



# THE CALIFORNIA HEALTH INTERVIEW SURVEY (CHIS)

The Center's 2021 Health Policy Seminar Series:

## CHIS 2020 Data Release

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and UCLA CHPR Director

**Todd R. Hughes**

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Senior Public Administration  
Analyst

**September 22, 2021**

[chis.ucla.edu](http://chis.ucla.edu)

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2021 E.R. Brown Virtual Symposium

# OPENING DOORS FOR ALL: IMPROVING HEALTH IN HOUSING AND HOMELESSNESS

Monday, October 4, and Tuesday, October 5, 2021  
9:30 a.m. – 1 p.m. PT | Zoom

Register for the symposium:  
<https://ucla.in/35UQAPT>

# Upcoming Events

*National Network of Health Surveys*

*Addressing Health Equity through Data Disaggregation Workshop Series*

## Imputation Strategies for Racial/Ethnic Data Disaggregation

Friday, October 8, 2021 | 10:30 a.m. – Noon PT

**Marc Elliott, PhD**

Senior Principal Researcher and  
Distinguished Chair in Statistics  
RAND Corporation

# THE CALIFORNIA HEALTH INTERVIEW SURVEY (CHIS)

## CHIS 2020 Data Release

**Ninez A. Ponce**, CHIS Principal Investigator, UCLA CHPR  
Director

**Todd R. Hughes**, CHIS Director

September 22, 2021

# Could the CHIS 2020 Successfully Continue During a Pandemic, Unlike Many Large Household Surveys?

Can we continue to print and mail our survey invitations?

Will the telephone interviewers be able to work remotely?

Can we implement secure remote access for UCLA CHIS staff to process data?

Will respondents participate during a pandemic?



# Could the CHIS 2020 Successfully Continue During a Pandemic, Unlike Many Large Household Surveys?

Can we continue to print and mail our survey invitations?

**Yes!**

Will the telephone interviewers be able to work remotely?

...and with an earlier annual release and preliminary monthly estimates! (AJPH article forthcoming)

Can we implement secure remote access for UCLA CHIS staff to process data?

Will respondents participate during a pandemic?

## Using CHIS to Understand the COVID-19 Pandemic

- Multiple dashboards are available:
  - 2021 and 2020 CHIS COVID-19 Preliminary Monthly Estimates
    - *Uses 2021 and 2020 CHIS data for new survey questions regarding the COVID-19 pandemic!*
  - COVID-19 Rates and Risk Factors by California County dashboard
  - COVID-19 Rates and Risk Factors by California County data table
  - NHPI COVID-19 Data Policy Lab dashboard



The screenshot shows the website interface for the UCLA Center for Health Policy Research. The top navigation bar includes links for 'About The Center', 'Publications', 'Programs', 'Newsroom', 'California Health Interview Survey', 'AskCHIS', and 'Health Profiles'. A dropdown menu is open under 'Health Profiles', listing 'Adults', 'Child-Teen', 'Legislative', 'Race/Ethnicity', and 'COVID-19 Dashboards' (highlighted with a red box). The main content area features a large image of a tablet displaying the 'May 2020 California Health Interview Survey Preliminary COVID-19 Estimates' dashboard. Below the image is a text block: 'California Health Interview Survey (CHIS) releases COVID-19 preliminary estimates dashboard'. To the right, there are three promotional boxes: 'AskCHIS™' with a search bar, 'Take the California Health Survey' with a 'LEARN MORE' button, and 'Search Publications' with a search bar and 'SEARCH' button.



## What Is CHIS?

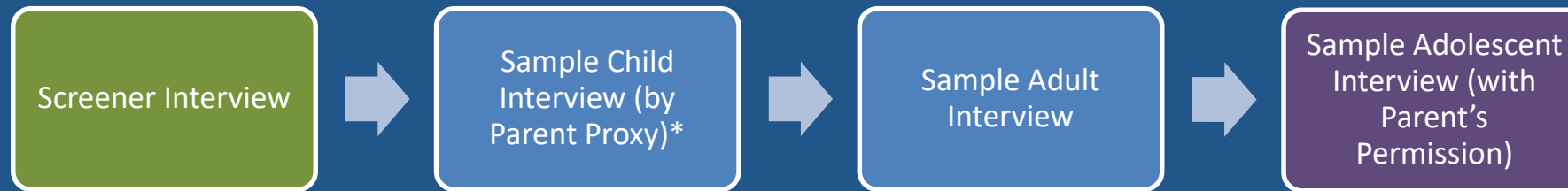
- Nation's largest state health survey
- Most comprehensive source of health information on Californians
- Comprehensive range of health topics
  - Health Status
  - Health Conditions
  - Mental Health
  - Oral Health
  - Health Behaviors
  - Access to & Use of Health Care
  - Health Insurance
  - Employment
  - Respondent Characteristics

## California Health Interview Survey (CHIS)

- California's assessment tool to meet state and local needs for population-based health data
  - Policy analysis, development, and advocacy
  - Service and program planning
  - Research
- CHIS is a collaborative project, funded by federal and state health agencies, California and national foundations, and others  
(See [healthpolicy.ucla.edu/chis/about](http://healthpolicy.ucla.edu/chis/about))

## CHIS Survey

- CHIS interviews
  - An adult (age 18+) in the household, adolescent (ages 12–17) if present, and child (ages 0–11) if present



\*Completing the sample child interview first for all households is new for 2019

- CHIS conducted in multiple languages
  - English, Spanish, Chinese (both Cantonese and Mandarin dialects), Korean, Vietnamese, and Tagalog

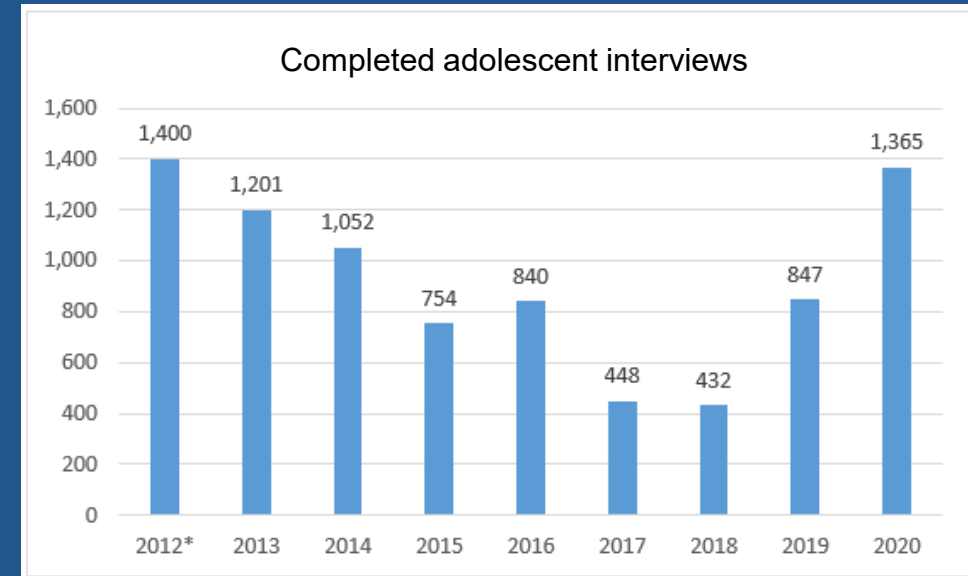
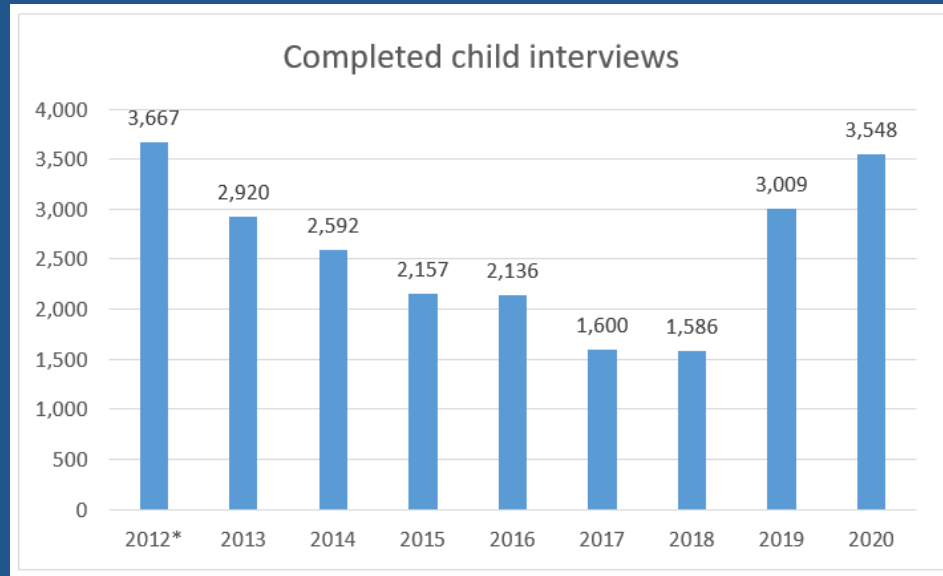
# 2020 Data Collection Results

## CHIS 2020 RACIAL/ETHNIC GROUP SAMPLES BY AGE

	ADULT (Age 18+)	ADOLESCENT (Ages 12-17)	CHILD (Ages 0-11)
<b>Total Sample Size</b>	<b>21,949</b>	<b>1,365</b>	<b>3,548</b>
<b>RACE*</b>			
White	16,243	920	2,344
Asian	2,792	155	433
Native Hawaiian/Pacific Islander	54	7	14
African American	796	47	115
American Indian/Alaska Native	293	18	42
Other single race	995	71	161
Two or More Races	776	147	439
<b>LATINO ETHNICITY</b>			
Latino	4,317	446	1,267
Non-Latino	17,632	919	2,281

<http://chis.ucla.edu/methodology>

## Innovative Methods to Increase Child and Adolescent Interviews

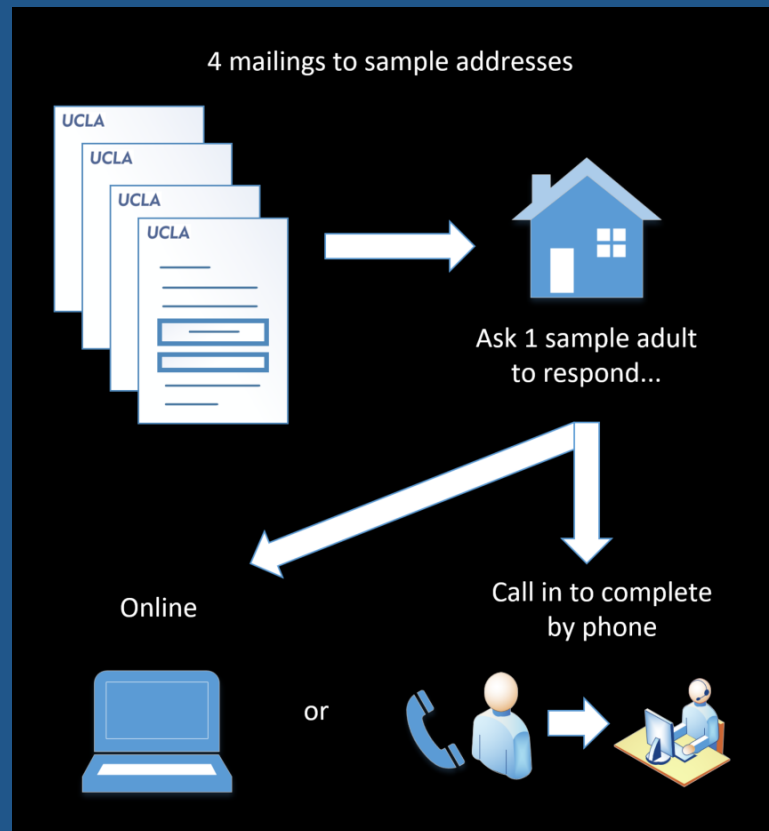


CHIS 2020 demonstrated continued increases in child and adolescent interviews, due to methodological innovations implemented in 2019 and the stay-at-home orders in 2020.

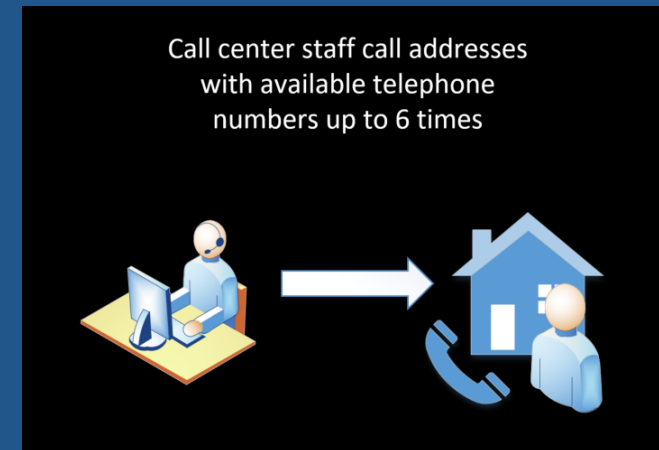


# CHIS 2019–2020 Data Collection Method for Adults: Address-Based Sampling with Web and Telephone Response

## Phase 1: Push-to-Web

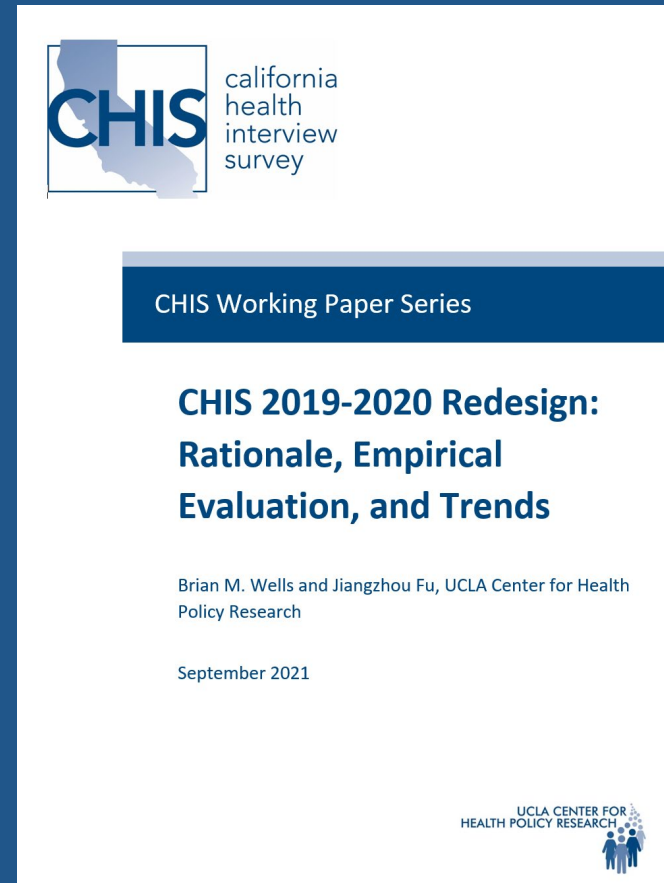


## Phase 2: Telephone Nonresponse Follow-up



# Understanding the Impact of the 2019 CHIS Redesign on Trends Through 2020

- Changes observed in 2019–2020 CHIS data may be due to:
  - Actual changes in the population over time
  - Sample composition changes due to sampling frame/mode
  - Measurement changes for the web mode vs. telephone
- Based on evaluations conducted, CHIS feels assured that data users will be able to trend most variables
- When there are unanticipated shifts in trend, we encourage data users to interpret trends with caution
- See the full report by Brian Wells and Jiangzhou Fu at:  
<http://chis.ucla.edu/methodology>



## Improved 2020 Weighting and Re-release of 2019 CHIS data

- Enhancements for 2020 CHIS weighting:
  - Separation of “South Asian, not Hispanic” from “Other Asian, not Hispanic” in weighting
  - Improvements to child sampling probabilities and jackknife replicate weighting
- The 2019 CHIS data are being revised to include these enhancements:
  - 2020 CHIS weighting improvements described above
  - Revised set of 2019 population estimates from the California Department of Finance which most significantly impacts counts for American Indian/Alaska Native, Native Hawaiian/Pacific Islander, and Multi-race groups
- Today’s release of 2020 CHIS data is accompanied by a re-release of 2019 CHIS data in *AskCHIS*, as well as revised 2019 Public Use Files

# Highlights from the 2020 CHIS

Todd R. Hughes  
CHIS Director



## Essential workers were more likely to have had or thought they had COVID-19, but less willing to receive the vaccine

*Ever had or thought they had COVID-19*



**15.1%**  
Essential  
workers



**12.1%**  
Non-essential  
workers

*Would get the COVID-19 vaccine*

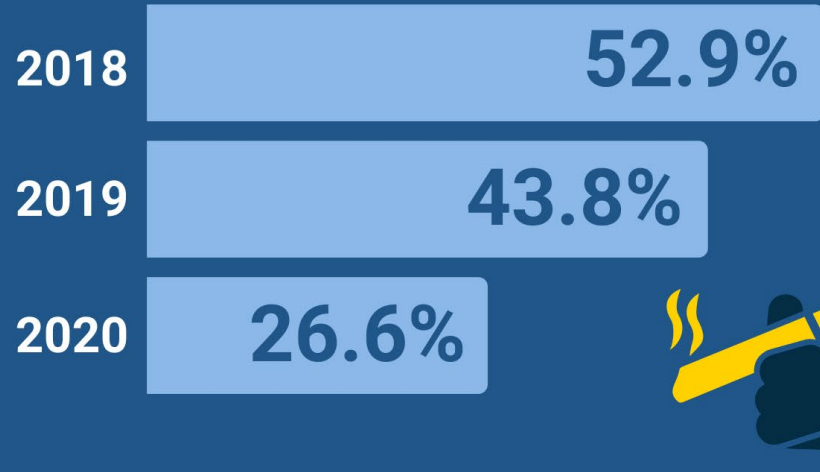
**73.6%**  
Essential  
workers

**76.7%**  
Non-essential  
workers





 **Does less socializing = less exposure to smoking and less tobacco use?**



The percentage of adults who said they were exposed to secondhand smoke from tobacco products or vapor from e-cigarettes was cut in half compared to 2018.

	Flavored tobacco	E-cigarettes
2019	5.8%	4%
2020	4%	2.8%

Flavored tobacco, e-cigarette use in the past 30 days dropped by nearly one-third among adults.

Source: 2020 California Health Interview Survey



## Healthy changes in adolescent behaviors during 2020

Adolescents age 12-17 were less likely to engage in binge drinking in the past month

**7%**  
in 2019  
**2.6%**  
in 2020



Adolescents age 12-17 were more likely to eat 5+ servings of fruit and vegetables daily

**26.1%**  
in 2019  
**33.3%**  
in 2020



Source: 2020 California Health Interview Survey



## Unhealthy changes in adolescent behaviors during 2020

The percentage of children and adolescents age 2–17 who spent 5+ hours on sedentary activities on typical weekend days increased.

**35.4%** in 2019    **40.8%** in 2020



The percentage of adolescents age 12–17 who reported “almost constantly” being on the internet also rose.

**28.6%**  
in 2019

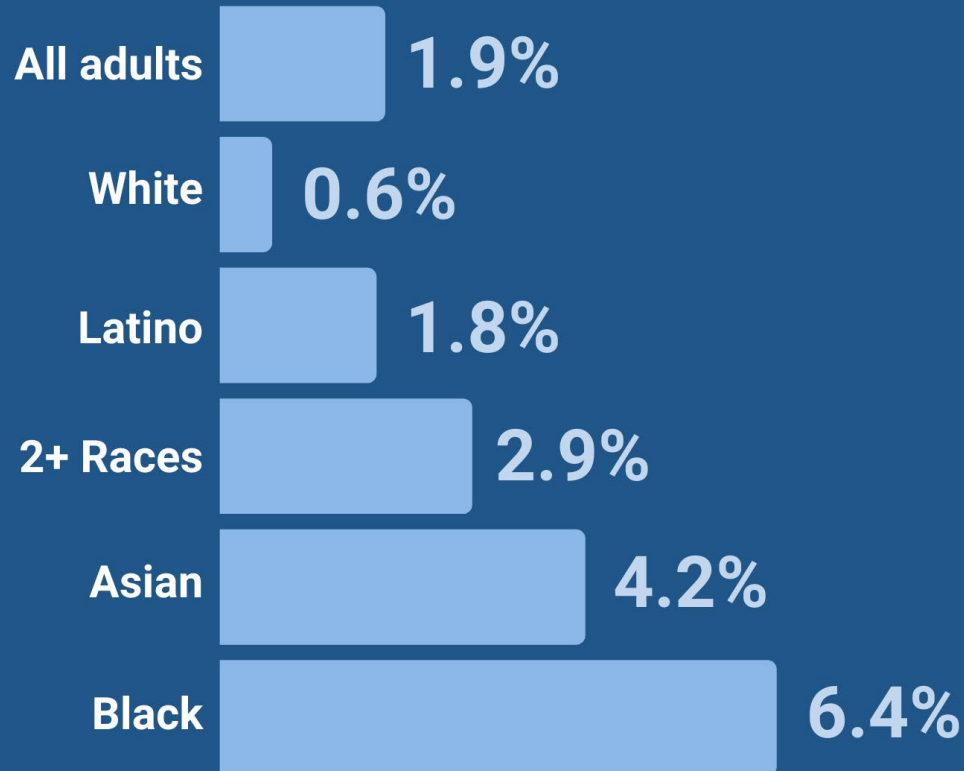
**43.2%**  
in 2020

**51% jump in adolescents who are “almost constantly” online**





## Race/ethnicity and unfair treatment during the pandemic\*



The proportion of Black and Asian adults who reported unfair treatment because of race/ethnicity during the COVID-19 pandemic was much higher than among other racial/ethnic groups.

Source: 2020 California Health Interview Survey

\*Insufficient data for American Indians, Alaska Natives, Native Hawaiians, and Pacific Islanders





## Mental health distress among those treated unfairly during the pandemic due to their race/ethnicity



	Suicidal thoughts among those who were...	Likely serious psychological distress (SPD) among those who were...
...treated unfairly because of race/ethnicity	<b>19.3%</b>	<b>18.5%</b>
...not treated unfairly because of race/ethnicity	<b>12.1%</b>	<b>12.1%</b>

Source: 2020 California Health Interview Survey





## Economic challenges during pandemic led to increased household conflict

Households reporting an increase in interpersonal conflict during COVID-19 among adults who had



Difficulty paying for basic necessities

22.9%

No difficulty paying for basic necessities

11.9%



Lost a job during COVID-19

19.3%

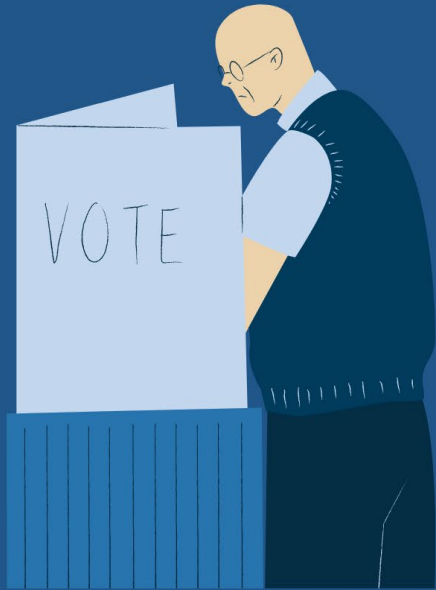
Did not lose a job during COVID-19

13.9%

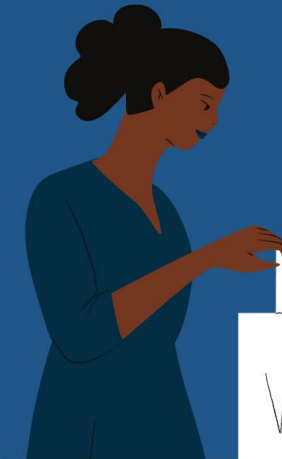
Source: 2020 California Health Interview Survey

## **Voter engagement up during a pandemic election year**

Percentage of voters in national, state, and local elections



	2019	2020
Always engaged	46.2%	51.3%
Frequently engaged	16.1%	14.3%
Sometimes engaged	27.5%	25.7%
Never engaged	10.2%	8.7%





**1.4 million more “always engaged” voters during pandemic**

Source: 2020 California Health Interview Survey

## Voter engagement up during a pandemic election year

Percentage of “always engaged” voters in national, state, and local elections

	Latino	White <sup>1</sup>	Black or African American <sup>1</sup>	American Indian/ Alaska Native <sup>1</sup>	Asian <sup>1</sup>	Native Hawaiian/ Pacific Islander <sup>1</sup>	Two or More Races <sup>1</sup>
2019	36.0%	56.5%	51.5%	53.1%	34.1%	46.7%	54.3%
2020	42.7%	61.2%	56.5%	68.0%	40.0%	33.3%	46.1%



More engaged voters across nearly all racial/ethnic groups

Source: 2020 California Health Interview Survey

<sup>1</sup> non-Latino

## What's New in the 2019–2020 CHIS?

### California Health Interview Survey

#### What's New and Notable in CHIS 2019-2020

This document describes new and notable design features and data collected in California Health Interview Survey (CHIS) 2019-2020. CHIS data users should review the information below and detailed online documentation before analyzing or reporting CHIS data. For more details on CHIS methods, please visit the [CHIS Methodology page](#).

#### Sampling & Data Collection Redesign

CHIS has employed random-digit-dial sampling and telephone interviewing since its inception, but industry declines in telephone interview response rates, along with cultural shifts in telephone usage, motivated exploring alternative sampling and data collection methodologies for CHIS moving forward.

Following extensive experimentation and research, CHIS transitioned to a mixed-mode survey (web and telephone) using a random

#### New and Updated Survey Questions

Survey questions are added, removed, and modified in each two-year cycle of CHIS to meet stakeholders' needs and monitor emerging public health concerns. Questions are removed from the interview to reduce its length and save data collection costs when topics are no longer relevant for public health surveillance, or when sponsor funding is no longer available. Most CHIS questions remain in the interview across multiple CHIS cycles. For CHIS 2019-2020 approximately 80% of the content continued from CHIS 2018. Occasionally, changes to question wording are made based on methodological evaluations or when user feedback strongly suggests that

*Continued...*

#### Noteworthy Additions to CHIS 2019-2020

New Adult Questionnaire Topics in 2019-2020

#### New Adult Questionnaire Topics in 2020

- Coronavirus (COVID-19) symptoms, testing, and impacts on work and family
- Planned Parenthood utilization

#### New Adolescent Questionnaire Topics in 2020

- Attitudes towards voting

<http://chis.ucla.edu/methodology>



**California reached health coverage milestone with 94% of people insured in 2020, but access to care remains a challenge during the COVID-19 pandemic**

**Sean J. Tan**

Senior Public Administration Analyst





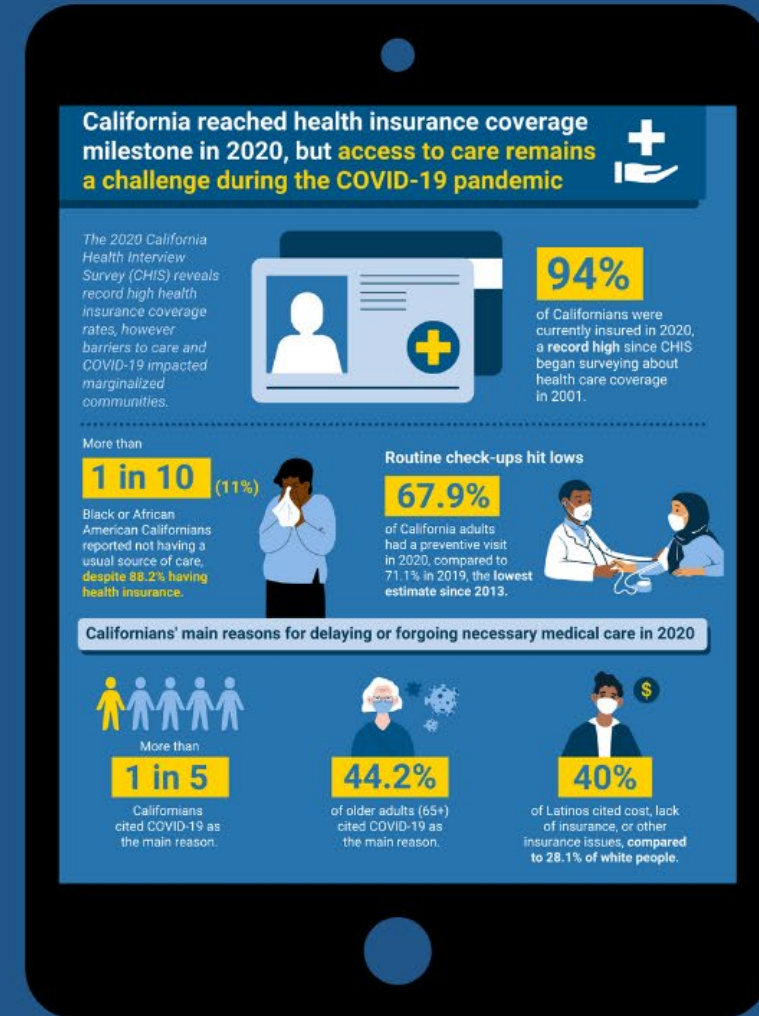
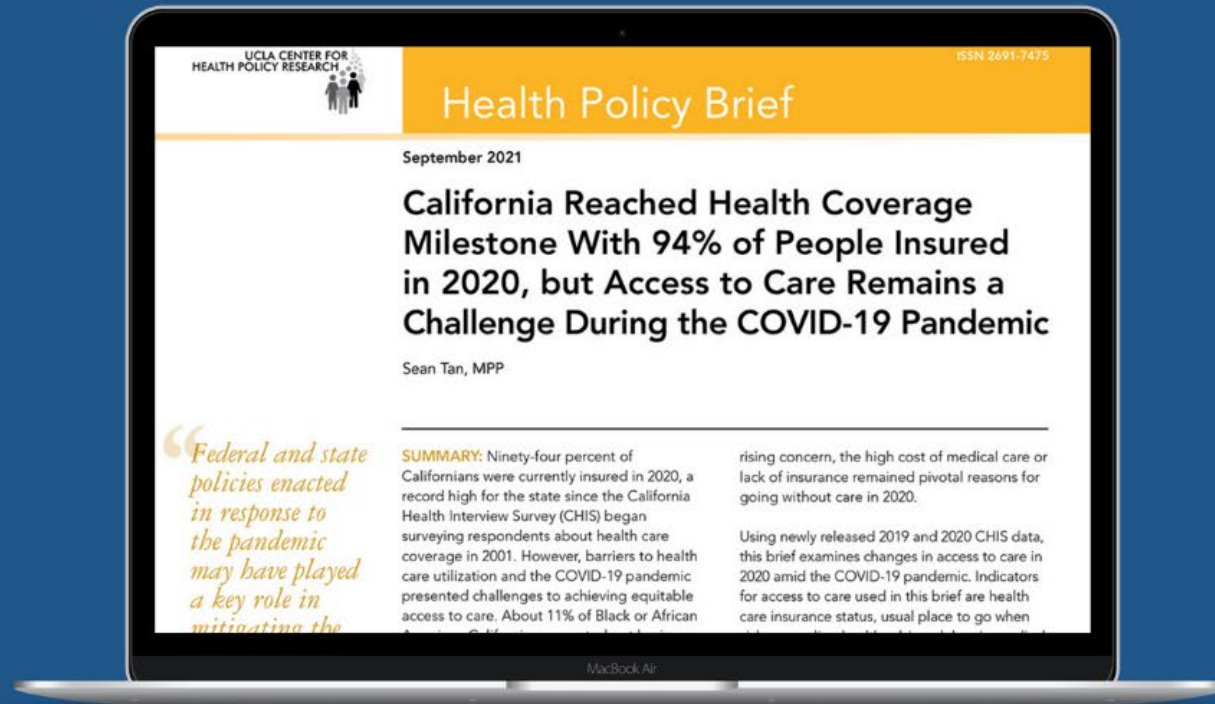
# Funder Acknowledgment



California  
Health Care  
Foundation



# Policy Brief and Infographic





## California reaches health insurance coverage milestone

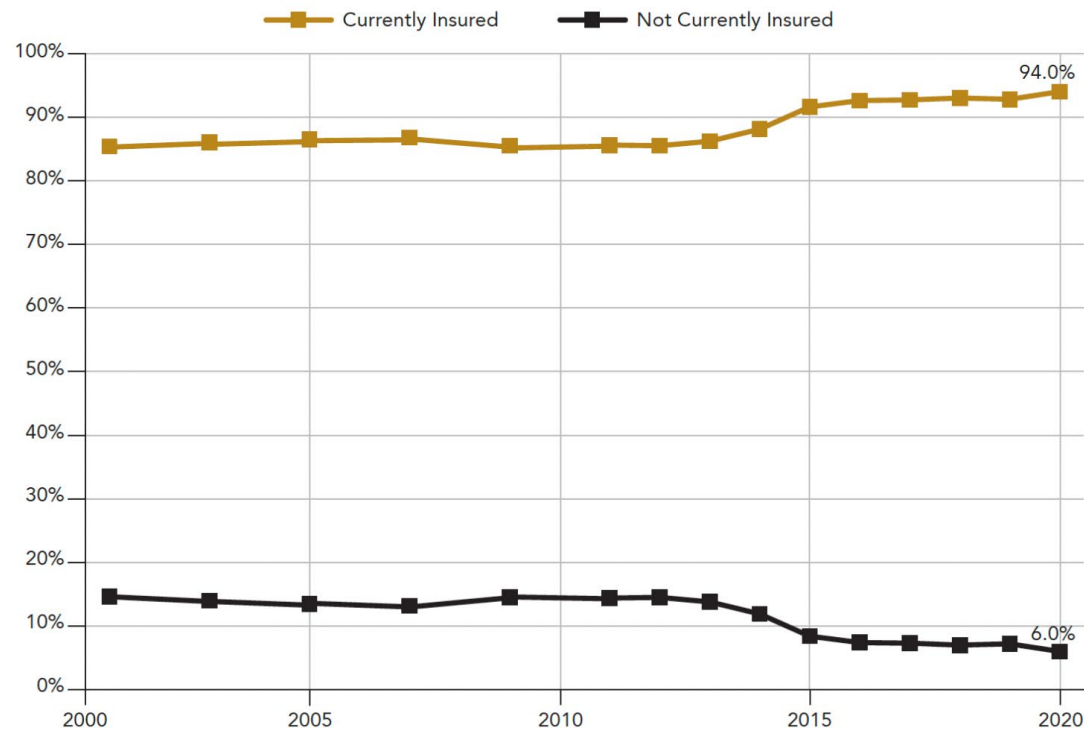


# 94%

of Californians were currently insured in 2020, a **record high** for the state since CHIS began surveying respondents about health care coverage in 2001

Source: 2020 California Health Interview Survey

Percentage of Total California Population Currently Insured vs. Not Currently Insured in California, 2001–2020



Source: 2001 to 2020 California Health Interview Surveys (2001–2011; collected every other year)



## More Black and African American Californians did not have a usual place to go when sick or needing health advice in 2020

More than **1 in 10 (11%)** Black or African American Californians reported not having a usual source of care, **despite 88.2% having health insurance.**

**26%** children  
(0–17)

**66.8%** adults  
(18–64)

**3.7%** older adults  
(65+)



**91.7%**  
lived in urban areas

Source: 2020 California Health Interview Survey



**+** **Doctor visits and routine check-ups in the past 12 months were significantly affected during COVID-19 pandemic**

**67.9%**

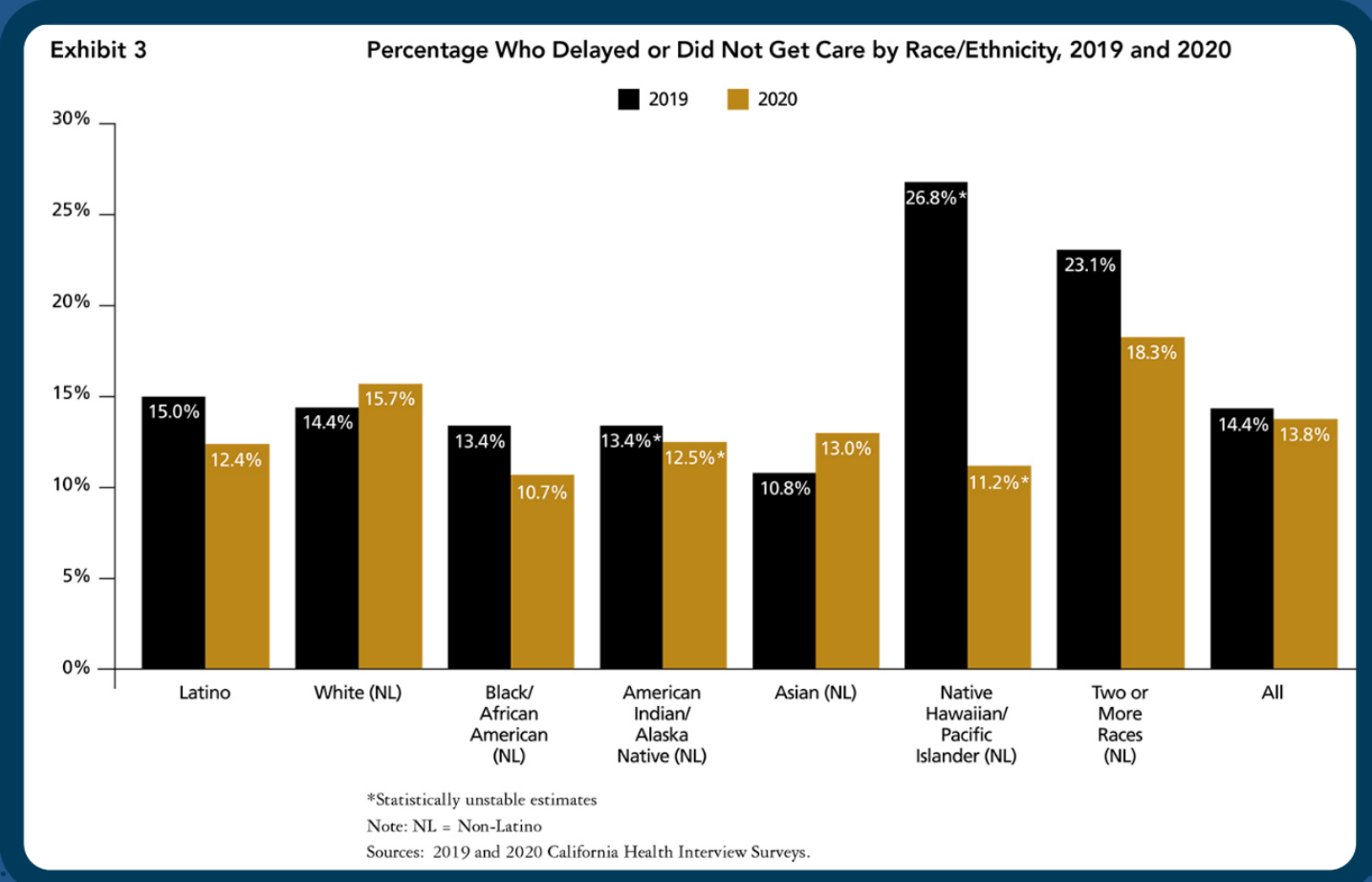
of California adults had a preventive visit in 2020, compared to 71.1% in 2019, the **lowest estimate since 2013**



## Delayed receiving medical care

About **13.8%** of Californians had delayed or did not get the care in the past 12 months when surveyed in 2020.

Of those who delayed care, **more than half (59.5%)** had forgone care or had not eventually gotten the medical care they felt they needed.



Source: 2020 California Health Interview Survey



## COVID-19 as a barrier to care



Percentage who cited COVID-19 as a reason for forgoing care in 2020, by age group.

All ages **21.6%**

Children/adolescents (0-17) **20%**

Adults 18-64 **17.9%**

Older adults (65+) **44.2%**

More than **1 in 5**

Californians who delayed or had forgone medical care in 2020 cited COVID-19 as the main reason.

Older adults ages 65+ were nearly **2 1/2** times more likely than adults ages 18-64 to delay or forgo care.







## Cost of medical care and lack of insurance were major barriers to accessing care

Main Reasons for Delaying or Forgoing Necessary Medical Care in California by Race/Ethnicity, 2020

	Latino	White (NL)	Black or African American (NL)	Asian (NL)	Two or More Races (NL)
Cost, lack of insurance, or other insurance-related reasons	40.0%	28.1%	31.9%	30.0%	28.4%
Health care system/provider issues and barriers	19.4%	16.9%	20.2%	20.0%	30.3%
Personal reasons	27.1%	26.8%	18.3%	28.6%	27.9%
COVID-19	13.5%	28.2%	29.6%	21.5%	13.4%

Note: NL = Non-Latino

Sources: 2020 California Health Interview Surveys.

40%



of Latinos in California cited cost, lack of insurance, and or other insurance-related issues as the main reason for delaying or forgoing necessary medical care in 2020, compared to 28.1% of white people

# How to Access CHIS Data

**Ninez A. Ponce**

CHIS Principal Investigator and UCLA CHPR Director

## What Are the CHIS Dissemination Aims?

1. Protect respondent confidentiality
2. Democratize access to data — put data into the hands of those who can use it
3. Reach a large and diverse audience across divides of technology, skills, and resources

# CHIS Dissemination

## 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

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

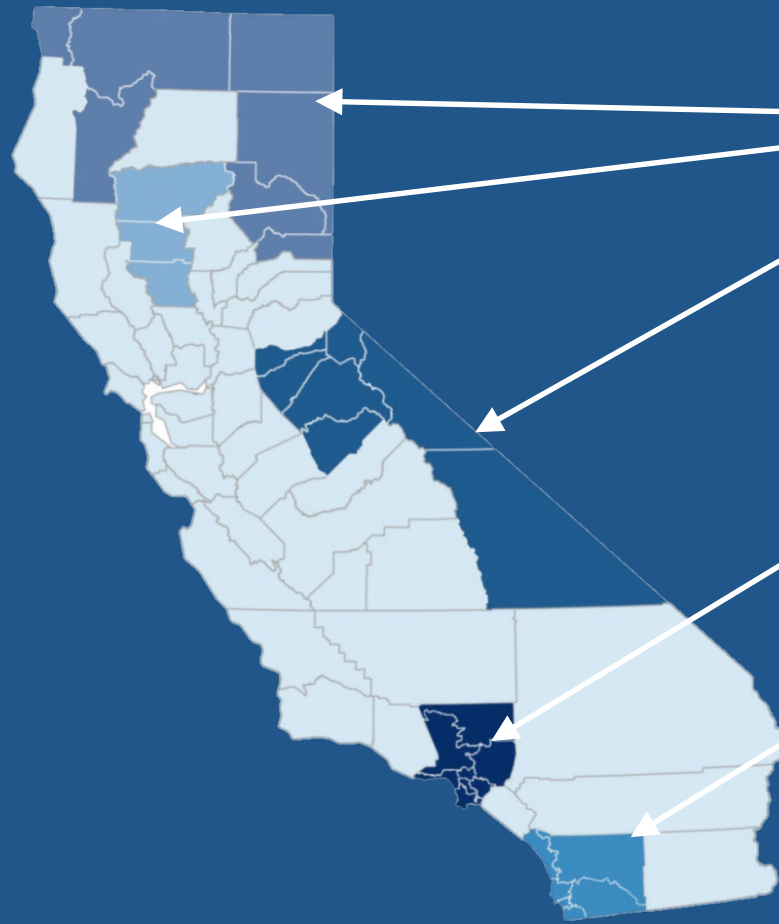
### AskCHIS Neighborhood Edition and AskCHIS NE en Español

Granular health data beyond counties (Small Area Estimates).

### Health Profiles

Reports on CHIS' most requested health topics.

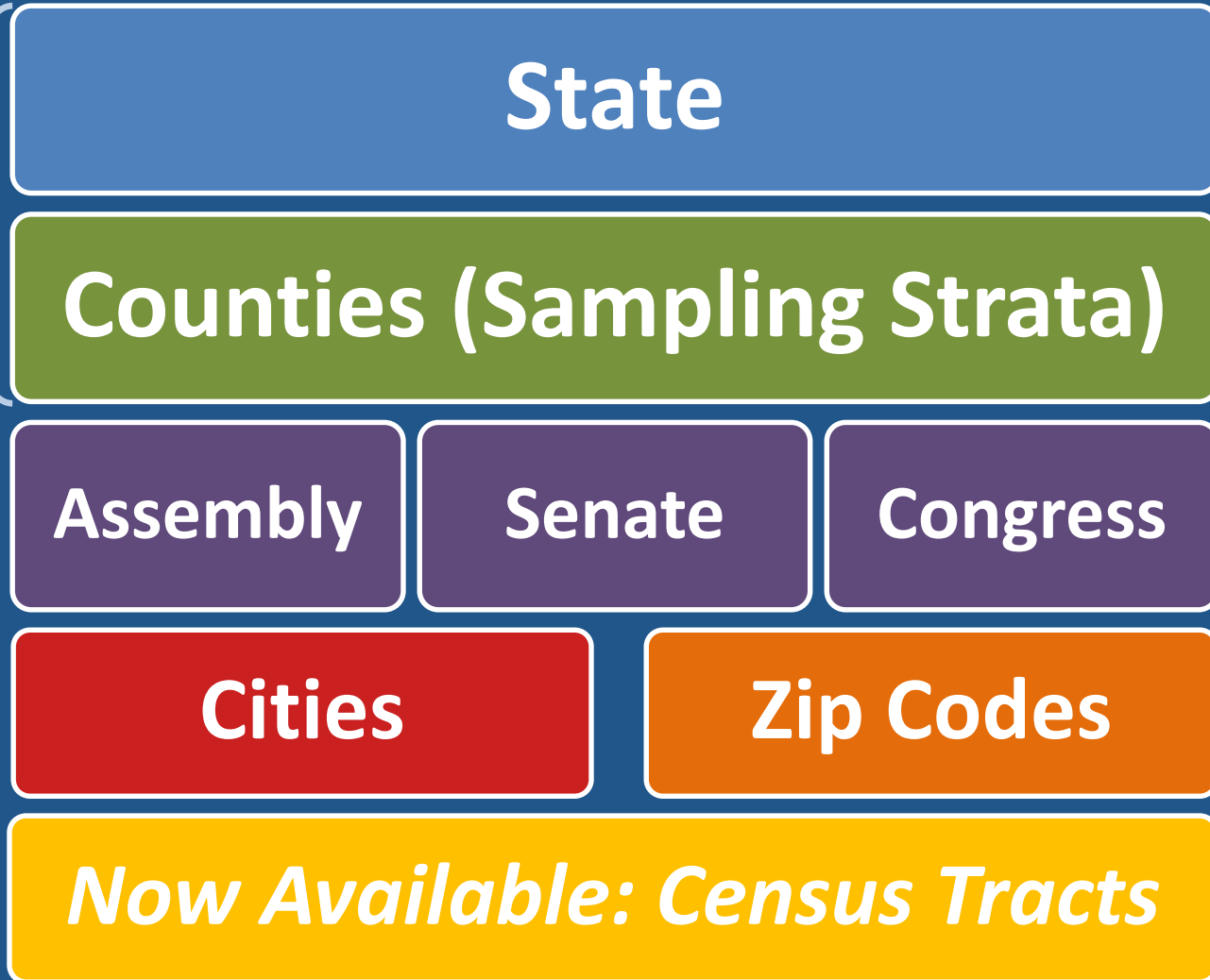
## Geographic Sample Design to Produce Direct Estimates for Each Sampling Stratum



- 56 total geographically defined strata
- 3 grouped county strata containing the 17 smallest counties (by population)
- 2 counties with sub-county strata
  - Los Angeles: 8 Service Planning Areas (SPAs)
  - San Diego: 6 Health Regions
- Remaining 39 counties each form their own individual strata
- Lower levels of geography require 2 years of data to produce modeled estimates

# Data Across Geographies

AskCHIS



Now with  
**2020**  
CHIS data!



2019-  
2020 CHIS  
data  
coming in  
mid-2022

*AskCHIS  
Neighborhood  
Edition  
(Updated every  
two years)*



## Census Tract Estimates in AskCHIS Neighborhood Edition

Selected Tracts (4): San Joaquin County Tract 0033.06, San Joaquin County Tract 0033.07, San Joaquin County Tract 0033.05, San Joaquin County Tract 0033.10

Search for a census tract by address...

	State	Cities	Tracts	
	California	Stockton	San Joaquin County Tract 0033.06	Census Tract Group 1
Ever diagnosed with diabetes (18+) (2016)	9.7% (9.0% - 10.4%) 29,390,200	12.9% (12.4% - 13.2%) 191,500	14.1% (13.5% - 14.5%) 2,900	13.9% (12.2% - 15.7%) 11,700
Needed help for mental health problems (18+) (2016)	16.9% (15.9% - 17.9%) 29,390,200	17.1% (16.2% - 17.5%) 191,500	19.0% (17.9% - 19.4%) 2,900	18.7% (15.7% - 21.6%) 11,700

Embed Map Download

### Needed help for mental health problems (18+)

Adult respondents ages 18+ who needed help for emotional/mental or alcohol/drug problem in past 12 months.

**San Joaquin Tract 0033.05 ... San Joaquin Tract 0033.10**

Federal Poverty Level

- 0-138% FPL
- 139-249% FPL
- 250-399% FPL
- 400%+ FPL

Race/Ethnicity

- Non-Hispanic White only
- Hispanic or Latino
- Non-Hispanic Asian only
- Non-Hispanic Black only
- Non-Hispanic Other

Population

Female Male

- 80+
- 65-79
- 40-64
- 25-39
- 18-24
- 12-17
- 0-11

**San Joaquin Tract 0033.05 ... San Joaquin Tract 0033.10**  
 Estimate: 18.7%  
 95% CI: (15.7% - 21.6%)  
 Estimated population: 11,700

# AskCHIS On-Demand Learning Center

Fast, free tutorials on how to use *AskCHIS* and  
*AskCHIS Neighborhood Edition*®  
<http://chis.ucla.edu/CHIStraining>

**Brief:** Digestible, 10-minute segments!

**Simple:** Designed for those who have no experience or those who want to brush up on their skills.

**Available 24/7:** You can get the help you need when and how you need it!

## AskCHIS Neighborhood Edition Trainings:



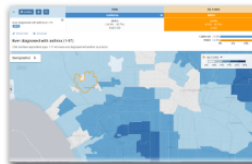
### Introduction to AskCHIS NE

AskCHIS Neighborhood Edition allows you to access hyper-local California health data, including ZIP code, legislative district, city and more!



### How to build a basic Community Profile

Learn how to select a health topic and up to five hyper-local geographical locations.



### How to adjust and visualize your data

Learn how to adjust results, visualize your data, and more!

## The tutorials cover:

- How to do a basic query
- Displaying data visually
- How to export your data in a variety of formats
- Confidence intervals, pooling, statistical stability, and much more!

## Please visit us at [chis.ucla.edu](http://chis.ucla.edu)

Special thanks to our data collection partner SSRS, our content partner PHI, the members of our Advisory Board and committees, and the rest of the UCLA CHPR CHIS team:

Julian Aviles

Zebry Jiang

Sean Tan

Rogelio Batas

Andrew Juhnke

Flor Vásquez

Jason Frost

Royce Park

YuChing Yang

Jiangzhou Fu

Dana Paycao

Jiyoun Yoo

Parneet Ghuman

Jacob Rosalez

Eileen Zhou

Questions?