

Oral Health in America: Problems, Progress and Priorities

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Oral Health in America



Advances and Challenges

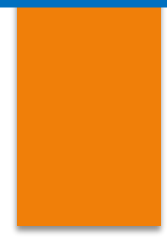
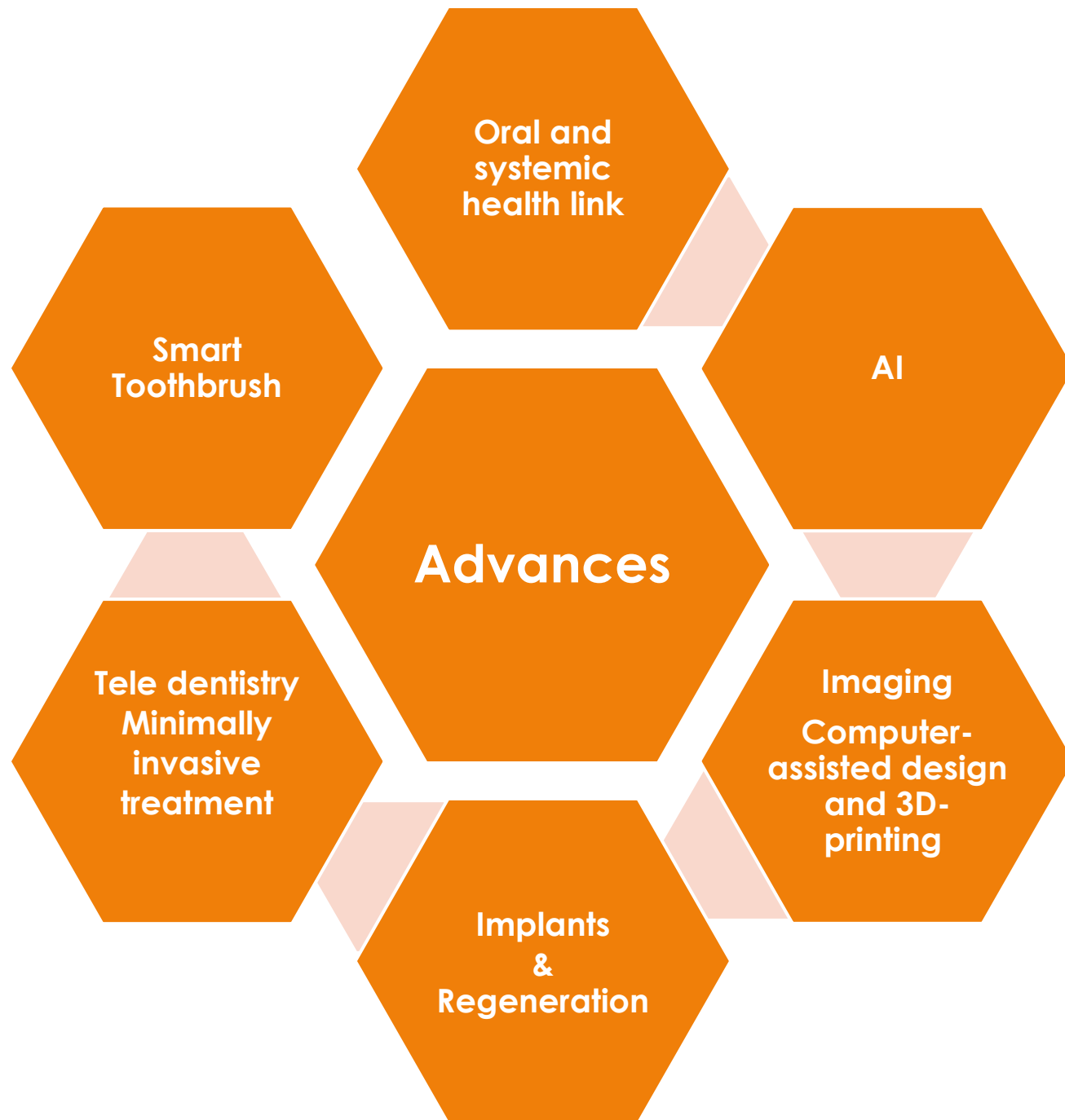


Call to Action

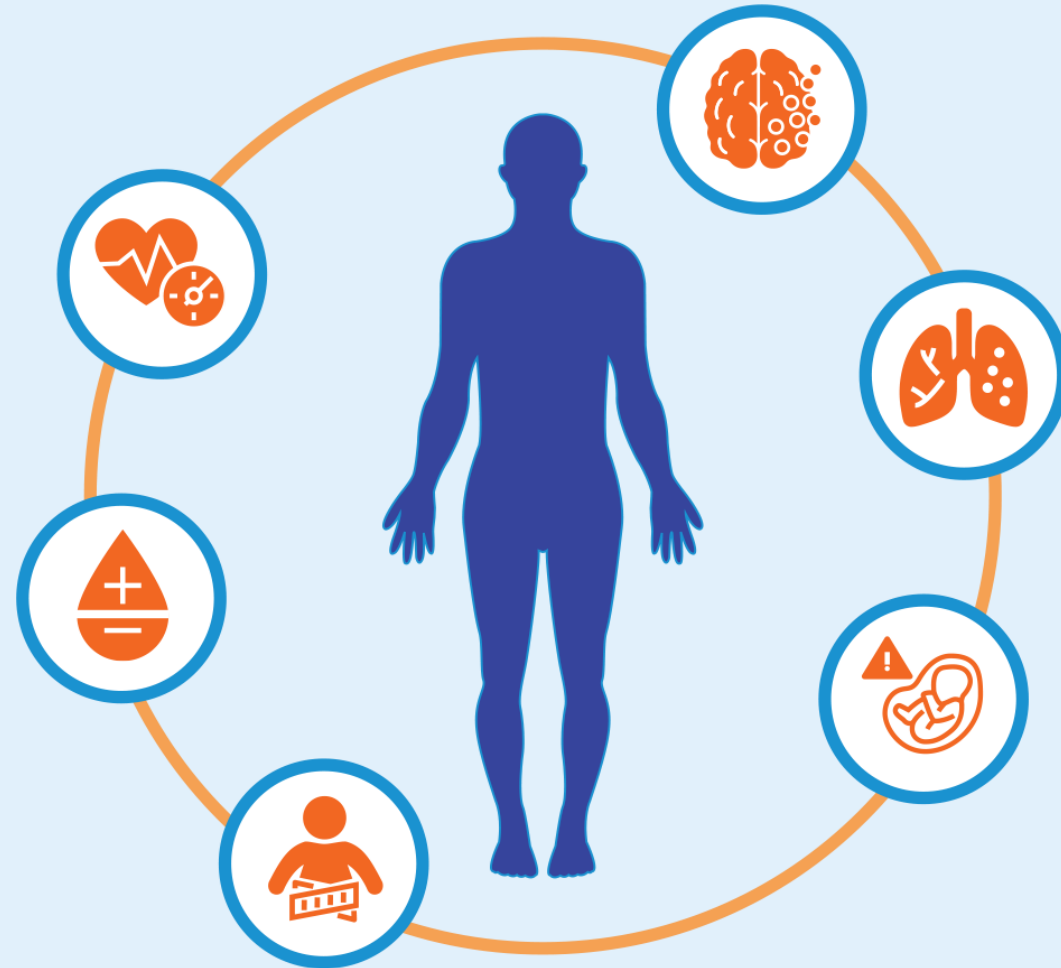
- policy changes are needed to reduce or eliminate ...inequities
- dental and other health care professionals must work together
- we need to diversify the composition of the nation's oral health professionals, address the costs ...and ensure a strong research enterprise

A Message

Jennifer Webster-Cyriaque, D.D.S., Ph.D.
Deputy Director, NIH NIDCR



Oral health is associated with several systemic conditions, including cardiovascular disease, diabetes, and adverse pregnancy outcomes.



High Blood Pressure

Diabetes

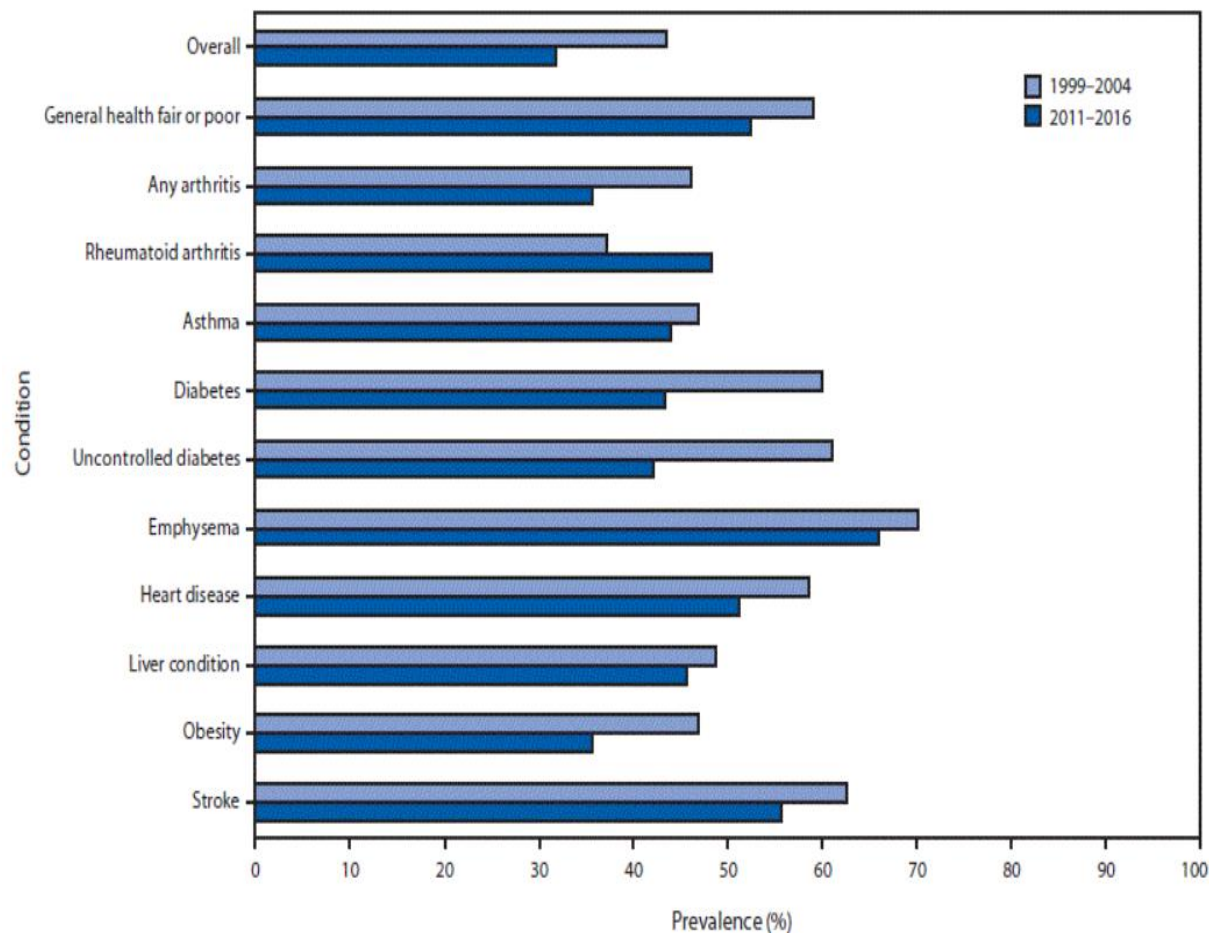
Obesity

Dementia

Respiratory Health

Adverse Birth Outcomes

Change in prevalence^{*,†} of lack of functional dentition (<20 teeth) among U.S. adults aged ≥50 years with selected chronic conditions — NHANES 1999–2004 and 2011–2016

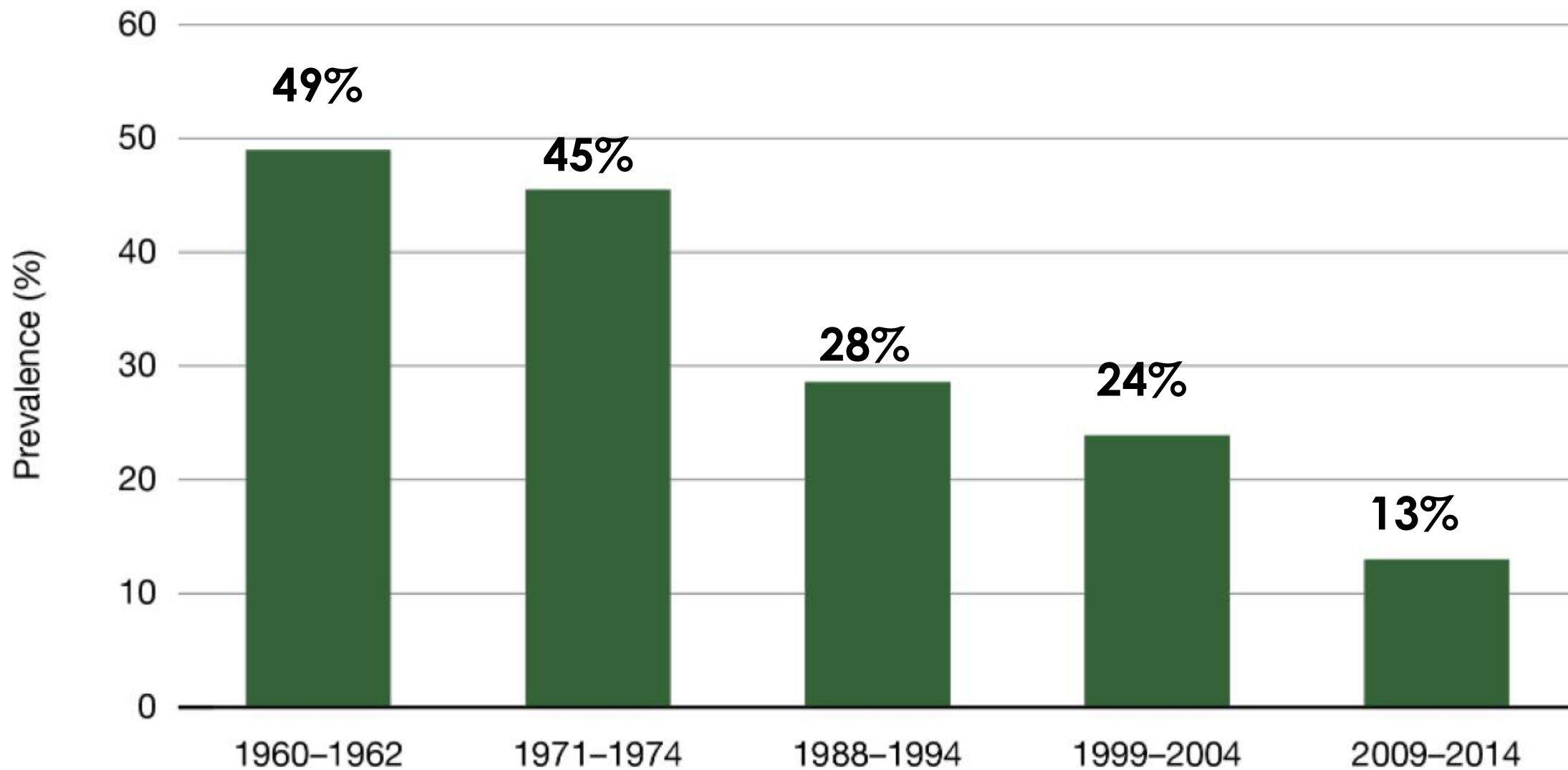


56.5 %  68.2%

“The overall prevalence of lack of functional dentition decreased 11.7 percentage points from 1999–2004 (43.5%) to 2011–2016 (31.8%)”

Parker ML, Thornton-Evans G, Wei L, Griffin SO. Prevalence of and Changes in Tooth Loss Among Adults Aged ≥50 Years with Selected Chronic Conditions — United States, 1999–2004 and 2011–2016. *MMWR Morb Mortal Wkly Rep* 2020;69:641–646. DOI: <http://dx.doi.org/10.15585/mmwr.mm6921a1>

Figure 5. Trend in edentulism among adults ages 65–74: United States, 1960–1962 to 2009–2014

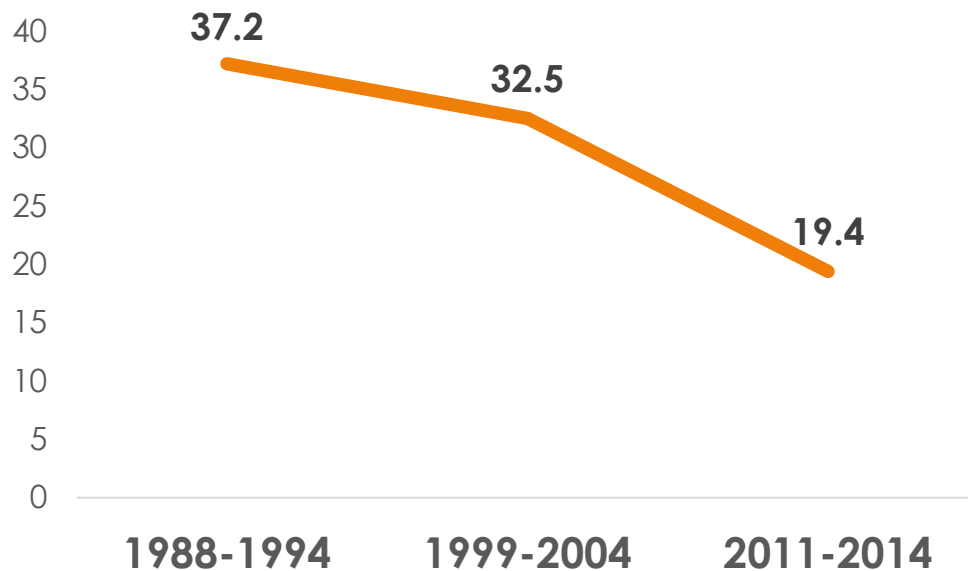


Note: Edentulism is complete loss of all natural permanent teeth.

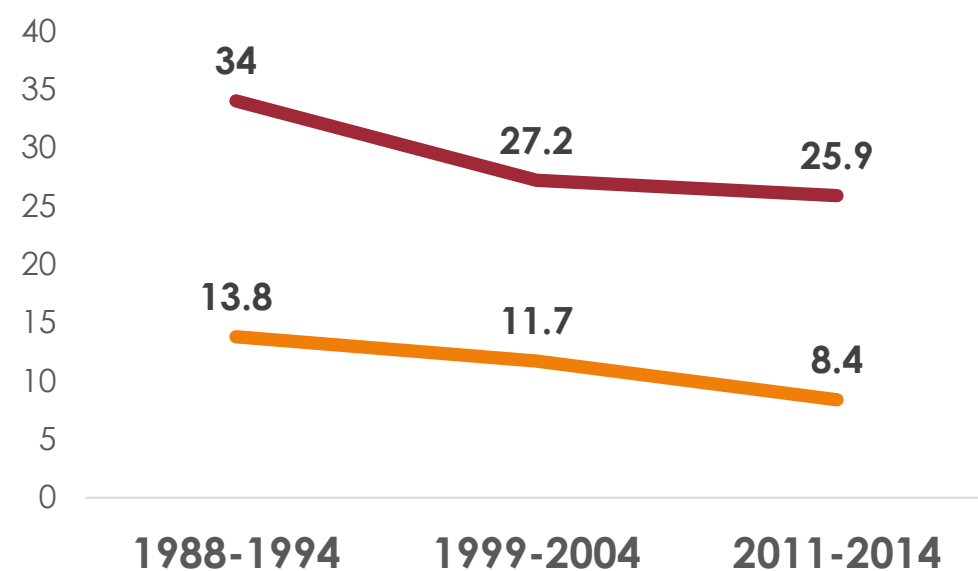
Source: Adapted from Dye et al. (2019).

Percentage of Poor Children (2-11, 12-19 years) with Untreated Dental Caries, 1988-1994, 1999-2004, 2011-2014, U.S.

Untreated Tooth Decay 2-11 (Primary Teeth)



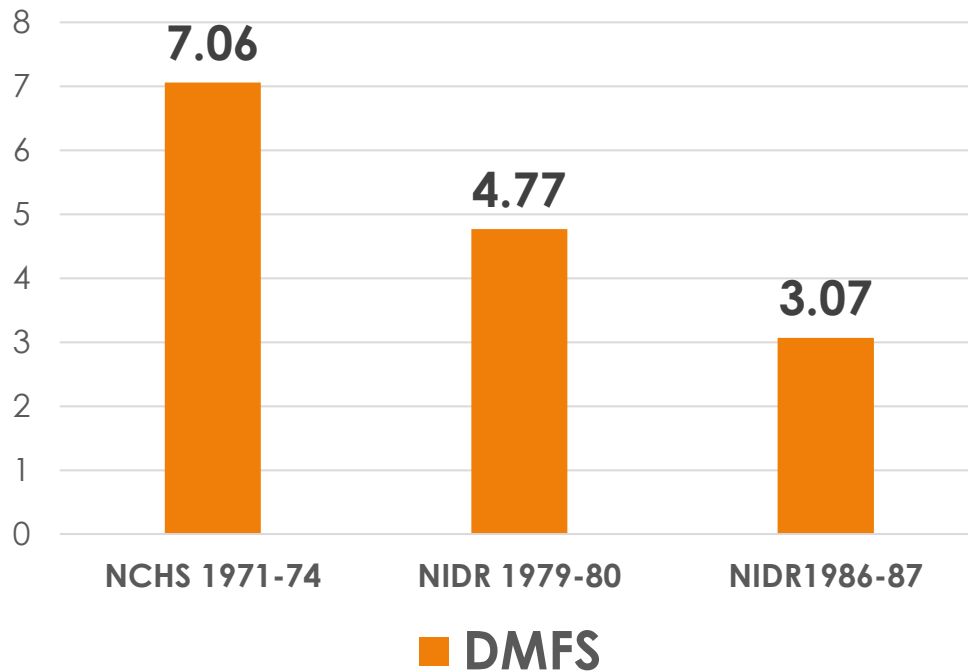
Untreated Tooth Decay 6-11 and 12-19 (Permanent Teeth)



National Trends – Decayed, missing and filled tooth surfaces or teeth

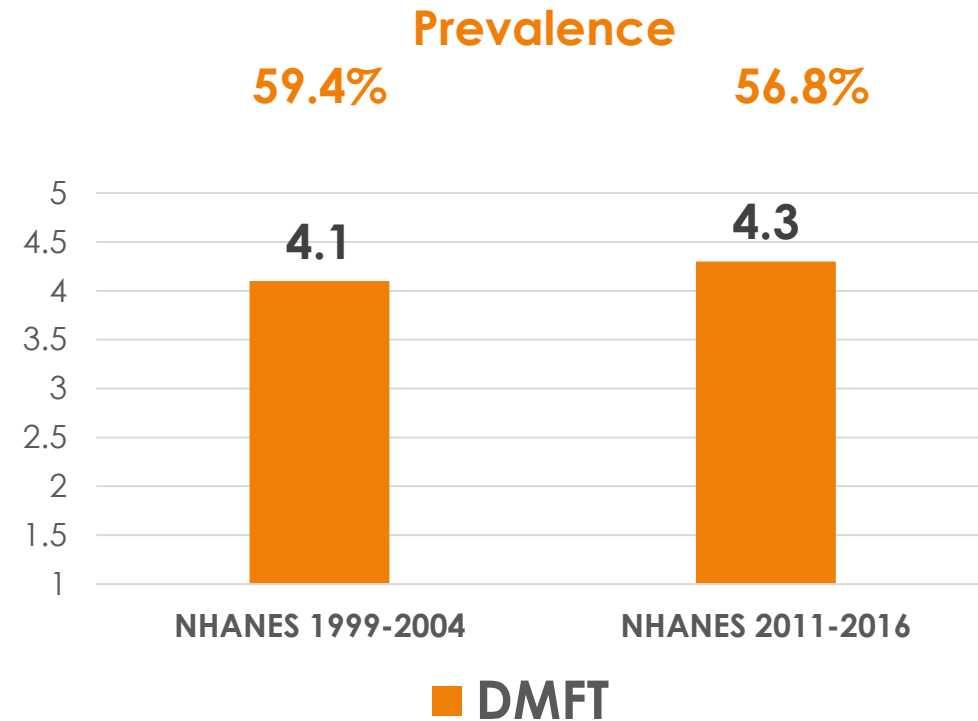
10

1971-74 and 1986-87 5–17-year-old children



Brown, L. J., Beazoglou, T., & Heffley, D. (1994). Estimated savings in U.S. dental expenditures, 1979-89. *Public Health Reports (Washington, D.C. : 1974)*, 109(2), 195–203

1999-2004 and 2011-2016 12–19-year-old children with at least one DMFT

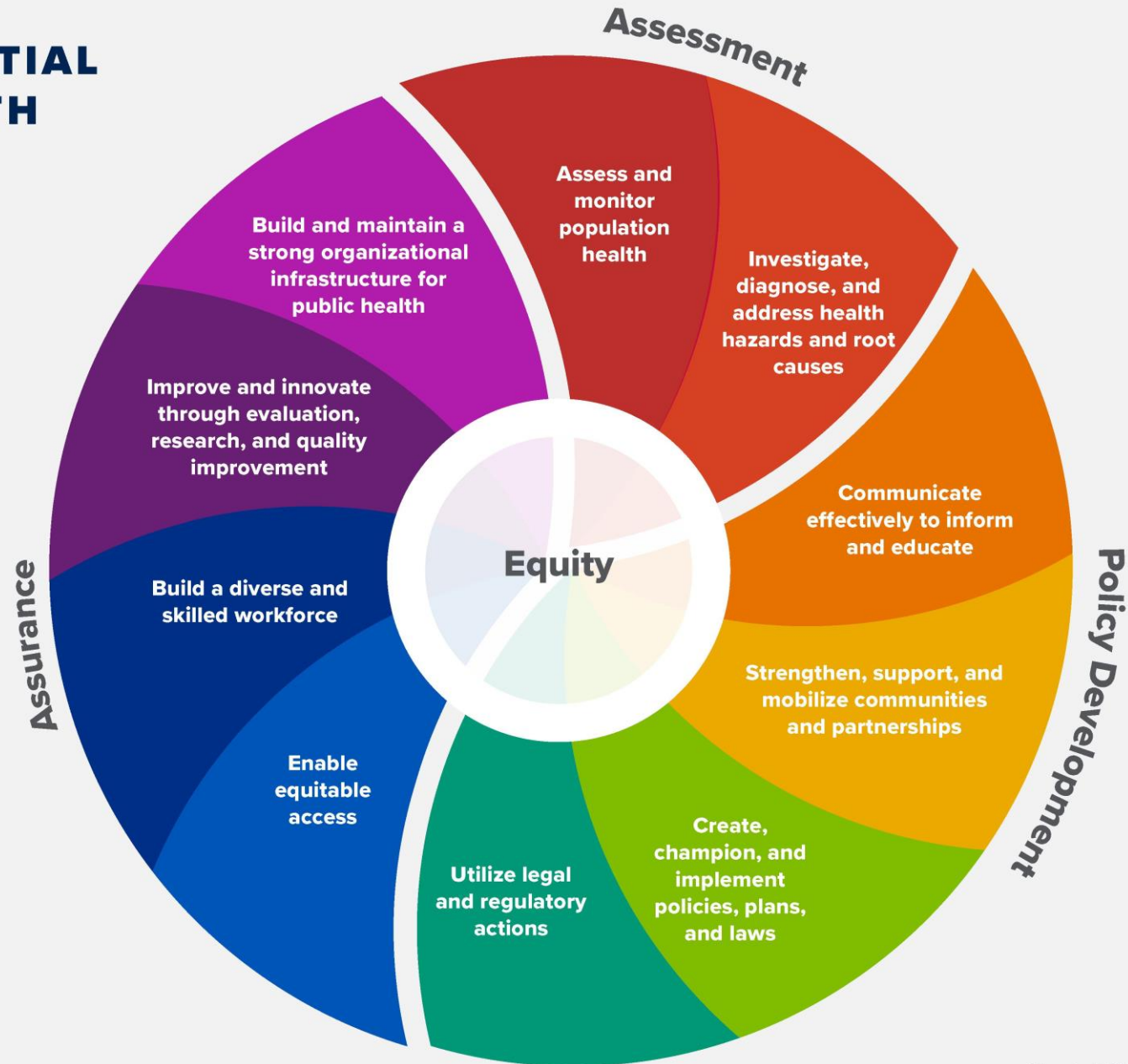


Centers for Disease Control and Prevention. (2019). *Trends in Dental Caries and Sealants, Tooth Retention, and Edentulism, United States*. www.cdc.gov/oralhealth

THE 10 ESSENTIAL PUBLIC HEALTH SERVICES

To protect and promote the health of all people in all communities

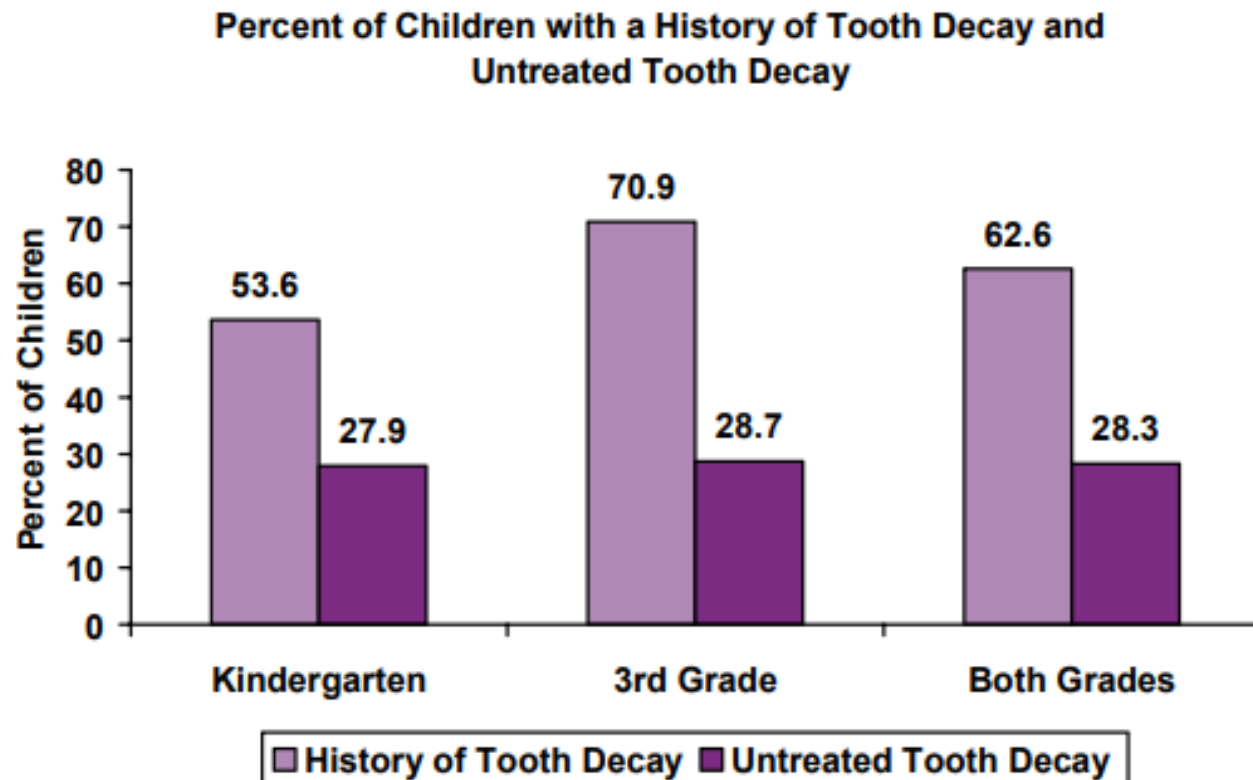
The 10 Essential Public Health Services provide a framework for public health to protect and promote the health of all people in all communities. To achieve optimal health for all, the Essential Public Health Services actively promote policies, systems, and services that enable good health and seek to remove obstacles and systemic and structural barriers, such as poverty, racism, gender discrimination, and other forms of oppression, that have resulted in health inequities. Everyone should have a fair and just opportunity to achieve good health and well-being.



Oral Health in California: 2015 to 2023

KEY FINDING #1: DENTAL DISEASE IS THE HIDDEN EPIDEMIC OF CALIFORNIA'S SCHOOL CHILDREN. MORE THAN HALF OF KINDERGARTNERS AND MORE THAN 7 OUT OF 10 3RD GRADERS HAVE EXPERIENCED TOOTH DECAY, AND MORE THAN A QUARTER OF THEM HAVE UNTREATED DECAY. LEFT UNTREATED, TOOTH DECAY OFTEN HAS SERIOUS CONSEQUENCES, INCLUDING NEEDLESS PAIN AND SUFFERING, DIFFICULTY SPEAKING AND CHEWING AND LOST DAYS IN SCHOOL.

February 2006



“Mommy, It Hurts to Chew”

California Smile Survey

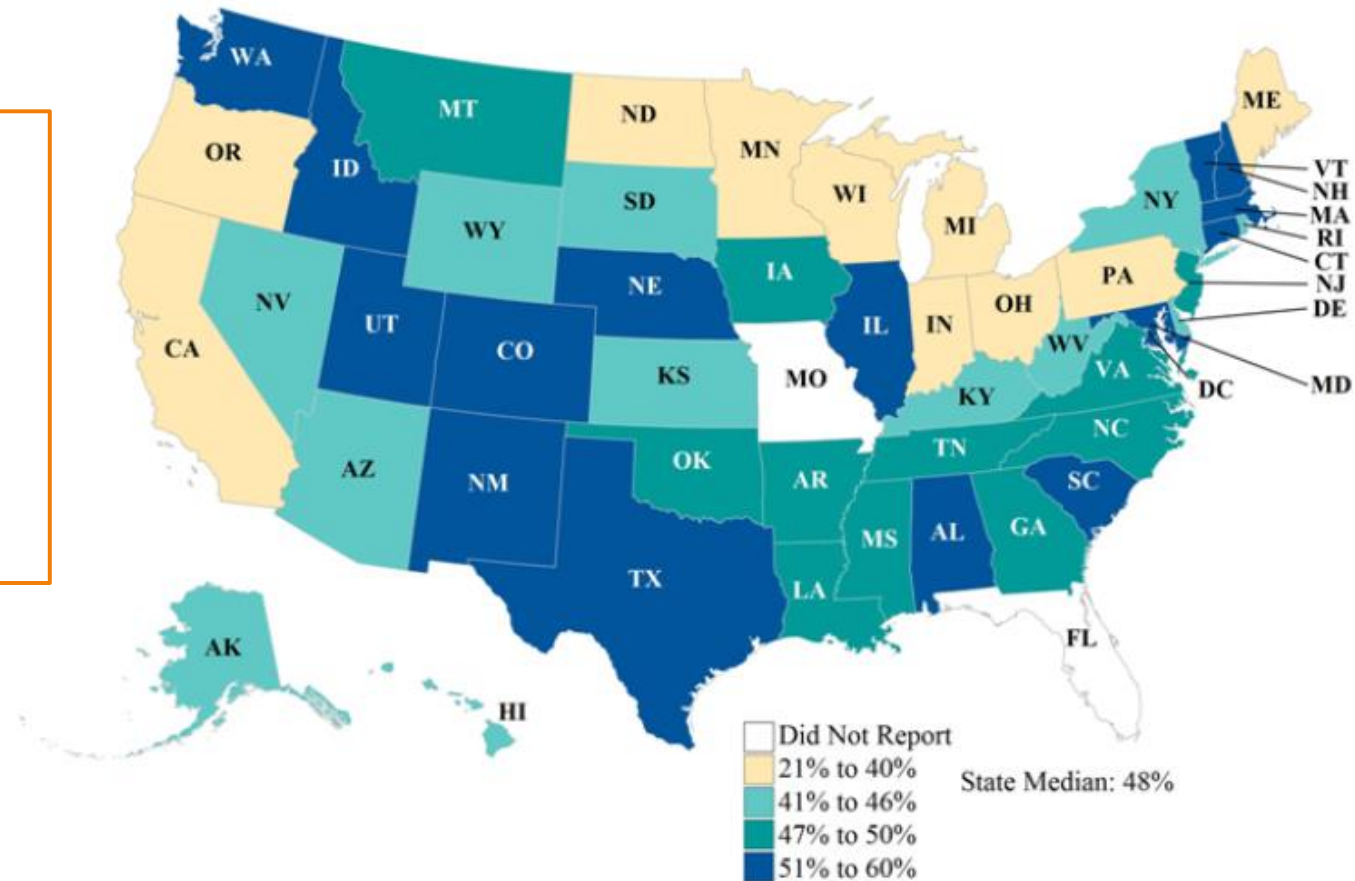
AN ORAL HEALTH ASSESSMENT OF CALIFORNIA'S KINDERGARTEN AND 3RD GRADE CHILDREN

Geographic Variation in the Preventive Dental Services Measure, FFY 2013 (n = 49 states)

FFY 2013

California 36.6%

United States 46.0%



Source: Mathematica analysis of FFY 2013 CMS-416 reports as of August 4, 2014.

To view state-specific data for this measure, please see Table PDENT at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2013.zip>.

November 2011

Phased Strategies for Reducing the Barriers to Dental Care in California

California Dental Association
Access Report

access 
Understanding the issue. Answering the need.

Communicated the solution

1. Establish State Oral Health Leadership and Optimize Existing Resources (years 1-3)
2. Focus on Prevention and Early Intervention for Children (years 3-5)
3. Innovate the Dental Delivery System to Expand Capacity (years 4-7)



2016

FIXING DENTI-CAL

REPORT #230, April 2016



LITTLE HOOVER COMMISSION
DEDICATED TO PROMOTING ECONOMY AND
EFFICIENCY IN CALIFORNIA STATE GOVERNMENT

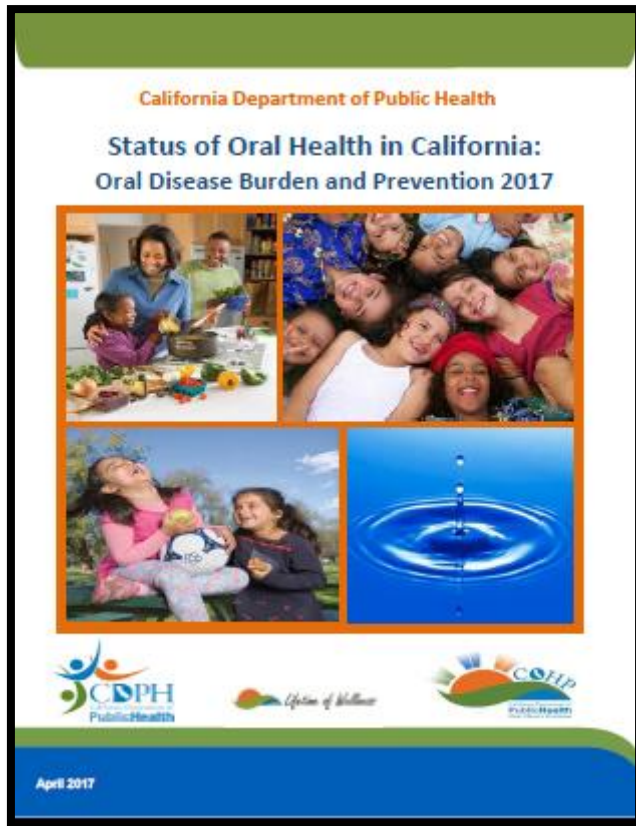
“After concluding its study process in November 2015, the Commission learned ...a five-year \$740 million targeted incentive program to spur more dentists to offer preventative care to children.

...The Commission also learned of the scheduled June 2016 release of a 10-year prevention-focused state oral health plan...

The Commission believes both initiatives represent a significant opportunity for California to do better by the population it is supposed to help.”

Legislative mandate to address oral health

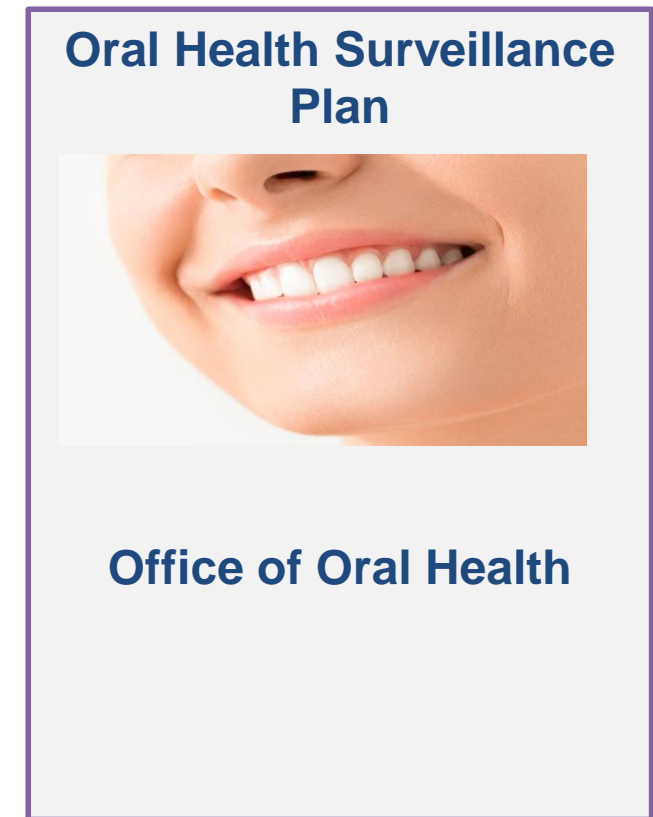
2017



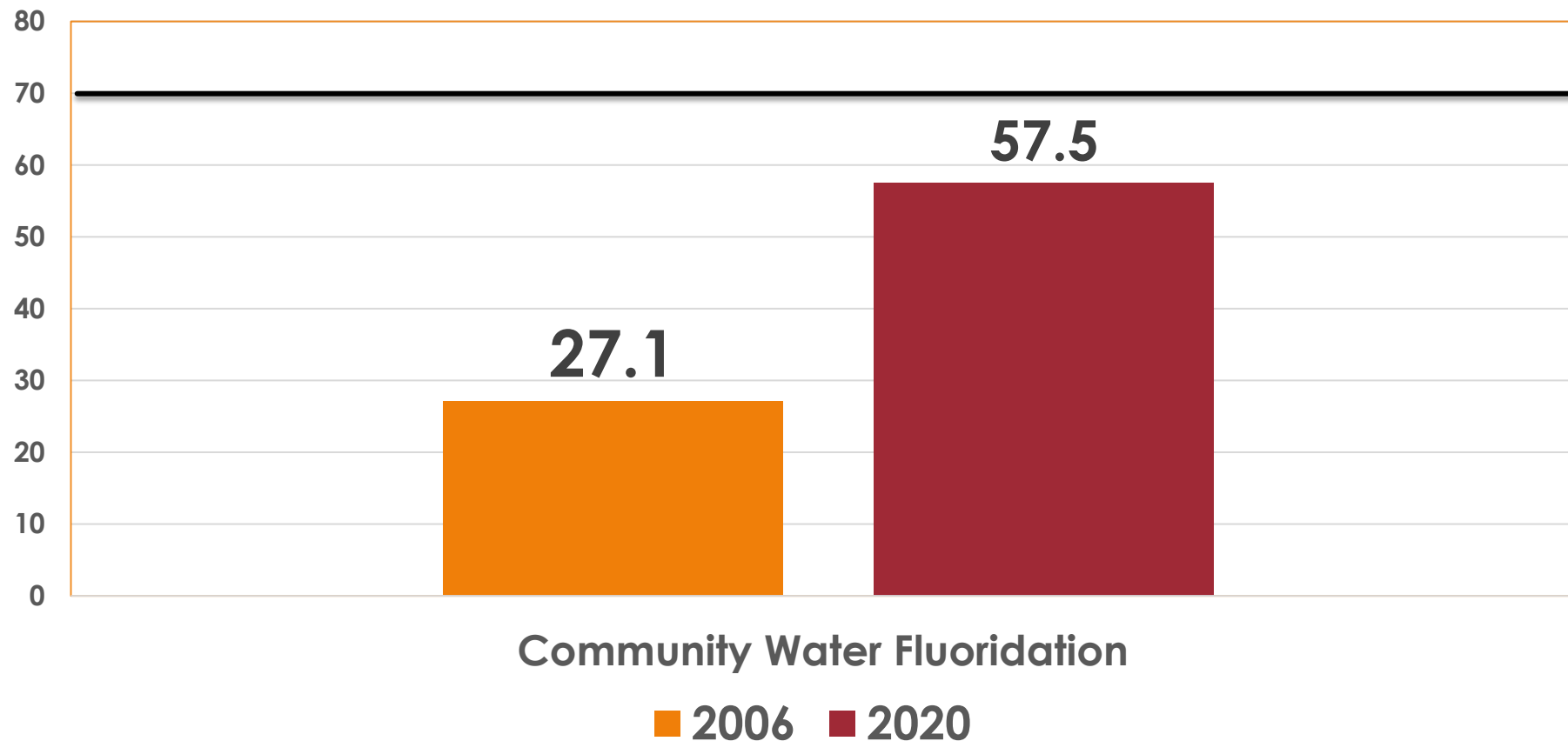
2018



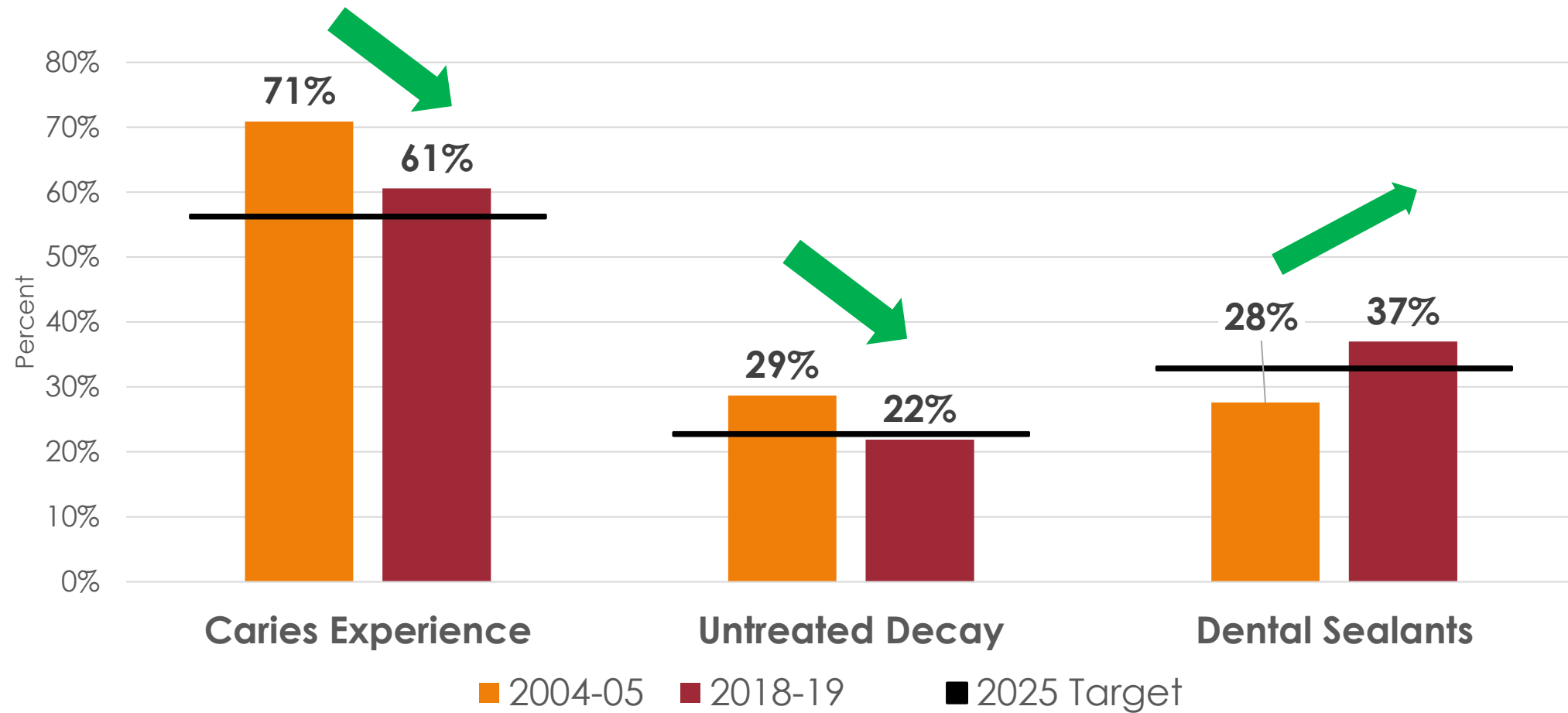
2019



Population Served by CWS Receiving Fluoridated Water, 2006 and 2020



Results from the 2004-2005 and 2018-19 California Smile Survey of 3rd Grade Children



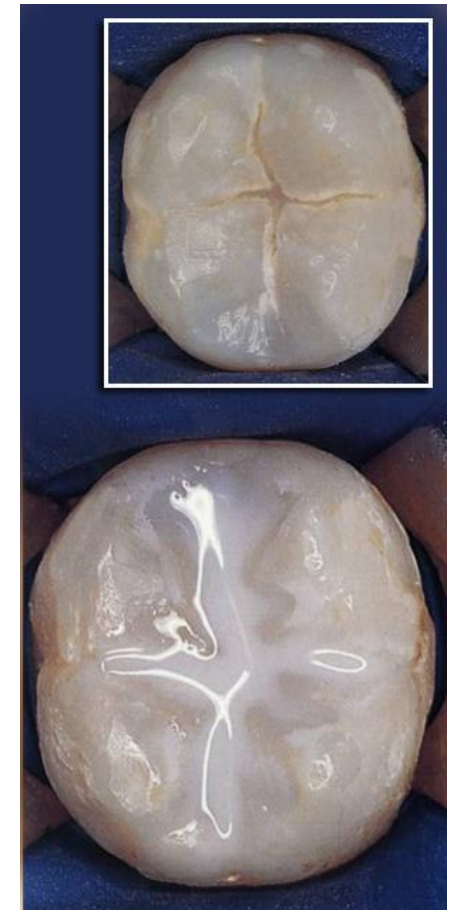
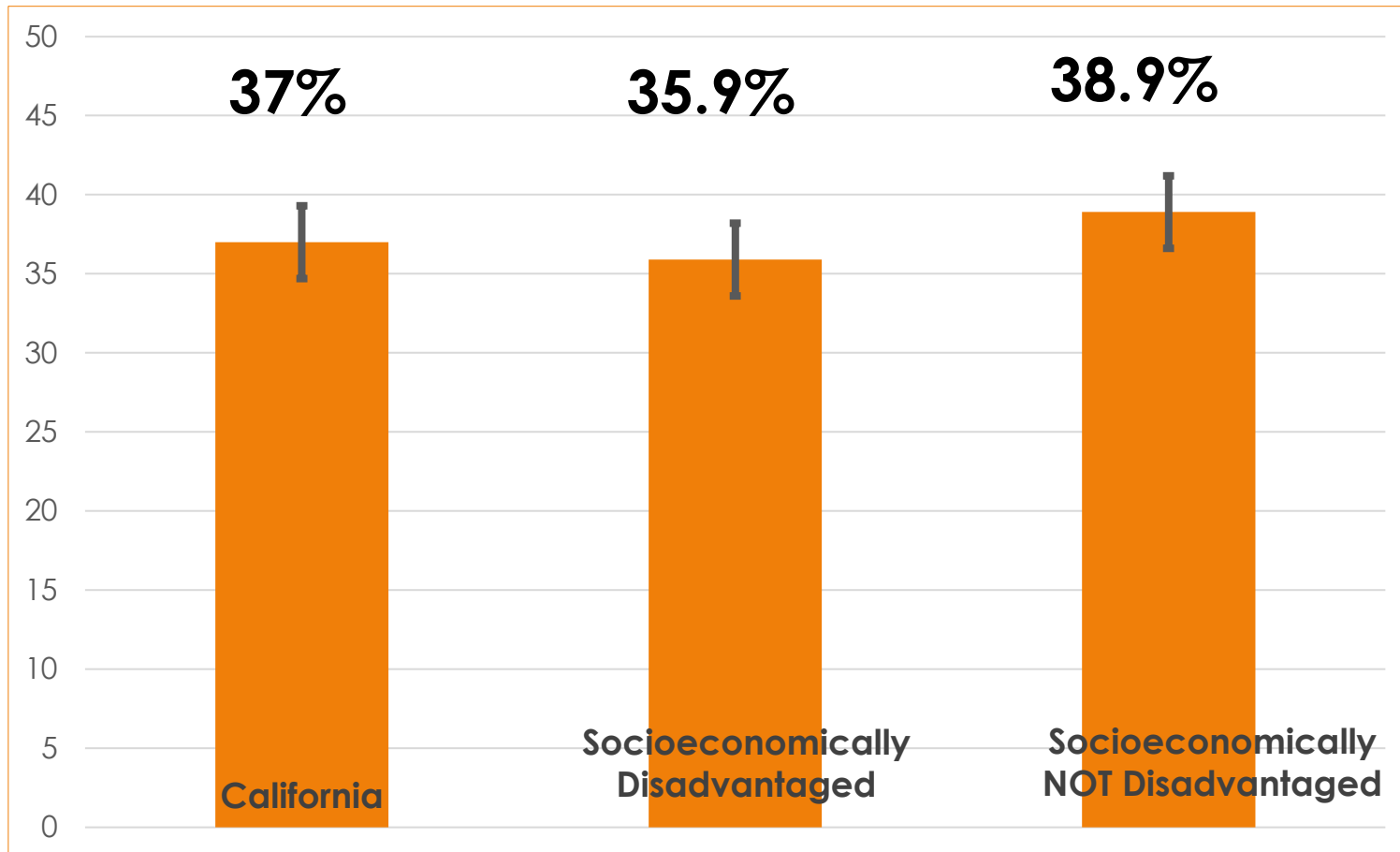
Darsie B, Conroy SM, Kumar J (2021). Oral Health Status of Children: Results of the 2018-2019 California Third Grade Smile Survey. Sacramento, California: Office of Oral Health, California Department of Public Health.

Caries Experience by Region

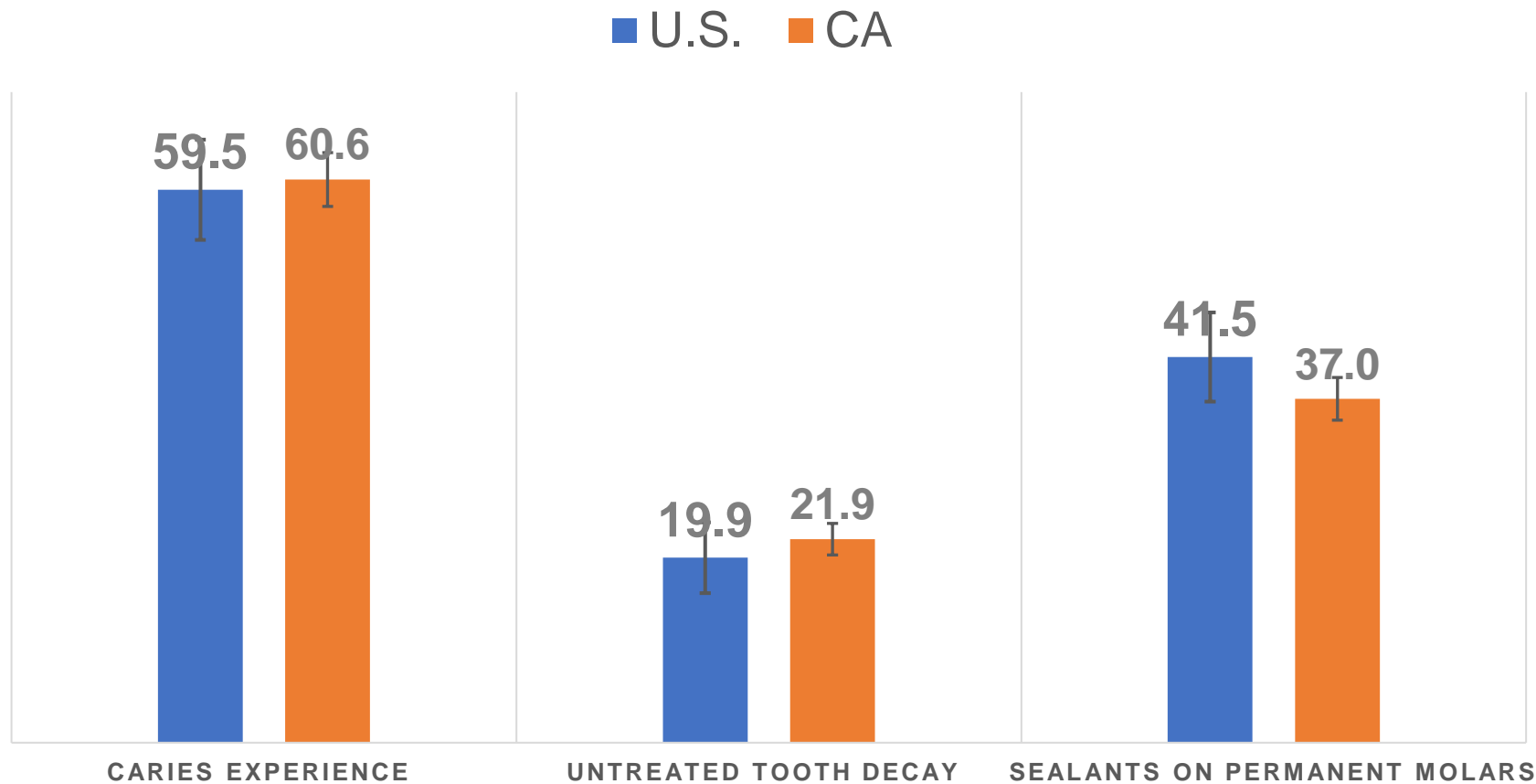
Region	Caries Experience Percent
Bay Area	45.4%
Sacramento Region	46.2%
Northern/Sierra	51.6%
Southern	60.4%
Central Coast	64.2%
Los Angeles	64.7%
Central Valley	75.9%



Dental Sealant Prevalence in 3rd Grade Children by Socioeconomic Status, 2018-2019



Prevalence of tooth decay in 3rd grade children, U.S. vs CA



Percent Latino Children

U.S. = 25% Vs. CA = 52%

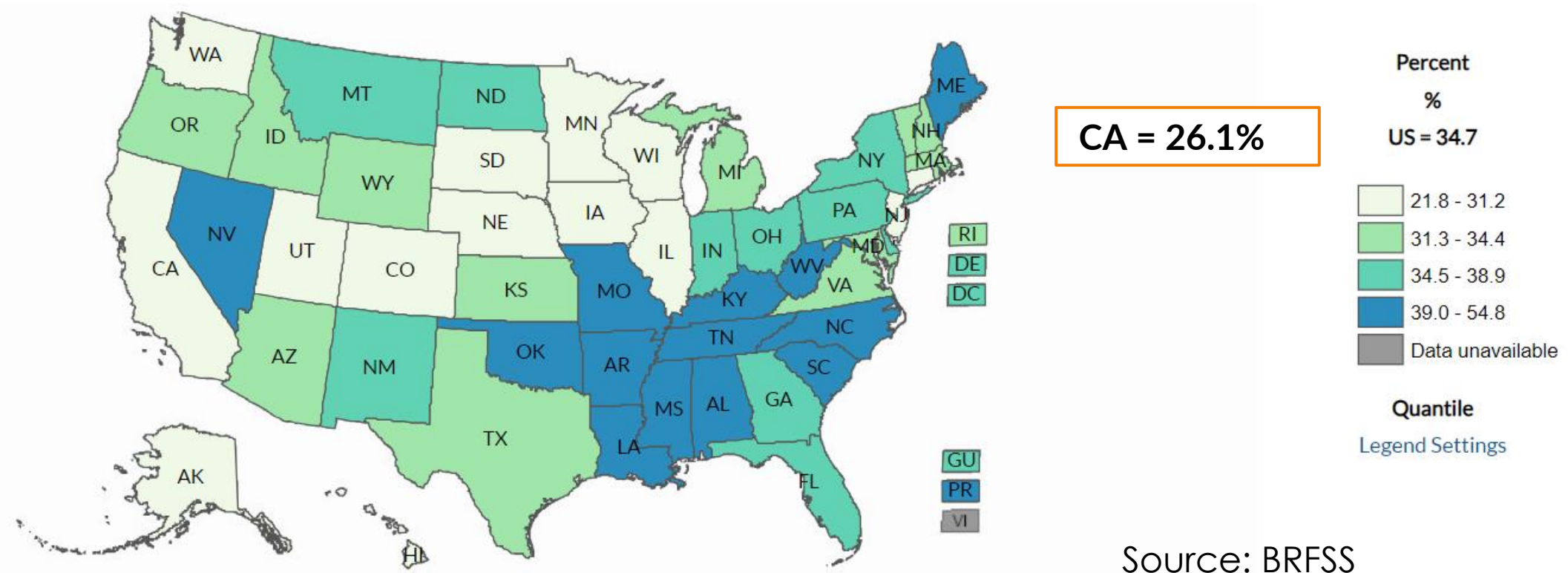
Source:

<https://www.hispanicresearchcenter.org/research-resources/latino-children-represent-over-a-quarter-of-the-child-population-nationwide-and-make-up-at-least-40-percent-in-5-southwestern-states/>

Source: Lin, Mei (CDC/ONDIEH/NCCDPHP) Personal Communication

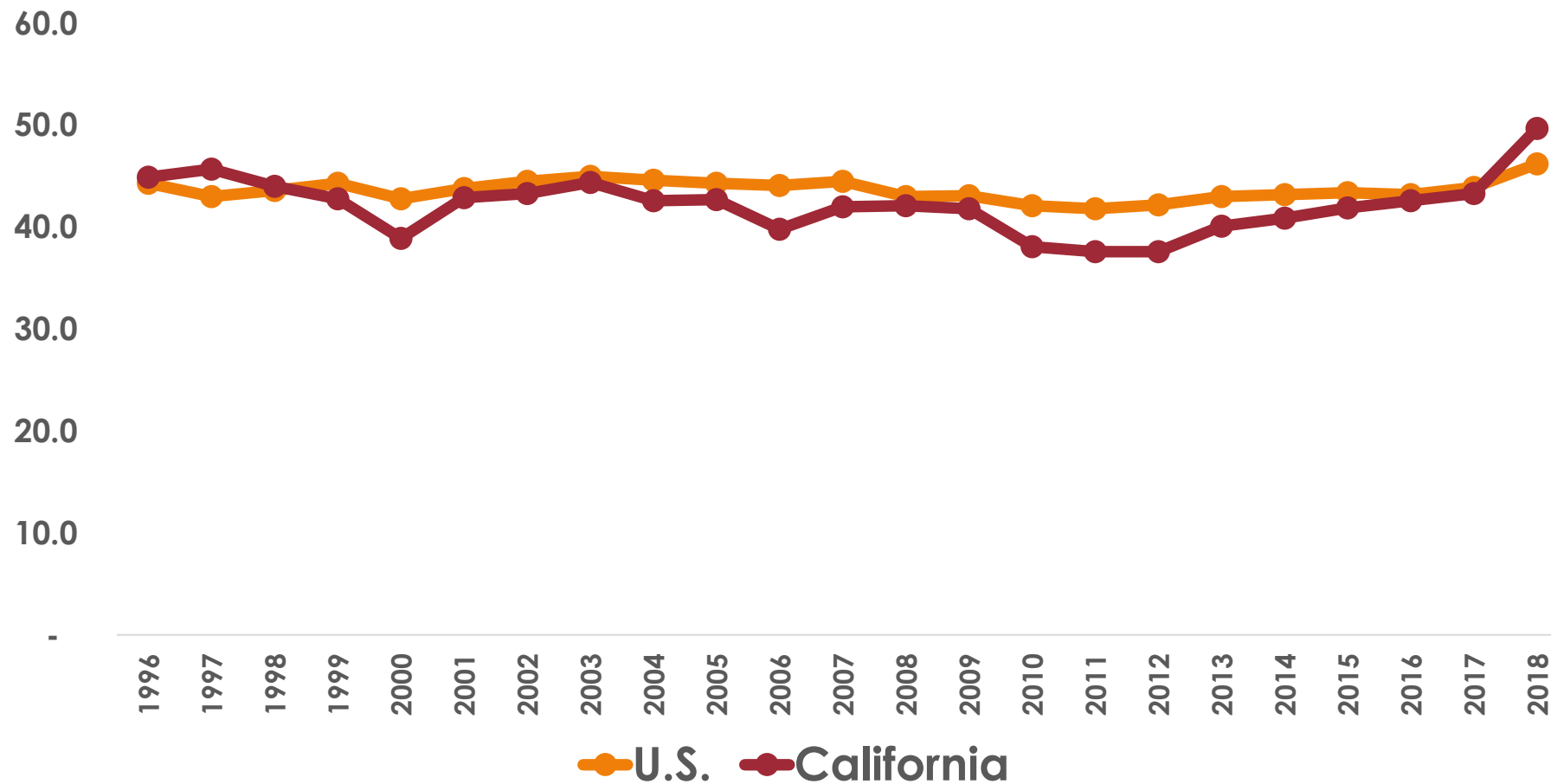
Adults aged 65+ who have lost six or more teeth

2018
 Adults aged 65+ who have lost six or more teeth due to tooth decay or gum disease
 Response: Yes

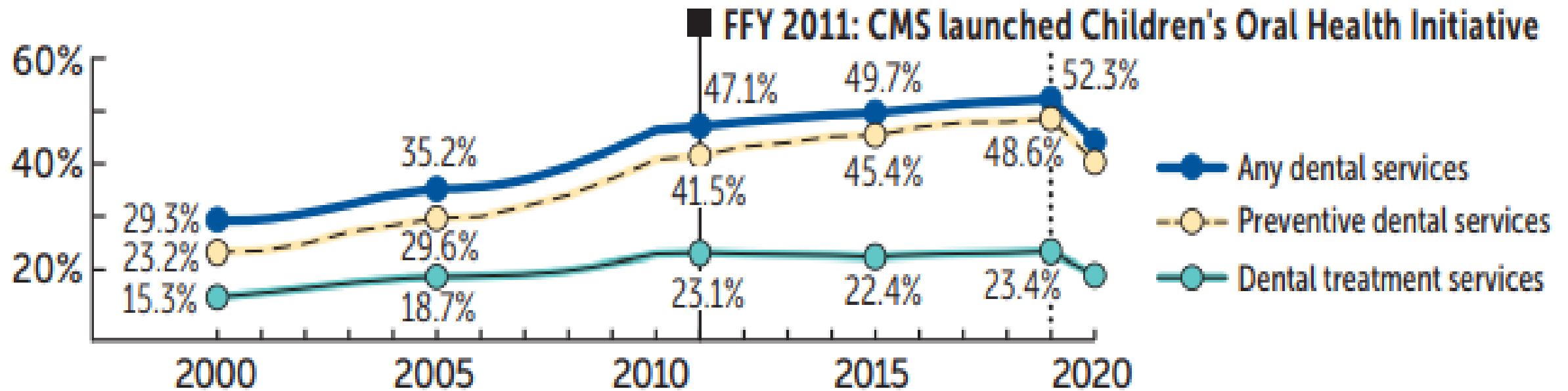


Dental Visits

Proportion of people 2 years of age and older who had a dental visit within the year, MEPS Data

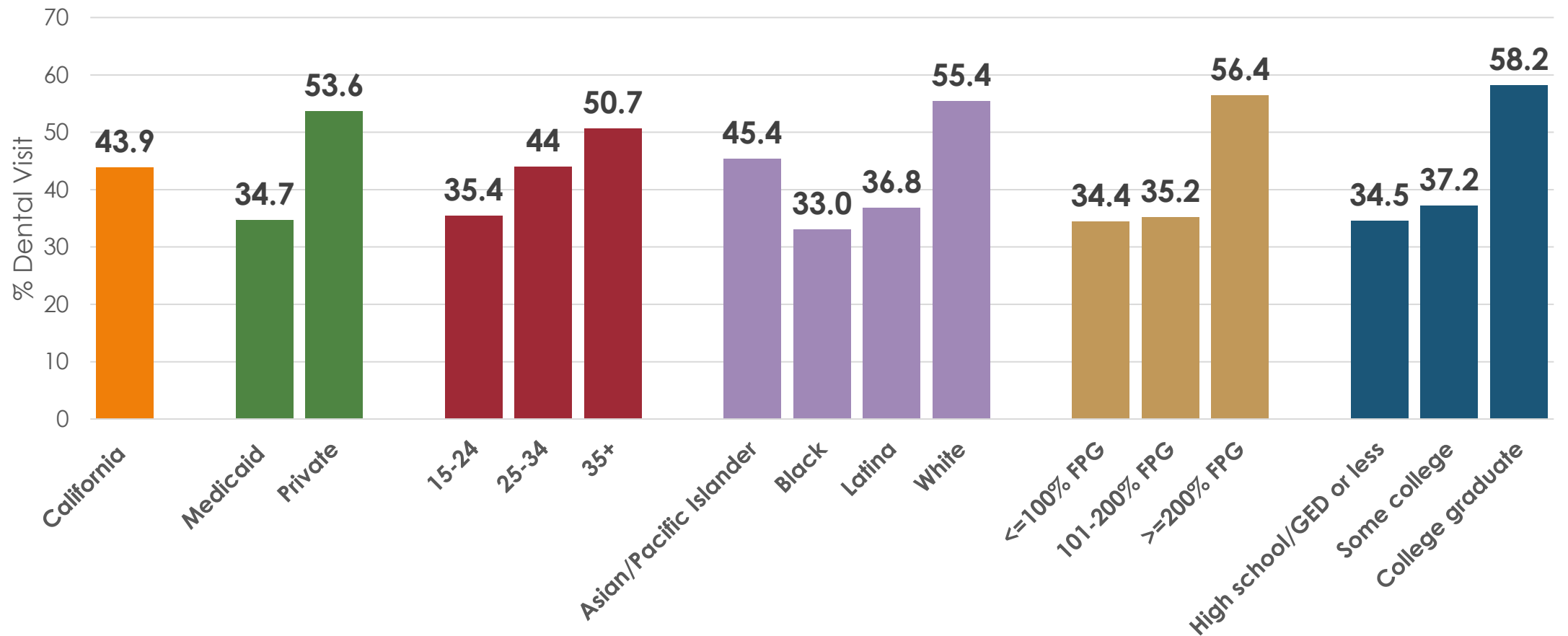


Percentage of Children and Adolescents, Ages 1 to 20, Enrolled in Medicaid for at Least 90 Continuous Days Who Received Dental Services, FFY 2000 -2020, U.S.

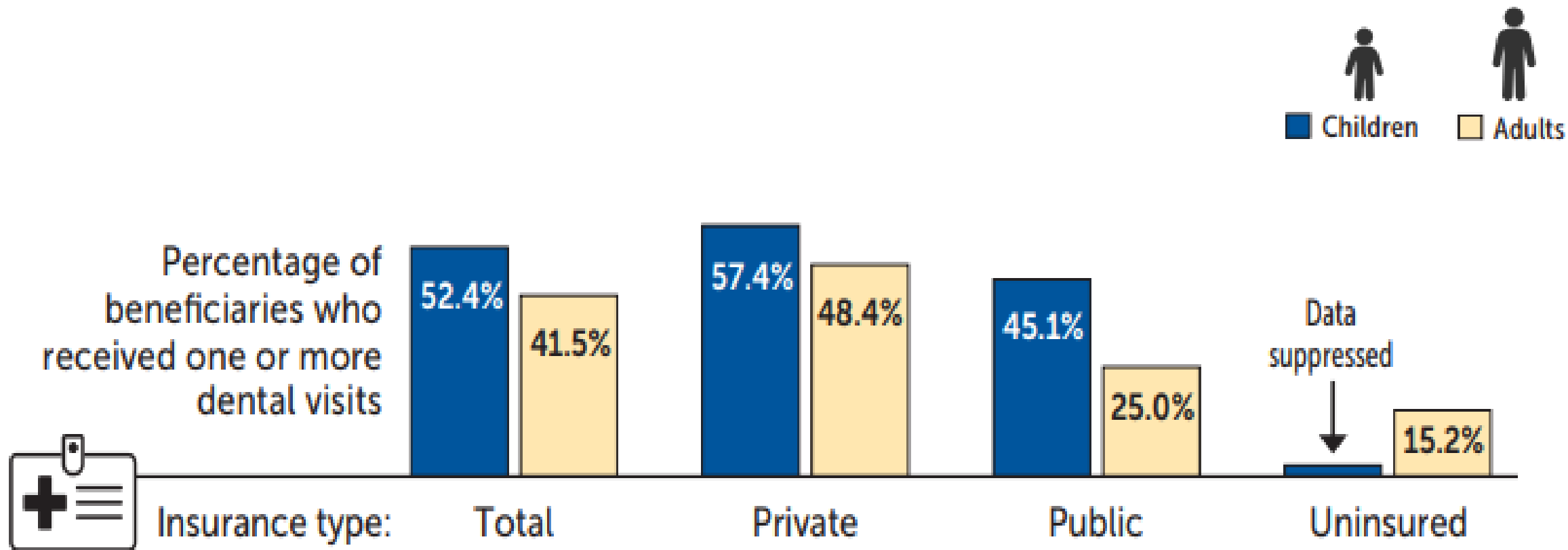


Source: <https://www.medicaid.gov/medicaid/benefits/downloads/2023-oral-health-at-a-glance.pdf>

Receipt of dental visit during pregnancy among California women with a recent live birth, Maternal and Infant Health Assessment (MIHA) Survey, 2017-2018

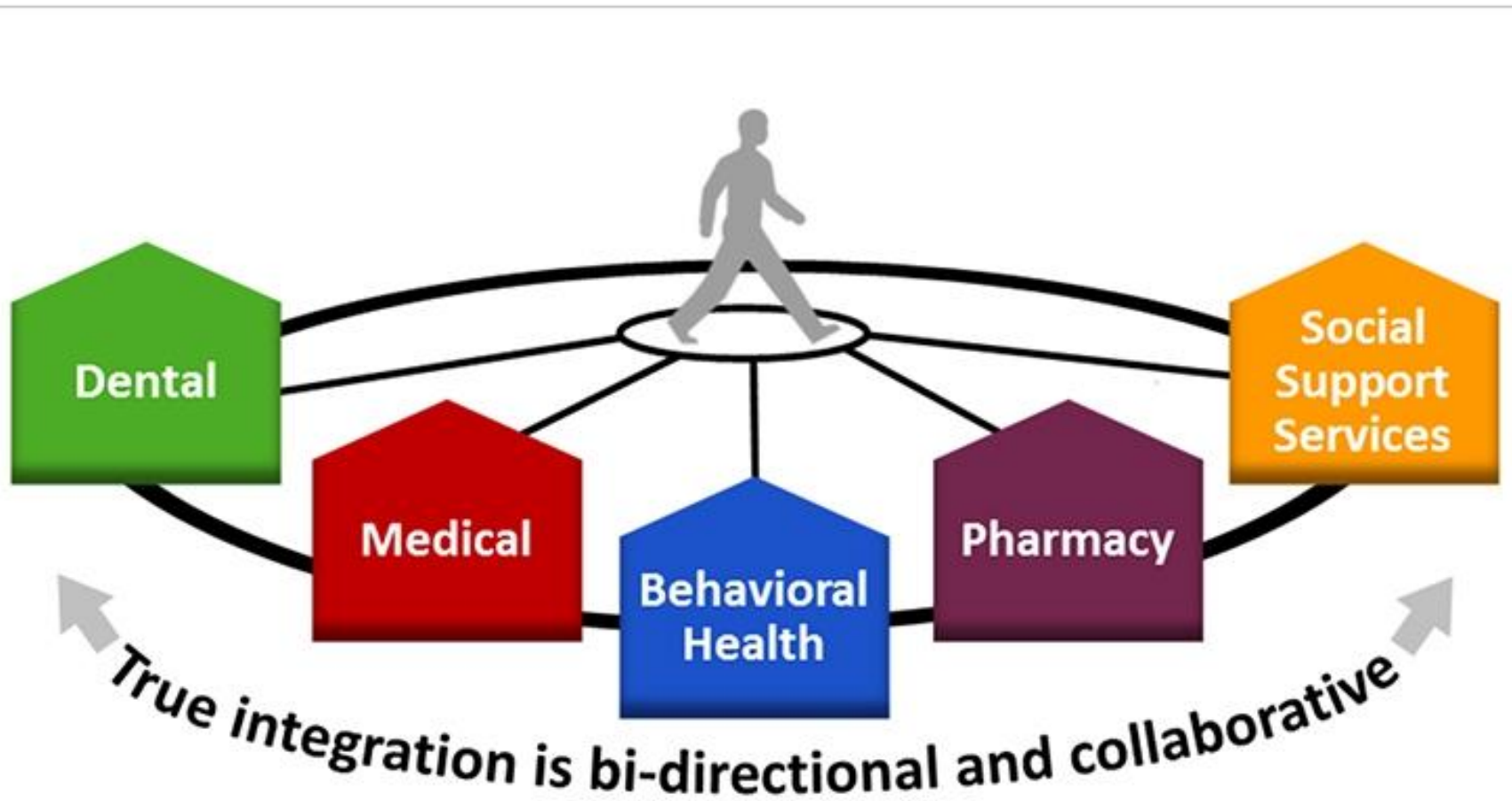


Disparities in Dental Visit Utilization by Type of Medical Insurance Coverage, U.S., 2019



Source: <https://www.medicaid.gov/medicaid/benefits/downloads/2023-oral-health-at-a-glance.pdf>

Medical-Dental-Social Support Systems Integration



Source: Dentistry Today - Online Toolkit Improves Integrated Approaches to Dental Care, August 3, 2016

Oral Health for All — Realizing the Promise of Science

Rena N. D'Souza, D.D.S., Ph.D., Francis S. Collins, M.D., Ph.D., and Vivek H. Murthy, M.D., M.B.A.

“To substantially improve oral health throughout the United States, policy changes are needed to reduce or eliminate social, economic, and other systemic inequities. Oral diseases are preventable, and social and other determinants of health need to be considered in prevention and treatment strategies. Policymakers must make oral health care more accessible, affordable, and equitable.”

Key messages

1. Oral health must be regarded as integral to overall health.
2. Community conditions make it difficult for families to improve oral health.
3. The separation of dentistry from overall health care limit access to care and perpetuate disparities in oral health.



“Intellectuals solve problems.
Geniuses prevent them.”

— Albert Einstein

Thank
you