



california  
health  
interview  
survey



# THE CALIFORNIA HEALTH INTERVIEW SURVEY (CHIS)

## The California Health Interview Survey: Population Health Data for Young Children

**Todd Hughes, CHIS Director**  
**UCLA Center for Health Policy Research**

# Why First 5 California's Support of CHIS is Important for Children and Families

- CHIS data help provide the foundation for evidence-based decision making to support healthy children and their families in California
  - How healthy are our children?
  - What is the prevalence of conditions and behaviors?
  - Which children are at greatest risk?
  - Where do they live?
  - What languages do they speak?
  - Are priority outcomes improving, worsening, or staying the same?

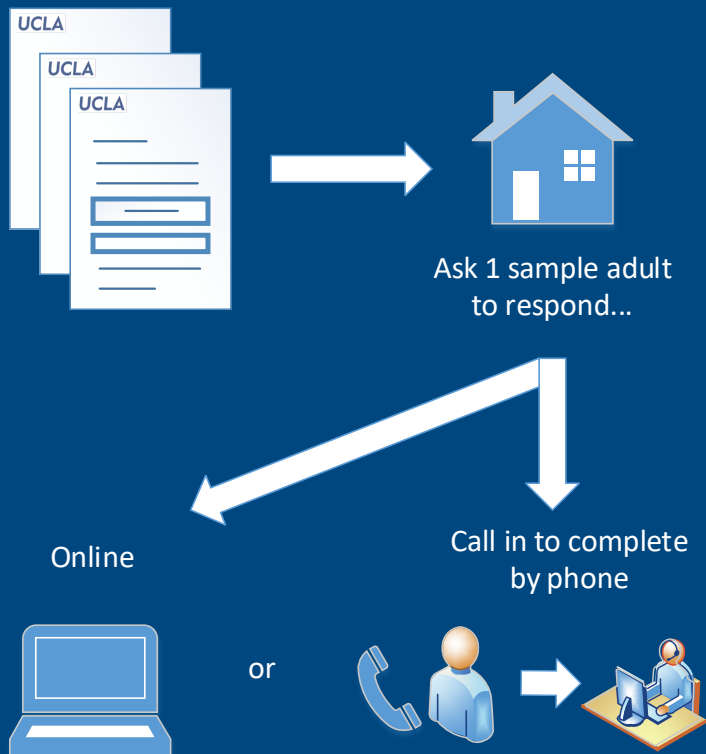
# How is CHIS done?

- Through 2018, employed Computer-Assisted Telephone Interview (CATI) with a blend of cell phone and landline numbers. In 2019 moving to address-based sampling with a blend of mail push-to-web and telephone response.
- CHIS collects detailed information for:
  - One adult (age 18+) in the household,
  - One adolescent (age 12-17) if present, and
  - One child (age 0-11) if present (through an interview of a knowledgeable adult)
- Interviews conducted in 6 languages:
  - English, Spanish, Chinese (Cantonese and Mandarin), Korean, Vietnamese, and Tagalog
- Ethnic oversamples (Korean and Vietnamese) ensure representativeness

# 2019 CHIS Data Collection Approach

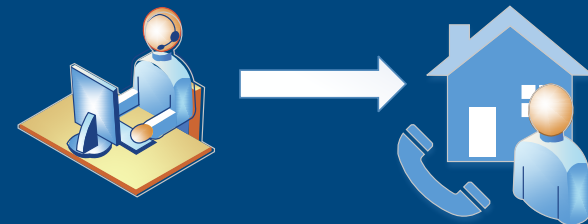
## Phase 1: Push-to-Web

3 mailings to sample addresses



## Phase 2: Telephone Nonresponse Follow-up

Call center staff call addresses with available telephone numbers up to 6 times



# How Many People Does CHIS Interview?

Age Group	2001	2003	2005	2007	2009	2011 2012	2013 2014	2015 2016	2017 2018
Adult (18+)	56,270	42,044	43,020	51,048	47,614	42,935	40,240	42,089	42,330
Teen (12-17)	5,733	4,010	4,029	4,029	3,379	2,799	2,253	1,594	880
Child (0-11)	12,802	8,526	11,358	9,913	8,945	7,334	5,512	4,293	3,186
Age 0-5 as % of Child Interviews	45.4	46.8	51.6	50.6	47.7	47.3	41.3	50.5	42.3

# New Methods to Increase Child and Teen Response

- During the field experiments we conducted in 2018 to explore the switch to Address-Based Sampling and web + telephone response options, we also explored methods to improve child and teen response:
  - Sequencing the child survey questions before the adult questions
  - Adding incentives for teen completions, and a nonresponse follow-up (NRFU) mailing to parents who declined permission for teens
- Assuming a full-scale use of these methods in 2019, we anticipate almost a 50% increase in Child interviews over CHIS 2017 and nearly a 30% increase for Adolescent interviews (for a single year)

	Projected 2019 Completes	CHIS 2017 Completes	% Change
Child (using child-first design)	2,368	1,600	48% increase
Adolescent (Incentives and NRFU)	576	448	29% increase

# CHIS Funders

- CHIS is funded by a variety of state and local agencies, California and national foundations, and others
- First 5 California has been a major funding partner for CHIS data on children since 2001



# CHIS Provides Estimates for Local First 5 Agencies

- Because the CHIS sample is large and represents counties and county groups, CHIS data has relevance for local First 5 Agencies
- UCLA CHIS Dissemination Products for Local Estimates
  - AskCHIS (county estimates)
  - AskCHIS Neighborhood Edition (zip code estimates)
  - Health Profiles (counties and regions)



# CHIS Data & Findings Widely Disseminated

- **Dissemination of data & findings:**
  - Publications
  - Online tools: AskCHIS and Health Profiles
  - Data files
    - Public use files (adult, child, adolescent)
    - Confidential (including a child file to First 5 California)
- **CHIS child health information disseminated by others**
  - *Children Now's California Report Card & County Scorecard of Children's Well-Being*
  - Kidsdata.org (Lucille Packard Foundation)
  - Various county health reports

# First 5 California CHIS Funding

- The funding request of \$1.7M for the 2019-2020 CHIS cycle represents 8.6% of the total estimated program budget of \$19.7M
- Roughly half of this amount supports UCLA staff who design and analyze the survey, and the other half supports data collection about children
- First 5 California funds for data collection are allocated as follows:
  - 60% for requested content for child-related questions
  - 20% for questions for adults related to those children
  - 20% for oversampling to ensure sufficient sample size for completed child questionnaires for children age 0-5

# CHIS Collects Policy-Relevant Information

- Rich set of demographic data
- Health behaviors and conditions
- Health care access and utilization (doctors and dentists)
- Health insurance coverage and uninsured (eligibility of uninsured for Medi-Cal, Covered California)
- Social engagement
- Pre-school attendance
- Neighborhood safety
- Neighborhood environment for raising young children
- Park access and safety

# CHIS Collects Content for First 5 California


## CHIS 2019 – 2020 Topics



- Breastfeeding practices
- Pre-school enrollment and childcare arrangements
- Developmental screening & referral
- Positive parenting activities
- Talk.Read.Sing<sup>®</sup> awareness/market penetration
- Receipt and use of Kit for New Parents
- Country of birth, immigration status, language spoken at home
- Health status and conditions
- Oral health
- Need for occupational, speech therapy or medicine
- Timely medical appointments and delays in care
- Languages spoken at home and English proficiency of parent

# CHIS Policy Brief for First 5 California

## June 2019 Policy Brief: *Parental Reading and Singing to California's Young Children – Trends, Predictors, and Association with the Talk.Read.Sing<sup>®</sup> Campaign*


Health Policy Brief

June 2019

### Parental Reading and Singing to California's Young Children – Trends, Predictors, and Association with the *Talk.Read.Sing<sup>®</sup>* Campaign

Suzanne Ryan-Ibarra, PhD, MPH, and Tara Becker, PhD


**T**alking, reading, and singing to children are critical to ensuring their development of literacy and language skills. Current research supports the benefits of reading to young children<sup>1,2</sup> and the benefits of talking, reading, and singing as a way of using language in the child's developmental environment.<sup>3</sup> Reading aloud to children when they are 5 or younger is associated with enhanced social-emotional development, as observed in improved behaviors and attention<sup>4</sup> and in positive developmental outcomes.<sup>5-7</sup> Being read to early in life is associated with improved language ability, according to a meta-analysis of the impact of age of onset and frequency of reading on infants' and toddlers' early language and literacy development.<sup>8</sup> Furthermore, improved language ability at age 2 predicts future language ability, as measured in a longitudinal study with, on average, five years of follow-up.<sup>9</sup> However, a study using data from the California Health Interview Survey 2005-2009 found that foreign-born parents were less likely than U.S.-born parents to read to their children.<sup>10</sup>

Since 2014, First 5 California has funded *Talk.Read.Sing<sup>®</sup>*, a social marketing campaign that educates parents of children 0-5 years old about the benefits of talking, reading, and singing every day to their children. The campaign encourages parents to interact with their young children to promote brain development as well as emotional and social growth. An evaluation of the campaign found high recall of the *Talk.Read.Sing* social marketing messages among parents. Furthermore, recall and recognition of the messages were associated with an increased likelihood that parents would talk, read, and sing with their children from birth to age 5.<sup>11</sup>

The purpose of this policy brief is to use data from the California Health Interview Survey, a population-based representative survey, to do the following:

- 1) describe trends in parents' reading and singing to their children from birth to 5 years of age
- 2) identify characteristics associated with reading and singing to children from birth to 5 years of age
- 3) assess the reach of the *Talk.Read.Sing* campaign, as well as the relationship between campaign awareness and reading and singing to children from birth to 5 years of age.

**Reading and Singing to Children Increased**  
From 2005 to 2016, the number of parents reading (defined as reading or looking at picture books) to their young children three or more days per week increased significantly, but trends in reading every day did not



This policy brief was made possible by funds received from First 5 California.

## Findings from the Talk.Read.Sing<sup>®</sup> Policy Brief

- Based on an analysis of 2015-16 CHIS data, UCLA researchers found:
- Most parents are reading and singing to their young children (88% reading three times or more per week, 91% singing three times or more per week)
- Recognition of the message of the TRS campaign is high (87%)
- Parents who have seen the message are:
  - Nearly 3 times more likely to read to their child three days or more per week
  - Twice as likely to sing to their child three days or more per week

## Findings from the Talk.Read.Sing<sup>©</sup> Policy Brief

- There is still room for improvement:
  - Parents who are foreign-born or who speak Spanish at home are less likely to read or sing to their young children than both their U.S.-born counterparts and those who do not speak Spanish at home
  - Parents that speak Spanish at home or that speak both English and Spanish at home are less likely to read to their children compared to parents who speak only English, even when adjusting for education
  - Foreign-born parents are less likely to sing to their children, even when adjusting for education and race-ethnicity

## CHIS Child Data Enables Public Research

- UCLA recently assembled a bibliography of peer-reviewed articles that used CHIS child data
  - Includes articles published from 2003 to present
  - Includes UCLA Center for Health Policy Research publications
- Studies used child data alone, in combination with CHIS adult and teen data or in combination with other data sources (e.g. U.S. Census, California Dept. of Education, LA FANS)
- Most of the studies used multiple years of CHIS data
- 59 articles were identified across a broad range of topics



## Bibliography of research articles that use CHIS child data

Topic Area	Count
Asthma	12
Health Insurance	10
Health Status & Development	8
Diet	7
Access & Utilization	6
Obesity	3
Dental Health	3
Child Care	2
Mental Health	2
Exposure to secondhand smoke	1
Families with young children	1
Injury	1
Physical Activity	1
Special Health Care Needs	1
Talk.Read.Sing <sup>®</sup>	1
<b>TOTAL</b>	<b>59</b>

Included in this list are six Center publications funded by First 5 California addressing health status and trends, families with young children, secondhand smoke exposure, and the Talk.Read.Sing<sup>®</sup> campaign.

# CHIS – In the news

- Research using CHIS quoted thousands of times in media articles on topics ranging from health disparities to sedentary behavior



# How Are CHIS Data Disseminated Broadly?

## CHIS DATA

HealthDATA — Data. Advocacy. Training. Assistance.  
Health data capacity building

### Data Access Center (DAC)

Secure network that holds data and analysis, protecting confidentiality.

### Public Use File (PUF)

Available as free download in SAS, SPSS, and STATA format.

### AskCHIS

Premiere online health data query tool. (Health Data All-Star – 2013)

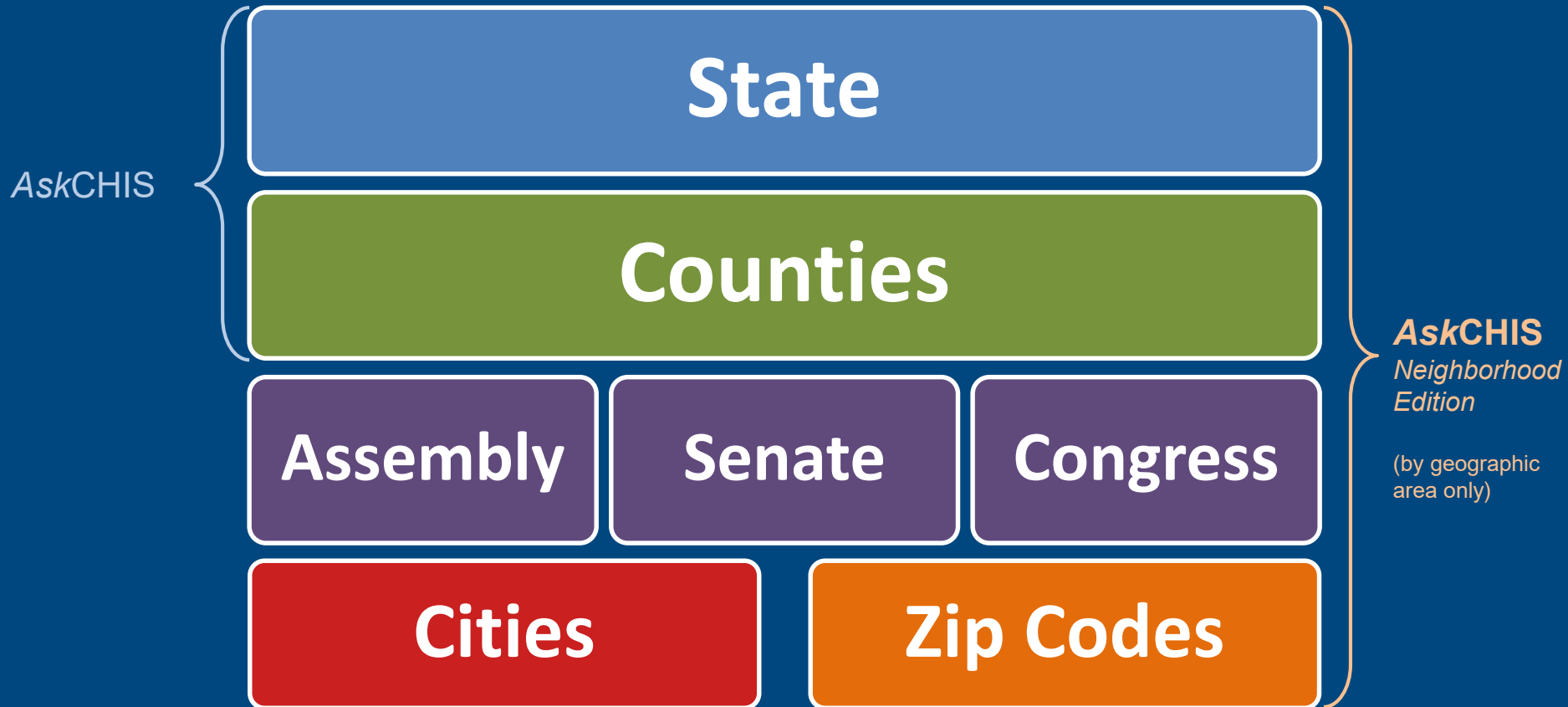
### *AskCHIS Neighborhood Edition*

Granular health data beyond counties (Small Area Estimates).

### Health Profiles

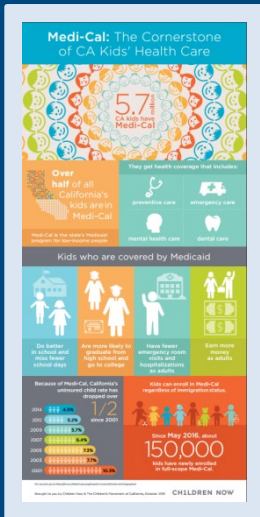
Reports on CHIS' most requested health topics. PDF-based downloads.

# Data Across Geographies



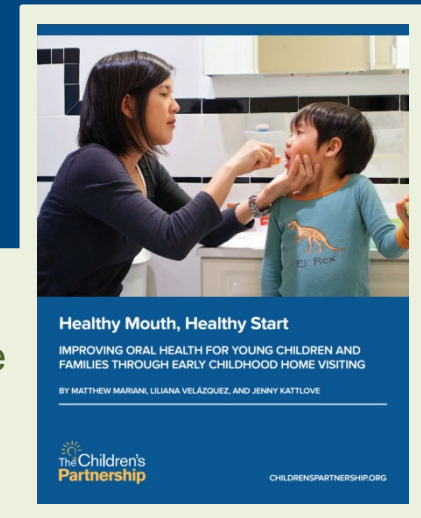
# Ask CHIS: Reaching a Broad Audience

- Over 1.1M queries since launch
- Used by policy makers, hospital administrators, media, universities, advocacy groups, and others



**Example: CH1LDREN NOW**  
Used AskCHIS to describe Medi-Cal coverage among children.

**Example: Children's Partnership**  
Used AskCHIS to paint the landscape of oral health needs in California's Young children and pregnant women.



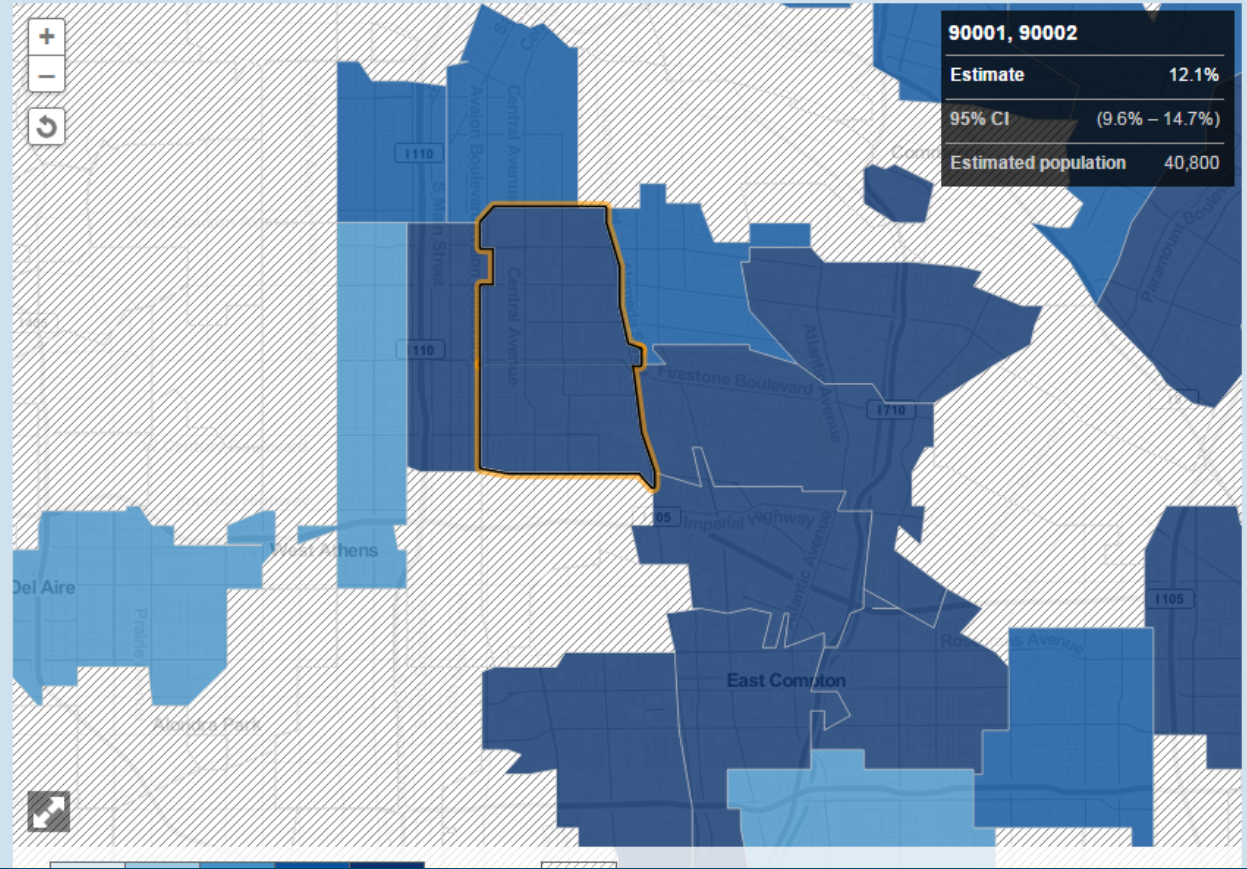
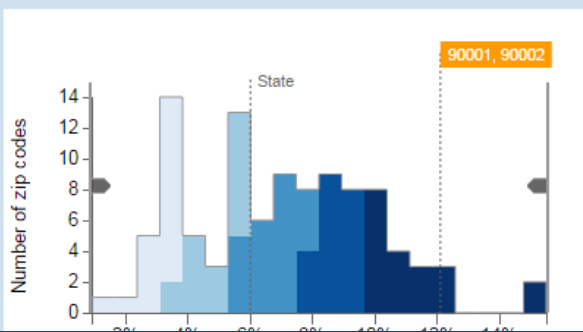
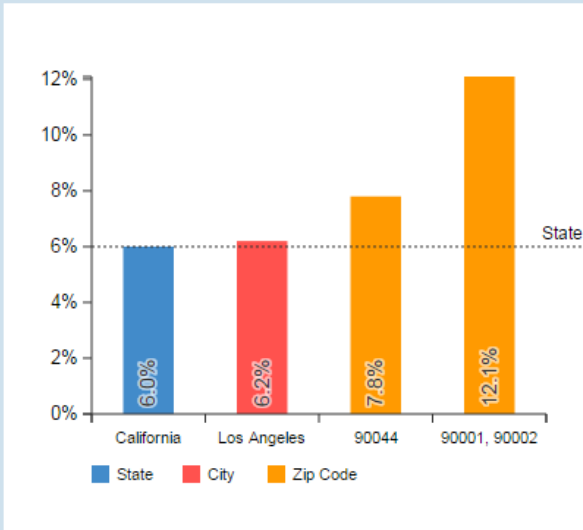
# AskCHIS NE: Tools to Explore Local Data

## Fair or poor health (0-17)

Embed Map Download

Child and teen respondents ages 0-17 with fair or poor health.

Show Results by: Zip Codes







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## Thank you

*CHIS awarded 2019 Health Services Impact Award,  
AcademyHealth*