



The ABCs of School-Based Oral Health

November 15, 2023





CareQuest

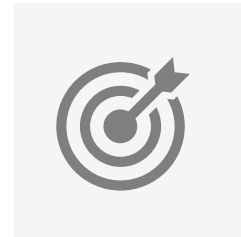


Institute for Oral Health®

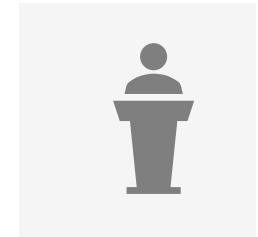




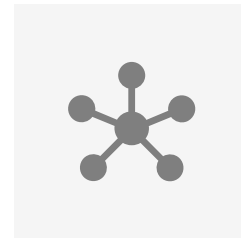
Agenda



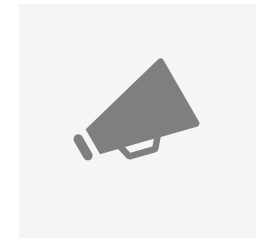
Overview of school-based oral health



Legislative trends



State examples



Q&A



“THE ABCS OF SCHOOL-BASED ORAL HEALTH SERVICES”

the differences in oral health access for children, the overall importance of oral health for the lifespan, and schools as an access point for oral health

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ORAL HEALTH THROUGH THE LIFESPAN: SYSTEMIC CHANGES

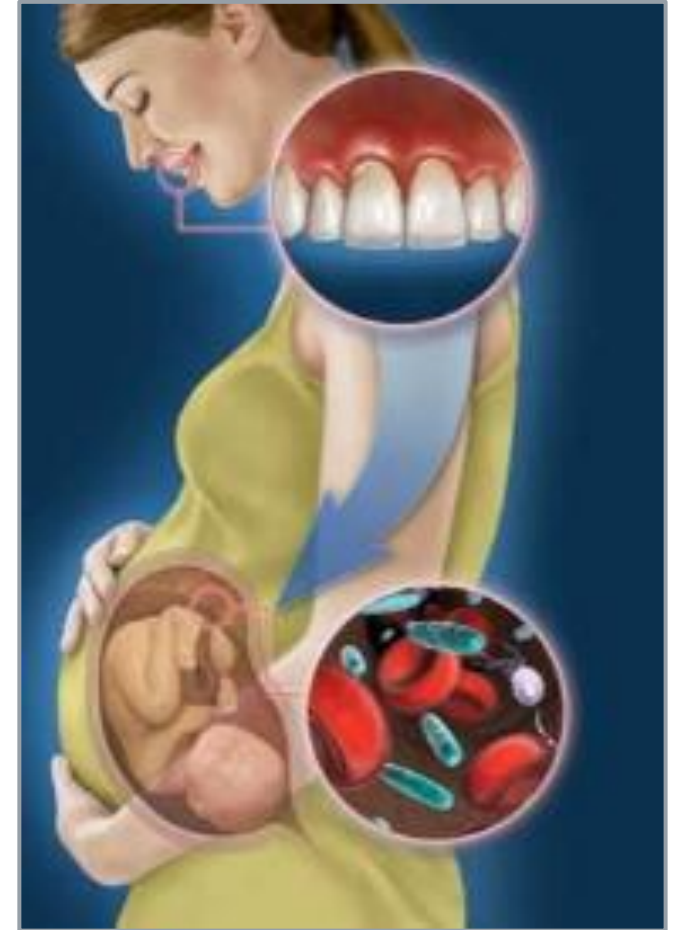


- ❖ Puberty
- ❖ Pregnancy
- ❖ Menopause



Oral Health in Pregnancy

- Hormonal Changes
 - Increased Estrogen
 - Increased Progesterone
- Increased Oral Bacteria
- Gum Inflammation (Periodontitis) when left untreated may be associated with:
 - Pre-Term labor and birth
 - Low birth weight infants
 - Poor glycemic control
 - Pre-eclampsia



PUBERTY GINGIVITIS, CARIES, & GROWTH

- Hormonal Changes Occur

- Estrogen
- Testosterone

- Bacteria Changes

- Normal Oral Bacteria
- Caries Causing Bacteria



- Bone Growth

- Maxillae & Mandible Growth
- Occlusion May Change

- Periodontal (Gum) Disease

- Increased Blood Flow
- Increased Gingival Bleeding



MENOPAUSE AND ORAL HEALTH

- Xerostomia
- Glossodynia
- Tooth Pain
- Periodontal Disease



Photo from: Colgate Professional

CHILDREN AND ORAL HEALTH FACTS

- 20% of their waking hours are spent in school
- Caries is the most common chronic disease of childhood in the United States
- Approximately 17% of days missed are associated with dental pain and infection

Data from the CDC

- Children aged 1–17 years living in families with incomes below 400% of the federal poverty level were less likely to have had an annual dental examination or cleaning in 2020 than in 2019

Data from the National Center for Health

Statistics



Image from Colgate.com

STATE OF CHILDREN'S ORAL HEALTH

UNITED STATES

- 4 out of 10 American children have tooth decay before they start kindergarten
- Among children aged 6-11 years, 45% have caries and 15% have untreated caries
- Among children aged 12-19 years, 54% have caries and 13% have untreated caries
- Kids from low-income families have twice the risk of tooth decay than kids from higher income families
- Black and Hispanic children experience caries at a higher rate than Non-Hispanic whites

Data from the CDC & State of Tennessee Oral Health Plan

TYPES OF SCHOOL-BASED PROGRAMS

- School-based **Dental Sealant** Program
 - Cavity Prevention
- School-based **Fluoride** Programs
 - Cavity Prevention
- School-based **Dental Screening and Referral** Programs
 - Oral Health Education
 - Establish a Dental Home
- School-based **Comprehensive Dental Care** Programs
 - Cleanings
 - Dental Cavities
 - Extractions



SCHOOL-BASED PROGRAMS & ORAL HEALTH IMPROVEMENT

- Help Improve Access
 - Low Income Children
 - Rural & Underserved Communities
- Promote Health Equity
- Serve to Integrate Oral and Systemic Health
- Reduce Dental Caries, Tooth Decay, & Oral Health Disparities
- Support & Promote Collaboration
 - School Leadership
 - Oral Health Community
 - Families



Oral Health Legislative Trends

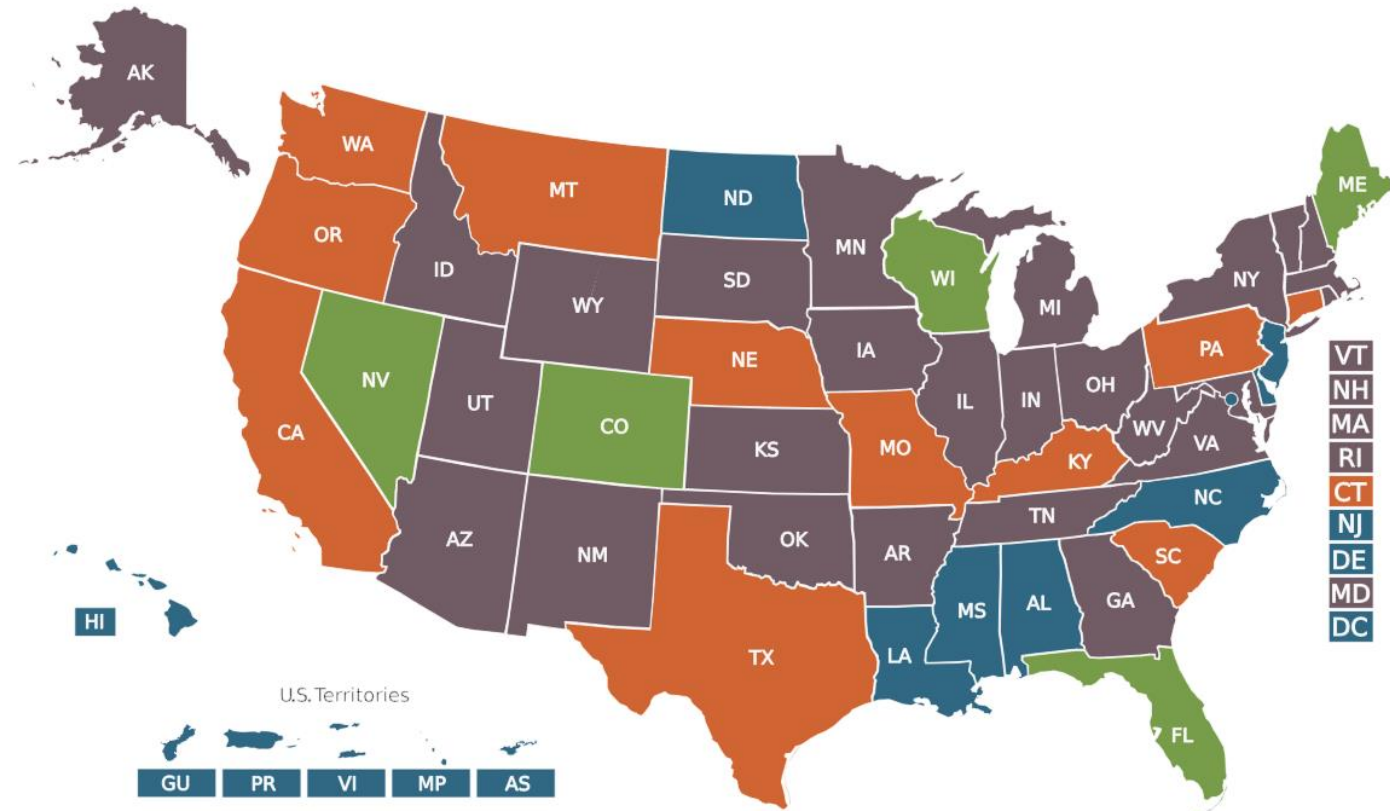
Kendall Speer, policy specialist, NCSL



Dental Hygienists in Schools

- At least [five states](#) allow dental hygienists to see patients without supervision and 11 states allow direct access with educational/practice hours.
- [Georgia House Bill 154](#) (2017): authorizes licensed dental hygienists to perform certain functions under general supervision in certain settings, including school settings and certain health facilities.
- [Rhode Island Senate Bill 572](#) (2019): Includes any licensed public health dental hygienist among persons eligible to conduct dental screenings.

DENTAL HYGIENISTS WITH DIRECT ACCESS



LEGEND

- No supervision required
- Educational/practice hours required to practice without supervision
- Collaborative agreement or supervision required
- No direct access



Dental Assistants and Medical Assistants



[Hawaii Senate Bill 2280](#) (2021): Provides that a dental assistant may operate under general supervision in a public health setting including schools and community centers



[Iowa House Bill 2267](#) (2020): Permits a registered dental assistant who has successfully completed expanded function training through the University of Iowa college of dentistry or a program certified by the commission on dental accreditation to place dental sealants on teeth



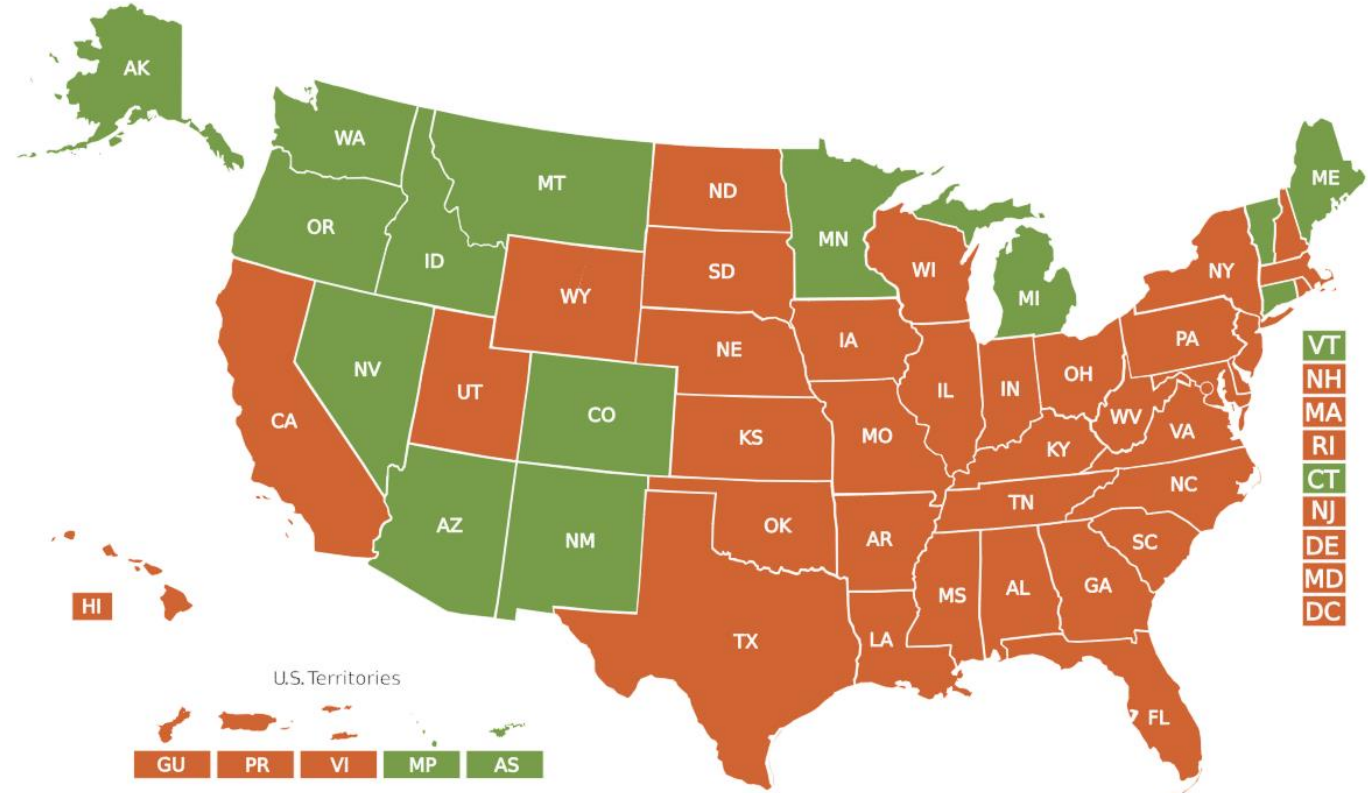
[Virginia House Bill 299](#) (2020): Allows a medical assistant to possess and administer topical fluoride varnish pursuant to an oral or written order or a standing protocol issued by a doctor of medicine, osteopathic medicine, or dentistry



Dental Therapists in Schools

- Dental therapists are currently recognized in 14 states and two territories.
- [Idaho Senate Bill 1129 \(2019\)](#): Permits dental therapists to federal or Tribal health programs on Tribal reservations, including schools.
- [Colorado Senate Bill 22-219 \(2022\)](#): Sets the requirements to become a licensed dental therapist in Colorado and defines their scope of practice.

DENTAL THERAPISTS



LEGEND

- Dental therapists recognized in state or territory
- Dental therapists not recognized in state or territory



Oral Health Screenings

- As of 2022 at least 15 states and the District of Columbia had dental screening laws in place
- [Delaware H83 \(2023\)](#): requires every public school and charter school to provide students enrolled in kindergarten with an oral health screening by the last student attendance day of each school year



Additional Legislation



- [Maryland Senate Bill 100 \(2021\)](#): establishes the Task Force on Oral Health in Maryland and puts forth provisions to study child and adult oral health in the state.
- [Ohio H 203 \(2020\)](#): Specifies requirements for the operation of mobile dental facilities, allows for services to be provided to minors with the permission of a parent or guardian. These can be used to provide on-site school-based dental services
- [Oregon H 2969 \(2021\)](#): Provides that as an integral part of the health education curriculum for students in the public schools of this state, each school district must provide age-appropriate instruction in oral health



Reach Out Anytime!

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TENNESSEE SCHOOL-BASED ORAL HEALTH PROGRAM

- Kindergarten thru 8th grade
- Oral health screening
 - Topical Fluoride Application
 - Referrals
- **Dental sealants** for cavity prevention
- **Silver Diamine Fluoride** to arrest caries

SEALANTS



Unprotected
No Sealant

Protected
After Sealant

SILVER DIAMINE FLUORIDE (SDF)



Active Decay

Non-Active Decay

Photo from State of Tennessee Oral Health Plan

TENNESSEE SCHOOL-BASED ORAL HEALTH PROGRAM

- Oral health education for all
- Healthy school nutrition promotion
- Oral healthcare collaboration & coordination and identification of a **dental home**
 - Dental Providers
 - Public Health Agencies
 - Community Organizations
- **Support Academic Success**
 - Fewer Absences
 - Oral Health Curriculum



TENNESSEE HEALTHY SMILE INITIATIVE

- A public-private partnership
 - Safety Net Clinics
 - Health Department
 - Dental Schools
- Diverse stakeholders
- Broaden access to high-quality, low-cost dental care to Tennesseans
- Increase the dental workforce
 - Dentists
 - Dental Hygienists
 - Dental Assistants
- Focus on rural and remote areas
- Offers high risk populations preventive services
- Improve access and availability of care

School Dental Programs

JAYANTH KUMAR

STATE DENTAL DIRECTOR

California Department of Public Health
Center for Healthy Communities
Office of Oral Health



Disclaimer

The views and opinions expressed in this presentation are that of the speaker and do not necessarily reflect the views or positions of the California Department of Public Health or the Health and Human Services Agency.

The author has no financial interest associated with the content of this presentation.

Population health management and public health strategies

School Dental Program

Fluoride Varnish in Primary Care Settings

CaAIM Caries Risk Assessment Bundle for 0-6 P4P for preventive Dental home

Oral health care during pregnancy

The 3 Buckets of Prevention



Community Water Fluoridation

Toothbrushing in Early Care & Education Programs

Rethink Your Drink Campaign

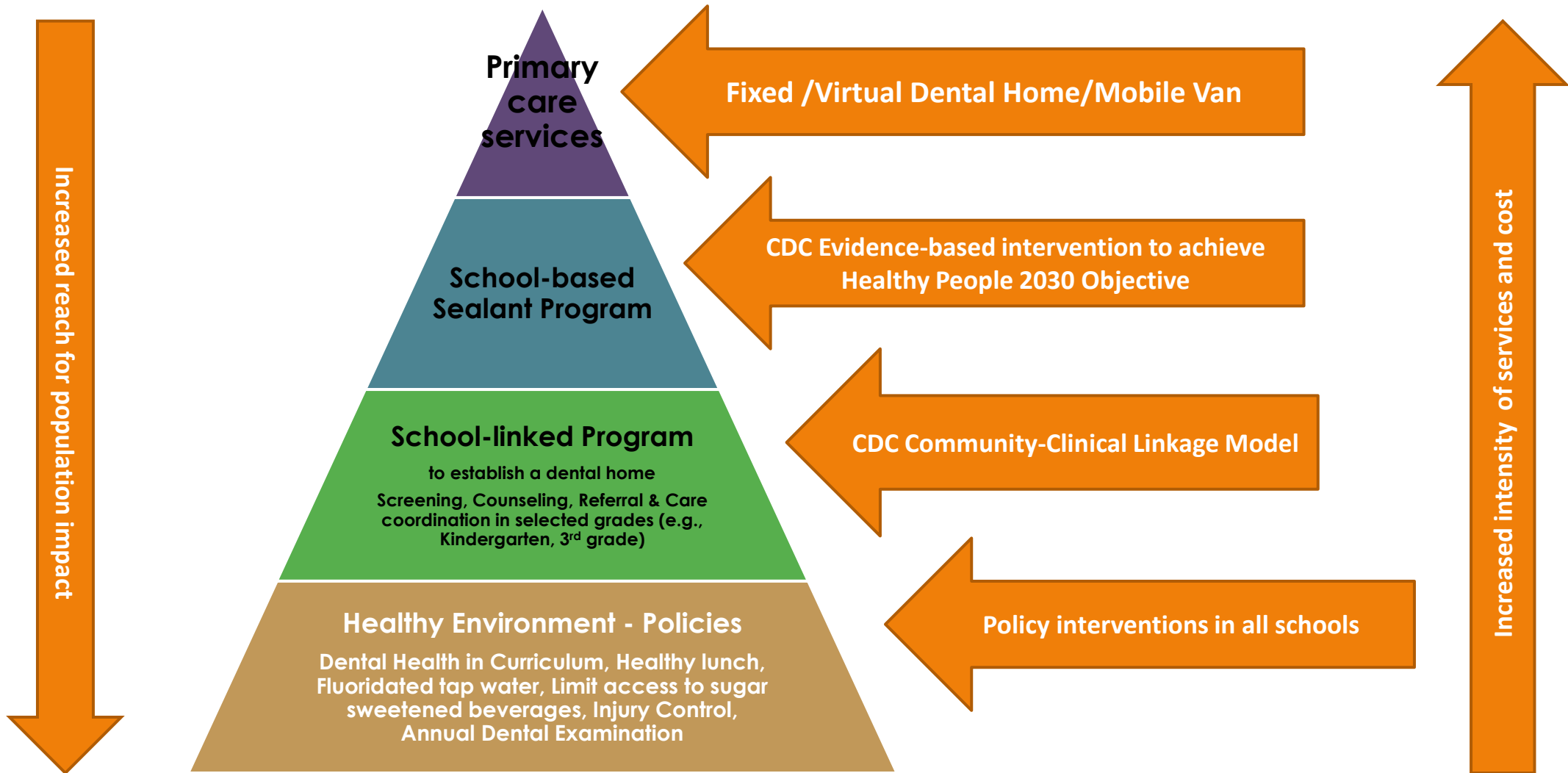
Oral Health Literacy

SOURCE: Auerbach J. The 3 Buckets of Prevention. J Public Health Management Practice 2011;http://journals.lww.com/jphmp/Citation/publishahead/The_3_Buckets_of_Prevention_

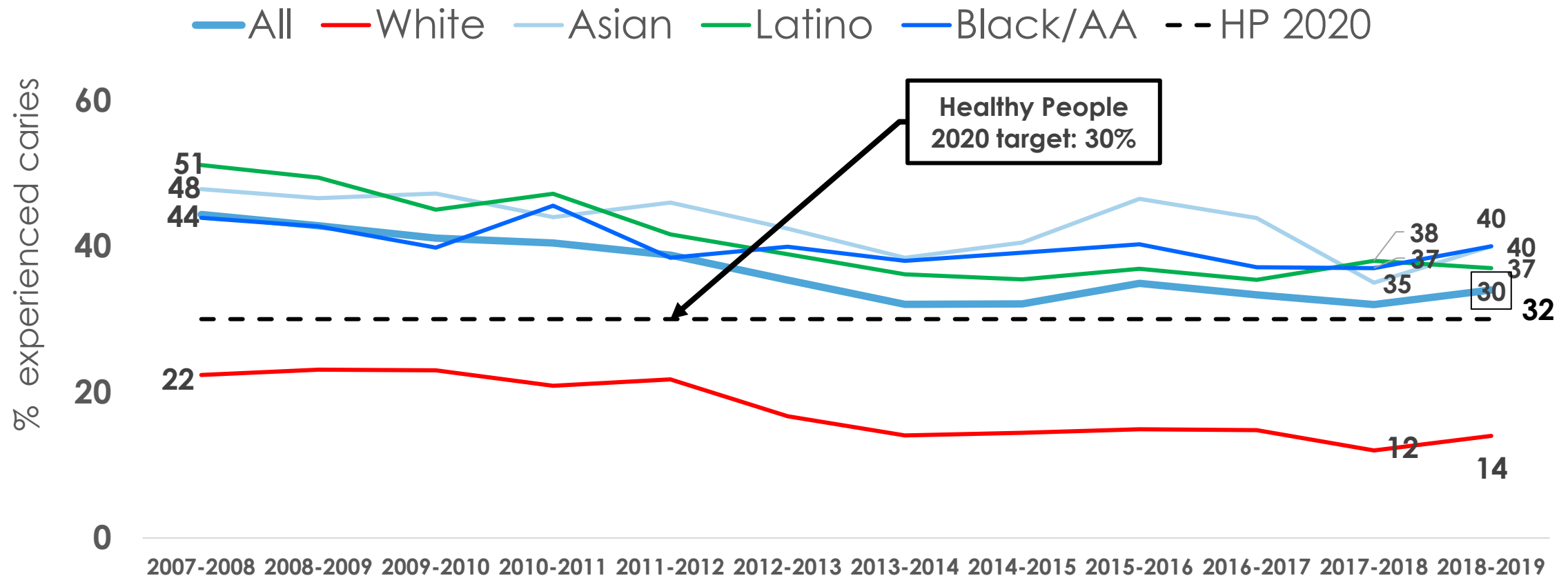
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Building interventions in schools: Intensity matched to need



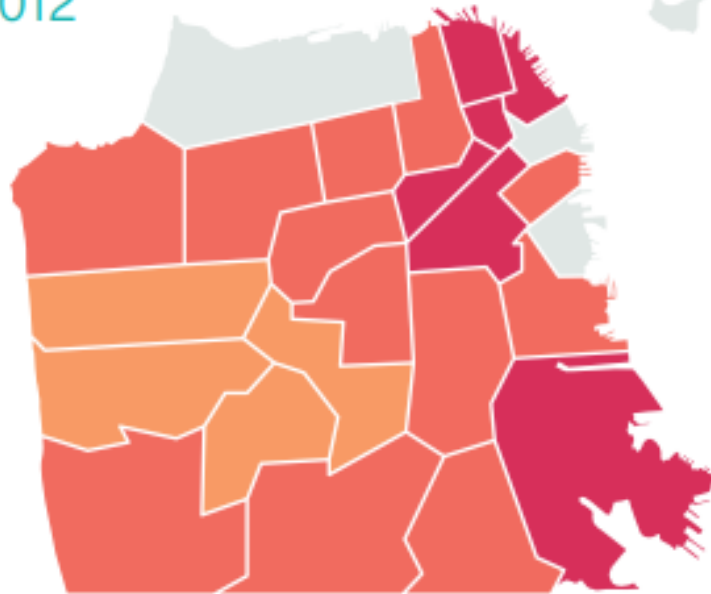
San Francisco Unified School District kindergarteners who have **experienced caries** in their primary teeth by race-ethnicity



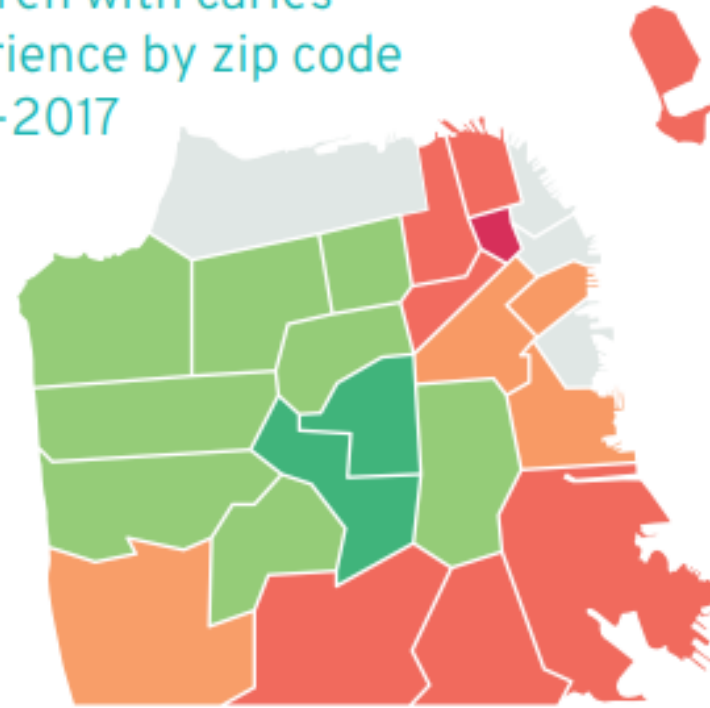
Changes in caries experience by zip code

Figure 6: Significant geographic disparities exist with regards to caries experience

Children with caries experience by zip code 2007-2012



Children with caries experience by zip code 2013-2017



0-10%

11-20%

21-30%

31-40%

41-50%

51-60%



California School-linked Dental Program

Paper  Electronic Referral Management

Oral Health Assessment Form

California law (*Education Code* Section 49452.8) states your child must have a dental check-up by May 31 of his/her first year in public school. A California licensed dental professional operating within his scope of practice must perform the check-up and fill out Section 2 of this form. If your child had a dental check-up in the 12 months before he/she started school, ask your dentist to fill out Section 2. If you are unable to get a dental check-up for your child, fill out Section 3.

Section 1: Child's Information (Filled out by parent or guardian)

Child's First Name:	Last Name:	Middle Initial:	Child's birth date:
Address:			Apt.:
City:			ZIP code:
School Name:	Teacher:	Grade:	Child's Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female
Parent/Guardian Name:	Child's race/ethnicity: <input type="checkbox"/> White <input type="checkbox"/> Black/African American <input type="checkbox"/> Hispanic/Latino <input type="checkbox"/> Asian <input type="checkbox"/> Native American <input type="checkbox"/> Multi-racial <input type="checkbox"/> Other _____ <input type="checkbox"/> Native Hawaiian/Pacific Islander <input type="checkbox"/> Unknown		

Section 2: Oral Health Data Collection (Filled out by a California licensed dental professional)

IMPORTANT NOTE: Consider each box separately. Mark each box.

Assessment Date:	Caries Experience (Visible decay and/or fillings present) <input type="checkbox"/> Yes <input type="checkbox"/> No	Visible Decay Present: <input type="checkbox"/> Yes <input type="checkbox"/> No	Treatment Urgency: <input type="checkbox"/> No obvious problem found <input type="checkbox"/> Early dental care recommended (caries without pain or infection; or child would benefit from sealants or further evaluation) <input type="checkbox"/> Urgent care needed (pain, infection, swelling or soft tissue lesions)
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Licensed Dental Professional Signature

CA License Number

Date



Program Components

1. Policy support
2. Innovation
3. Technical package
4. Partnership
5. Communication
6. Accountability

Program

Screening

Referral

Care coordination

Data

PM & QI

Challenges

- ▶ Infrastructure and capacity
- ▶ Financing
- ▶ Participation
- ▶ Reach

Thank you



- [Maternal and Child Health Database, NCSL](#)
- [Workforce Strategies to Improve Access to Oral Health Care, NCSL](#)

