, http://www.nccp.org/YCPfact0303.pdf, accessed April 2003.

xii For children 3-5 years old, not yet in Kindergarten; Childtrends Databank, http://www.childtrendsdatabank.org/family/thefamily/5ReadingtoYoungChildren.htm, accessed April 2003.

xiii For children 0-4 years old. Freya L. Sonenstein, Gary Gates, Stefanie R. Schmidt, Natalya Bolshun Primary Child Care Arrangements of Employed Parents Findings from the 1999 National Survey of America's Families, http://www.urban.org/url.cfm?ID=310487 accessed April 21, 2003.

ATTACHMENT 3
COUNTY SCHOOL READINESS INDICATORS

	HEALTH EXCELLENT OR VERY GOOD	ASTHMA DIAGNOSIS % (95% CI)	UNINSURED % (95% CI)	UNINSURED AND/OR COVERAGE GAP % (95% CI)	INSURED BY MEDICAID % (95% CI)	USUAL CARE SOURCE; COMMUNITY HEALTH CENTER % (95% CI)
NORTHERN AND SIERRA COUNTIES	**81.3 (77.2-85.5)**	**7.6 (4.9-10.4)**	**6.8 (4.4-9.2)**	**13.1 (9.9-16.2)**	**27.3 (22.7-31.9)**	**27.3 (22.9-31.7)**
BUTTE	88.4 (78.8-98.0)	**	**	**	**	**
SHASTA	82.9 (70.0-95.9)	**	**	**	33.5 (17.8-49.2)	29.2 (15.0-43.3)
HUMBOLDT, DEL NORTE	71.5 (54.8-88.3)	**	**	**	**	**
SISKIYOU, LASSEN, TRINITY, MODOC	82.8 (71.4-94.2)	**	**	**	24.7 (13.2-36.2)	26.1 (14.2-38.0)
MENDOCINO, LAKE	75.5 (61.7-89.3)	**	**	**	**	26.2 (11.8-40.6)
TEHAMA, GLENN, COLUSA	74.0 (63.4-84.6)	**	**	**	36.3 (24.3-48.3)	42.6 (30.2-55.0)
SUTTER, YUBA	80.0 (68.9-91.0)	**	**	**	33.7 (20.2-47.2)	39.4 (25.7-53.1)
NEVADA, PLUMAS, SIERRA	92.3 (83.4-100)	**	**	**	**	20.0 (7.1-32.7)
TUOLUMNE, CALAVERAS, AMADOR, INYO, MARIPOSA, MONO, ALPINE	85.2 (73.5-96.9)	**	**	**	25.2 (11.1-39.3)	31.4 (16.7-46.0)
GREATER BAY AREA	**76.6 (72.7-80.5)**	**12.5 (9.3-15.7)**	**2.1 (1.1-3.2)**	**5.6 (3.4-7.7)**	**16.7 (13.1-20.4)**	**14.1 (10.8-17.5)**
SANTA CLARA	69.1 (59.4-78.7)	**	**	2.4 (0.0-5.2)	17.1 (9.5-24.7)	13.5 (5.7-21.2)
ALAMEDA	83.4 (76.7-90.2)	**	**	**	16.2 (8.1-24.4)	17.8 (9.4-26.3)
CONTRA COSTA	77.8 (68.3-87.3)	**	**	**	18.8 (9.1-28.5)	**
SAN FRANCISCO	66.8 (54.4-79.3)	**	**	**	17.0 (7.5-26.6)	**
SAN MATEO	76.3 (64.4-88.2)	**	**	**	26.7 (11.1-42.2)	**
SONOMA	83.4 (72.0-94.8)	**	**	**	**	**
SOLANO	78.7 (71.0-86.5)	10.8 (5.4-16.2)	**	**	**	20.2 (13.2-27.3)
MARIN	90.1 (80.3-99.9)	**	**	**	**	**
NAPA	81.0 (70.2-91.7)	**	**	**	**	**
SACRAMENTO AREA	**82.4 (75.7-89.0)**	**13.0 (7.8-18.1)**	****	**7.7 (4.6-10.9)**	**18.3 (11.5-25.0)**	**7.8 (4.1-11.6)**
SACRAMENTO	81.2 (72.0-90.4)	13.2 (6.1-20.2)	**	6.5 (2.4-10.5)	20.5 (11.2-29.7)	6.7 (1.6-11.8)
PLACER	84.8 (74.6-94.9)	**	**	**	**	1.2 (0.0-3.8)
YOLO	83.2 (74.2-92.2)	**	**	**	**	21.0 (11.4-30.6)
EL DORADO	88.7 (79.9-97.5)	**	**	23.2 (10.6-35.9)	**	14.7 (3.9-25.5)

**This percentage is not reliable due to small sample size.

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ATTACHMENT 3
COUNTY SCHOOL READINESS INDICATORS (CONTINUED)

	HEALTH EXCELLENT OR VERY GOOD	ASTHMA DIAGNOSIS % (95% CI)	UNINSURED % (95% CI)	UNINSURED AND/OR COVERAGE GAP % (95% CI)	INSURED BY MEDICAID % (95% CI)	USUAL CARE SOURCE; COMMUNITY HEALTH CENTER % (95% CI)
SAN JOAQUIN VALLEY	**67.7 (62.9-72.5)**	**15.0 (10.9-19.0)**	**7.8 (5.4-10.1)**	**13.2 (9.9-16.5)**	**38.0(33.1-42.9)**	**22.5 (18.4-26.6)**
FRESNO	64.3 (51.1-77.6)	24.0 (11.6-36.5)	**	**	45.8 (32.7-58.8)	**
KERN	70.9 (62.2-79.6)	**	**	15.7 (8.3-23.1)	36.1 (26.0-46.2)	27.2 (18.0-36.5)
SAN JOAQUIN	66.8 (56.5-77.1)	11.5 (3.9-19.1)	**	11.8 (5.2-18.4)	31.2 (20.3-42.1)	15.9 (8.2-23.5)
STANISLAUS	74.0 (60.8-87.2)	**	**	**	**	**
TULARE	59.4 (47.2-71.7)	16.7 (7.1-26.3)	**	**	44.7 (32.5-56.9)	24.6 (13.9-35.2)
MERCED	72.3 (58.7-85.9)	**	**	17.0 (7.6-26.3)	35.2 (22.8-47.6)	35.3 (21.8-48.9)
KINGS	76.9 (68.0-85.9)	21.5 (11.8-31.2)	**	18.6 (9.9-27.3)	37.5 (27.1-48.0)	35.6 (25.2-46.1)
MADERA	63.5 (50.0-76.9)	**	**	**	34.7 (21.7-47.7)	28.4 (16.3-40.5)
CENTRAL COAST	**73.9 (67.3-80.5)**	**7.9 (4.3-11.6)**	**7.8 (3.6-12.0)**	**13.3 (8.5-18.2)**	**26.3 (19.9-32.7)**	**25.2 (19.1-31.4)**
VENTURA	71.1 (57.6-84.5)	**	**	**	32.4 (19.2-45.6)	**
SANTA BARBARA	81.8 (72.7-90.8)	1.4 (0.0-4.1)	**	8.8 (2.9-14.8)	30.6 (19.2-42.0)	24.3 (13.3-35.4)
SANTA CRUZ	76.7 (65.0-88.3)	**	**	**	**	25.0 (12.4-37.5)
SAN LUIS OBISPO	91.3 (84.5-98.0)	**	**	**	24.4 (10.7-38.1)	**
MONTEREY, SAN BENITO	65.4 (51.6-79.2)	**	**	14.9 (5.9-23.9)	**	42.7 (28.8-56.7)
LOS ANGELES	**73.1 (69.9-76.2)**	**8.5 (6.5-10.5)**	**8.5 (6.5-10.5)**	**11.5 (86.3-90.7)**	**34.3 (30.7-38.0)**	**23.2 (20.2-26.5)**
LOS ANGELES	73.1 (69.9-76.2)	8.5 (6.5-10.5)	8.5 (6.5-10.5)	11.5 (86.3-90.7)	34.3 (30.7-38.0)	23.2 (20.2-26.5)
OTHER SOUTHERN CALIFORNIA AREAS	**77.4 (73.8-81.0)**	**9.9 (7.3-12.5)**	**8.0 (5.9-10.0)**	**12.8 (10.2-15.4)**	**26.7 (22.4-30.9)**	**18.6 (15.2-22.0)**
ORANGE	74.8 (68.4-81.2)	**	5.7 (2.4-9.0)	10.2 (5.9-14.6)	22.6 (15.4-30.0)	12.0 (7.0-17.1)
SAN DIEGO	82.4 (76.6-88.3)	9.6 (5.2-13.9)	10.2 (5.7-14.7)	14.6 (9.4-19.7)	21.5 (13.9-29.0)	27.9 (21.2-34.7)
SAN BERNARDINO	78.2 (69.1-87.2)	17.6 (9.5-25.7)	7.7 (3.3-12.2)	11.4 (5.7-17.1)	35.7 (25.0-46.4)	18.0 (9.2-26.9)
RIVERSIDE	73.7 (64.0-83.4)	**	**	15.2 (8.5-21.9)	31.3 (21.4-41.2)	15.8 (8.4-23.2)
IMPERIAL	68.9 (54.6-83.2)	**	**	22.1 (10.9-33.3)	31.5 (17.4-45.5)	18.6 (9.6-27.5)

**This percentage is not reliable due to small sample size.

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ATTACHMENT 3
COUNTY SCHOOL READINESS INDICATORS (CONTINUED)

	EVER HAD DENTAL VISIT % (95% CI)	HAVE DENTAL INSURANCE % (95% CI)	DRINK SODA % (95% CI)	RECEIVE MILK RDA % (95% CI)	RECEIVE FRUIT RDA % (95% CI)
NORTHERN AND SIERRA COUNTIES	**55.0 (48.8-61.2)**	**73.2 (67.5-78.8)**	**20.3 (15.5-25.1)**	**62.2 (56.3-68.0)**	**90.1 (86.6-93.6)**
BUTTE	65.6 (45.7-85.4)	69.7 (51.2-88.3)	**	69.4 (51.2-87.6)	98.3 (95.7-100.0)
SHASTA	57.5 (38.6-76.5)	68.1 (48.5-87.7)	**	70.8 (54.7-87.0)	94.8 (87.4-100.0)
HUMBOLDT, DEL NORTE	47.6 (28.4-66.7)	69.7 (53.3-86.0)	**	68.5 (51.9-85.0)	81.5 (68.3-94.6)
SISKIYOU, LASSEN, TRINITY, MODOC	58.4 (41.7-75.0)	89.0 (78.6-99.3)	**	55.2 (37.6-72.7)	85.6 (75.2-95.9)
MENDOCINO, LAKE	48.4 (28.5-68.4)	65.5 (46.4-84.5)	**	38.1 (19.4-56.8)	94.6 (87.1-100.0)
TEHAMA, GLENN, COLUSA	48.2 (33.2-63.2)	74.2 (62.2-86.1)	**	70.5 (57.2-83.9)	86.1 (74.3-97.8)
SUTTER, YUBA	57.9 (40.9-74.8)	78.3 (64.0-92.6)	24.7 (12.0-37.3)	62.6 (46.8-78.3)	87.9 (74.1-100.0)
NEVADA, PLUMAS, SIERRA	71.6 (54.6-88.5)	77.7 (62.3-93.0)	**	47.7 (28.1-66.7)	88.8 (76.9-100.0)
TUOLUMNE, CALAVERAS, AMADOR, INYO, MARIPOSA, MONO, ALPINE	43.0 (22.9-63.0)	76.2 (58.4-93.9)	**	64.7 (46.2-83.1)	89.7 (78.7-100.0)
GREATER BAY AREA	**61.6 (56.4-66.8)**	**84.1 (80.6-87.5)**	**17.7 (13.6-21.8)**	**62.3 (57.2-67.5)**	**80.8 (76.6-85.1)**
SANTA CLARA	55.7 (44.6-66.7)	88.2 (82.1-94.2)	18.4 (8.4-28.3)	58.5 (47.3-69.7)	76.6 (67.7-85.6)
ALAMEDA	67.5 (55.4-79.5)	86.8 (77.7-95.8)	20.6 (10.5-30.6)	62.6 (50.5-74.6)	79.8 (70.0-90.0)
CONTRA COSTA	60.3 (47.2-73.5)	80.9 (71.3-90.4)	**	60.3 (46.6-74.0)	79.2 (65.7-92.7)
SAN FRANCISCO	70.6 (57.8-83.4)	80.7 (71.4-90.1)	**	72.7 (61.0-84.4)	83.8 (73.6-94.0)
SAN MATEO	60.5 (38.3-82.7)	94.1 (86.7-100.0)	**	68.8 (50.4-87.3)	84.6 (71.0-98.2)
SONOMA	54.1 (36.8-71.3)	66.0 (49.7-82.3)	**	59.5 (42.5-76.4)	86.1 (76.6-95.7)
SOLANO	66.2 (55.9-76.6)	91.6 (86.2-97.1)	26.8 (16.8-36.9)	62.8 (52.2-73.4)	88.9 (82.8-94.9)
MARIN	73.9 (57.8-90.0)	57.3 (37.9-76.6)	13.9 (1.1-27.7)	67.7 (51.1-84.4)	82.5 (68.1-97.0)
NAPA	46.9 (27.9-65.8)	75.5 (60.1-90.8)	20.2 (6.7-33.6)	58.5 (40.0-77.0)	90.3 (80.0-100.0)
SACRAMENTO AREA	**64.4 (56.0-72.8)**	**85.6 (80.1-91.0)**	**17.7 (10.7-24.7)**	**66.8 (58.3-75.4)**	**87.4 (81.8-92.9)**
SACRAMENTO	64.9 (53.2-76.7)	89.1 (81.8-96.3)	19.9 (9.8-30.0)	66.1 (54.0-78.1)	88.0 (80.4-95.7)
PLACER	61.0 (44.4-77.6)	75.7 (61.4-90.0)	**	75.3 (60.1-90.4)	88.6 (78.3-99.0)
YOLO	64.9 (50.1-79.6)	86.8 (78.3-95.3)	**	69.2 (55.9-82.6)	79.6 (66.7-92.5)
EL DORADO	64.3 (47.9-80.8)	71.8 (56.2-87.3)	**	57.3 (39.4-75.2)	88.9 (78.1-99.8)

**This percentage is not reliable due to small sample size.

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ATTACHMENT 3
COUNTY SCHOOL READINESS INDICATORS (CONTINUED)

	EVER HAD DENTAL VISIT % (95% CI)	HAVE DENTAL INSURANCE % (95% CI)	DRINK SODA % (95% CI)	RECEIVE MILK RDA % (95% CI)	RECEIVE FRUIT RDA % (95% CI)
SAN JOAQUIN VALLEY	**55.3 (49.5-61.0)**	**74.4 (68.9-80.0)**	**28.2 (23.0-33.5)**	**66.1 (60.5-71.8)**	**84.7 (80.0-89.5)**
FRESNO	69.3 (55.6-83.0)	69.3 (53.3-85.3)	31.6 (16.4-46.8)	60.6 (44.0-77.1)	78.9 (64.0-93.9)
KERN	55.8 (43.4-68.0)	72.8 (61.2-84.4)	24.0 (14.0-34.0)	62.6 (25.9-48.9)	81.2 (70.4-91.9)
SAN JOAQUIN	51.8 (39.0-64.5)	76.3 (65.3-87.2)	25.6 (14.9-36.2)	69.8 (58.3-81.3)	88.3 (81.6-95.0)
STANISLAUS	36.1 (18.8-53.3)	84.6 (73.4-95.7)	24.6 (11.0-38.1)	72.1 (58.0-86.2)	90.3 (80.4-100.0)
TULARE	49.1 (34.6-63.6)	69.3 (54.4-84.2)	28.5 (14.6-42.4)	67.1 (54.0-80.3)	88.9 (80.0-97.9)
MERCED	52.2 (37.3-69.2)	84.0 (74.0-94.0)	38.6 (22.6-54.5)	74.1 (61.3-86.8)	91.7 (85.2-98.2)
KINGS	62.2 (50.6-73.7)	81.5 (72.1-90.8)	28.9 (17.9-37.8)	65.5 (53.5-77.5)	82.9 (74.0-91.9)
MADERA	49.4 (33.6-65.3)	69.4 (55.1-83.7)	32.2 (17.0-47.3)	72.0 (58.5-85.4)	84.5 (74.6-94.4)
CENTRAL COAST	**61.5 (54.0-69.0)**	**74.5 (67.1-81.9)**	**21.2 (15.1-27.3)**	**68.6 (61.7-75.6)**	**90.9 (87.1-94.6)**
VENTURA	57.2 (42.5-71.8)	68.5 (53.9-83.0)	16.4 (7.1-25.8)	66.7 (53.2-80.2)	92.7 (87.1-98.4)
SANTA BARBARA	62.4 (48.7-76.2)	88.6 (80.4-96.7)	31.3 (16.7-46.0)	77.9 (67.3-88.5)	92.4 (86.0-98.8)
SANTA CRUZ	63.3 (48.4-78.2)	79.5 (66.8-92.2)	**	56.2 (40.2-72.1)	88.1 (73.4-100.0)
SAN LUIS OBISPO	57.8 (38.6-77.0)	83.2 (71.2-95.3)	**	67.2 (48.0-86.4)	86.0 (74.0-97.9)
MONTEREY, SAN BENITO	68.4 (53.0-83.8)	70.2 (54.3-86.1)	27.8 (12.0-42.5)	71.0 (57.0-85.1)	89.1 (80.2-98.1)
LOS ANGELES	**60.0 (55.5-64.5)**	**73.1 (59.1-77.2)**	**30.7 (26.3-35.0)**	**70.0 (25.9-34.4)**	**86.1 (82.8-89.4)**
LOS ANGELES	60.0 (55.5-64.5)	73.1 (59.1-77.2)	30.7 (26.3-35.0)	70.0 (25.9-34.4)	86.1 (82.8-89.4)
OTHER SOUTHERN CALIFORNIA AREAS	**54.0 (49.1-58.9)**	**75.1 (71.0-79.2)**	**23.8 (19.8-27.9)**	**65.8 (61.3-70.4)**	**88.2 (8.9-14.8)**
ORANGE	54.5 (45.5-63.5)	77.3 (70.1-84.5)	21.0 (14.1-27.9)	72.4 (64.9-80.0)	89.4 (84.4-94.4)
SAN DIEGO	55.1 (46.7-63.5)	72.0 (64.5-79.5)	25.9 (17.9-33.9)	59.7 (51.3-68.2)	90.3 (85.7-95.0)
SAN BERNARDINO	51.6 (39.4-63.7)	78.1 (68.9-87.2)	21.2 (12.0-30.3)	63.1 (51.6-74.7)	86.1 (79.2-92.9)
RIVERSIDE	53.9 (42.0-65.7)	73.8 (63.0-84.7)	26.4 (16.9-35.9)	67.3 (56.7-78.0)	85.3 (76.0-94.6)
IMPERIAL	55.6 (39.6-71.5)	68.0 (53.1-82.8)	48.6 (32.9-64.3)	63.6 (48.9-78.3)	78.5 (64.4-92.6)

**This percentage is not reliable due to small sample size.

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ATTACHMENT 3
COUNTY SCHOOL READINESS INDICATORS (CONTINUED)

	2+ HOURS OF TV DAILY % (95% CI)	> 2 HOURS OF MEDIA DAILY % (95% CI)	DAILY READING % (95% CI)	SOCIAL EVENTS AT LEAST TWICE A MONTH % (95% CI)
NORTHERN AND SIERRA COUNTIES	**63.4 (55.0-71.8)**	**64.3 (55.9-72.7)**	**56.0 (51.0-61.0)**	**82.1 (78.1-86.0)**
BUTTE	**	**	52.9 (37.8-68.0)	88.1 (79.6-96.6)
SHASTA	68.6 (42.5-94.7)	68.6 (42.5-94.7)	58.9 (42.9-74.9)	74.1 (58.8-89.3)
HUMBOLDT, DEL NORTE	58.7 (34.2-83.1)	58.7 (34.2-83.1)	56.3 (40.0-72.6)	81.3 (71.0-91.6)
SISKIYOU, LASSEN, TRINITY, MODOC	61.8 (35.1-88.5)	61.8 (35.1-88.5)	62.0 (48.7-75.2)	82.2 (72.0-92.5)
MENDOCINO, LAKE	75.4 (49.3-100.0)	75.4 (49.3-100.0)	49.1 (33.2-64.9)	80.3 (68.1-92.5)
TEHAMA, GLENN, COLUSA	71.5 (52.1-91.0)	73.3 (54.0-92.6)	40.0 (28.1-51.9)	81.1 (69.7-92.5)
SUTTER, YUBA	70.6 (47.2-94.0)	70.6 (47.2-94.0)	65.7 (53.3-78.0)	87.3 (76.6-98.0)
NEVADA, PLUMAS, SIERRA	54.0 (30.4-77.5)	54.0 (30.4-77.5)	63.9 (49.3-78.5)	78.2 (64.2-92.2)
TUOLUMNE, CALAVERAS, AMADOR, INYO, MARIPOSA, MONO, ALPINE	55.6 (17.4-93.7)	66.0 (28.7-100.0)	55.8 (40.2-71.4)	82.1 (69.4-94.8)
GREATER BAY AREA	**64.7 (57.9-71.4)**	**67.3 (60.7-73.9)**	**52.2 (48.0-56.5)**	**85.2 (82.4-88.0)**
SANTA CLARA	66.9 (53.3-80.5)	68.9 (55.7-82.2.)	45.0 (36.2-53.8)	82.4 (76.1-88.8)
ALAMEDA	72.8 (56.5-89.0)	75.0 (59.0-91.0)	52.3 (42.7-62.0)	88.2 (82.5-94.0)
CONTRA COSTA	50.2 (31.0-69.3)	50.2 (31.0-69.3)	52.3 (41.6-62.9)	84.7 (77.2-92.3)
SAN FRANCISCO	61.4 (43.3-79.6)	68.8 (52.2-85.4)	59.6 (48.1-71.0)	78.6 (68.2-88.9)
SAN MATEO	62.4 (36.7-88.1)	65.5 (40.3-90.8)	60.8 (45.9-75.8)	91.1 (84.7-97.4)
SONOMA	68.7 (45.3-92.1)	73.1 (50.4-95.7)	64.3 (501.-78.6)	87.6 (78.1-97.1)
SOLANO	68.6 (55.4-81.8)	72.0 (59.2-84.8)	45.6 (50.1-78.6)	81.0 (74.1-88.0)
MARIN	77.9 (58.6-97.1)	82.4 (65.5-99.3)	60.4 (44.9-75.9)	86.5 (74.1-99.0)
NAPA	50.3 (22.0-78.7)	50.3 (22.0-78.7)	49.5 (35.4-63.5)	90.5 (83.0-98.0)
SACRAMENTO AREA	**61.2 (48.9-73.5)**	**62.6 (50.4-74.8)**	****	**78.5 (71.9-85.1)**
SACRAMENTO	63.1 (46.1-80.0)	63.1 (46.1-80.0)	48.3 (38.1-58.4)	77.4 (68.4-86.4)
PLACER	46.3 (20.0-72.7)	56.5 (30.3-82.6)	70.9 (59.5-82.3)	78.8 (67.5-90.0)
YOLO	56.2 (22.5-65.1)	57.5 (36.1-79.0)	69.7 (36.9-61.3)	88.7 (81.8-95.5)
EL DORADO	72.5 (50.5-94.5)	72.5 (50.5-95.0)	25.9 (56.5-82.9)	76.9 (64.1-90.0)

**This percentage is not reliable due to small sample size.

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ATTACHMENT 3
COUNTY SCHOOL READINESS INDICATORS (CONTINUED)

	2+ HOURS OF TV DAILY % (95% CI)	> 2 HOURS OF MEDIA DAILY % (95% CI)	DAILY READING % (95% CI)	SOCIAL EVENTS AT LEAST TWICE A MONTH % (95% CI)
SAN JOAQUIN VALLEY	**75.0 (67.4-82.6)**	**75.6 (68.0-83.2)**	**40.0 (35.4-44.7)**	**81.5 (77.7-85.2)**
FRESNO	80.0 (58.9-100.0)	81.2 (60.0-100.0)	40.8 (28.3-53.2)	84.4 (75.6-93.1)
KERN	78.5 (65.0-92.0)	78.5 (65.0-92.0)	33.8 (24.4-43.1)	77.2 (68.2-86.2)
SAN JOAQUIN	76.1 (61.3-90.8)	76.1 (61.3-90.8)	42.2 (31.3-53.0)	73.7 (63.2-84.2)
STANISLAUS	68.8 (45.0-92.6)	68.8 (45.0-93.0)	36.9 (24.3-49.5)	85.8 (76.7-95.0)
TULARE	70.3 (53.2-87.4)	71.2 (54.3-88.1)	43.9 (32.1-55.7)	86.9 (78.1-95.6)
MERCED	65.9 (43.1-88.6)	65.9 (43.1-88.6)	51.4 (38.6-64.2)	80.0 (68.1-92.0)
KINGS	64.5 (46.2-82.8)	68.1 (50.0-86.2)	47.8 (37.2-58.4)	84.0 (76.8-91.2)
MADERA	72.9 (53.0-92.8)	72.9 (53.0-92.8)	29.1 (17.0-41.1)	88.2 (80.4-96.0)
CENTRAL COAST	**64.2 (51.9-76.5)**	**66.8 (54.5-79.1)**	**44.4 (38.1-50.8)**	**82.1 (76.9-87.3)**
VENTURA	61.0 (37.4-84.6)	64.7 (41.0-88.4)	43.9 (31.5-56.3)	82.1 (72.7-91.4)
SANTA BARBARA	68.1 (48.9-87.3)	70.9 (52.1-89.7)	46.0 (34.0-58.0)	91.3 (84.8-97.9)
SANTA CRUZ	68.7 (45.8-91.6)	69.7 (47.0-92.5)	54.0 (40.8-67.1)	78.8 (66.3-91.3)
SAN LUIS OBISPO	71.2 (47.0-95.4)	77.7 (55.5-100.0)	45.5 (31.0-60.0)	85.8 (76.6-95.1)
MONTEREY, SAN BENITO	63.8 (39.3-88.2)	63.8 (39.3-88.2)	39.7 (26.8-52.5)	75.5 (62.4-88.6)
LOS ANGELES	**61.6 (55.0-68.1)**	**62.6 (56.1-69.2)**	**36.7 (33.3-40.1)**	**82.8 (80.1-85.5)**
LOS ANGELES	61.6 (55.0-68.1)	62.6 (56.1-69.2)	36.7 (33.3-40.1)	82.8 (80.1-85.5)
OTHER SOUTHERN CALIFORNIA AREAS	**69.7 (63.6-75.8)**	**70.4 (64.3-76.4)**	**45.1 (37.8-52.4)**	**81.6 (78.3-84.8)**
ORANGE	78.7 (69.1-88.3)	79.3 (69.7-88.8)	45.1 (37.8-52.4)	85.5 (80.2-90.9)
SAN DIEGO	72.0 (62.3-81.6)	73.8 (64.4-83.2)	46.7 (39.5-53.8)	79.4 (73.4-85.3)
SAN BERNARDINO	62.3 (47.0-77.7)	62.3 (47.0-77.7)	41.0 (31.2-50.9)	80.6 (73.3-87.8)
RIVERSIDE	57.3 (39.7-75.0)	57.3 (39.7-75.0)	42.4 (32.4-52.3)	79.2 (70.3-88.1)
IMPERIAL	74.6 (58.1-91.2)	74.6 (58.1-91.2)	25.9 (15.0-36.8)	82.3 (72.4-92.1)

**This percentage is not reliable due to small sample size.

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ATTACHMENT 3
COUNTY SCHOOL READINESS INDICATORS (CONTINUED)

	IN CHILD CARE % (95% CI)	IN PRESCHOOL (AGE 3-5) % (95% CI)	BELOW 100% FPL % (95% CI)	LIMITED ENGLISH PROFICIENCY % (95% CI)
NORTHERN AND SIERRA COUNTIES	**37.6 (32.8-42.4)**	**25.4 (19.1-81.0)**	**20.7 (16.2-25.2)**	**19.9 (28.3-21.5)**
BUTTE	41.2 (26.4-56.0)	**	**	**
SHASTA	28.2 (13.6-42.8)	**	**	**
HUMBOLDT, DEL NORTE	40.5 (25.5-55.5)	**	**	**
SISKIYOU, LASSEN, TRINITY, MODOC	39.6 (26.0-53.2)	**	**	**
MENDOCINO, LAKE	34.7 (20.2-49.3)	**	28.2 (13.1-43.3)	**
TEHAMA, GLENN, COLUSA	43.5 (31.2-55.8)	**	20.3 (10.6-30.0)	47.3 (23.6-71.0)
SUTTER, YUBA	30.1 (18.3-42.0)	**	30.9 (17.3-44.6)	19.7 (0.4-39.1)
NEVADA, PLUMAS, SIERRA	48.3 (33.0-42.0)	47.0 (25.7-68.3)	**	**
TUOLUMNE, CALAVERAS, AMADOR, INYO, MARIPOSA, MONO, ALPINE	39.8 (24.4-55.3)	**	**	**
GREATER BAY AREA	**38.5 (34.5-42.5)**	**31.2 (25.7-36.7)**	**12.3 (8.8-15.8)**	**32.1 (24.3-39.9)**
SANTA CLARA	33.2 (25.3-41.1)	30.2 (18.5-41.9)	15.2 (6.3-24.0)	37.1 (21.6-52.6)
ALAMEDA	35.0 (25.8-44.1)	28.0 (15.4-40.6)	12.1 (4.7-19.7)	25.3 (11.5-39.2)
CONTRA COSTA	41.3 (30.7-51.8)	33.0 (18.2-47.7)	**	32.8 (13.0-52.7)
SAN FRANCISCO	56.8 (45.8-67.8)	38.2 (21.9-54.4)	**	**
SAN MATEO	41.6 (26.8-56.3)	**	**	**
SONOMA	39.8 (25.9-53.7)	39.2 (19.2-59.3)	**	**
SOLANO	38.7 (50.4-47.1)	30.6 (17.7-43.5)	7.9 (3.0-12.8)	40.5 (20.0-61.0)
MARIN	40.0 (25.3-54.8)	44.8 (21.0-68.5)	**	**
NAPA	39.8 (26.3-53.3)	43.8 (21.2-66.5)	6.7 (0.0-15.2)	**
SACRAMENTO AREA	**37.6 (30.5-44.7)**	**27.3 (19.0-35.6)**	**11.0 (5.8-16.2)**	**20.5 (6.1-34.9)**
SACRAMENTO	39.5 (29.8-49.2)	25.4 (14.4-36.3)	12.4 (5.2-19.6)	**
PLACER	31.5 (19.1-43.9)	31.7 (12.5-50.8)	**	**
YOLO	37.6 (25.9-49.2)	32.8 (15.3-50.3)	**	31.7 (15.9-47.6)
EL DORADO	30.6 (17.6-43.5)	**	**	**

**This percentage is not reliable due to small sample size.

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ATTACHMENT 3
COUNTY SCHOOL READINESS INDICATORS (CONTINUED)

	IN CHILD CARE % (95% CI)	IN PRESCHOOL (AGE 3-5) % (95% CI)	BELOW 100% FPL % (95% CI)	LIMITED ENGLISH PROFICIENCY % (95% CI)
SAN JOAQUIN VALLEY	**32.8 (28.4-37.2)**	**17.1 (12.4-15.5)**	**32.7 (27.8-37.6)**	**42.8 (35.1-50.4)**
FRESNO	30.8 (18.9-42.6)	**	33.4 (20.5-46.2)	37.3 (16.3-58.3)
KERN	27.1 (18.6-35.6)	**	38.1 (27.7-48.5)	43.0 (25.2-60.7)
SAN JOAQUIN	36.1 (25.8-46.4)	28.9 (13.5-44.2)	25.7 (14.4-37.0)	41.7 (23.3-60.1)
STANISLAUS	33.8 (21.2-46.3)	**	26.2 (12.3-40.0)	**
TULARE	38.4 (27.1-49.6)	23.4 (10.7-36.3)	**	51.6 (33.1-70.1)
MERCED	35.3 (23.5-47.1)	**	33.9 (21.5-46.3)	42.0 (23.9-60.2)
KINGS	41.0 (30.5-51.4)	24.7 (12.3-37.2)	32.0 (21.3-42.7)	39.0 (22.2-55.8)
MADERA	28.4 (16.7-40.0)	**	37.3 (21.6-53.1)	60.3 (37.8-82.8)
CENTRAL COAST	**37.4 (31.4-43.5)**	**26.7 (19.0-34.4)**	**20.2 (13.9-26.5)**	**29.3 (19.2-39.4)**
VENTURA	39.3 (27.3-51.2)	27.1 (12.9-41.3)	**	**
SANTA BARBARA	47.4 (35.3-59.5)	29.5 (13.4-45.6)	20.8 (10.3-31.3)	**
SANTA CRUZ	25.5 (15.8-19.1)	24.1 (9.9-38.2)	**	44.4 (18.9-70.0)
SAN LUIS OBISPO	25.7 (14.3-37.2)	**	**	**
MONTEREY, SAN BENITO	36.6 (23.9-49.3)	26.2 (10.6-41.8)	**	38.0 (17.2-58.7)
LOS ANGELES	**36.1 (32.7-39.5)**	**19.4 (15.2-23.6)**	**29.1 (25.5-32.7)**	**33.3 (28.4-38.1)**
LOS ANGELES	36.1 (32.7-39.5)	19.4 (15.2-23.6)	29.1 (25.5-32.7)	33.3 (28.4-38.1)
OTHER SOUTHERN CALIFORNIA AREAS	**35.2 (31.5-38.9)**	**19.9 (15.7-24.0)**	**23.6 (19.4-27.7)**	**32.2 (25.1-39.2)**
ORANGE	30.2 (23.9-36.3)	16.9 (10.0-23.9)	18.9 (11.8-26.0)	29.9 (16.1-43.7)
SAN DIEGO	44.6 (37.3-51.9)	25.9 (17.2-34.6)	23.4 (15.6-31.1)	39.9 (26.6-53.2)
SAN BERNARDINO	34.3 (25.6-42.9)	18.5 (9.6-27.4)	36.0 (25.4-46.6)	**
RIVERSIDE	29.8 (21.6-37.9)	17.0 (7.3-28.7)	17.7 (9.6-25.7)	36.4 (19.4-53.4)
IMPERIAL	35.9 (23.4-48.5)	**	23.9 (12.6-35.3)	**

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