

### SF HIP ~ San Francisco Children's Oral Health





## Tooth decay affects overall health and development

Speech and communication • Eating and dietary nutrition



Sleeping • Learning • Playing
Overall quality of life





Most Common Chronic Childhood Disease is ~ PREVENTABLE



### Poor oral health has high costs

- Emergency Department (ED) visits
  - \$5,000 per child with hospitalization in CA<sup>1</sup>



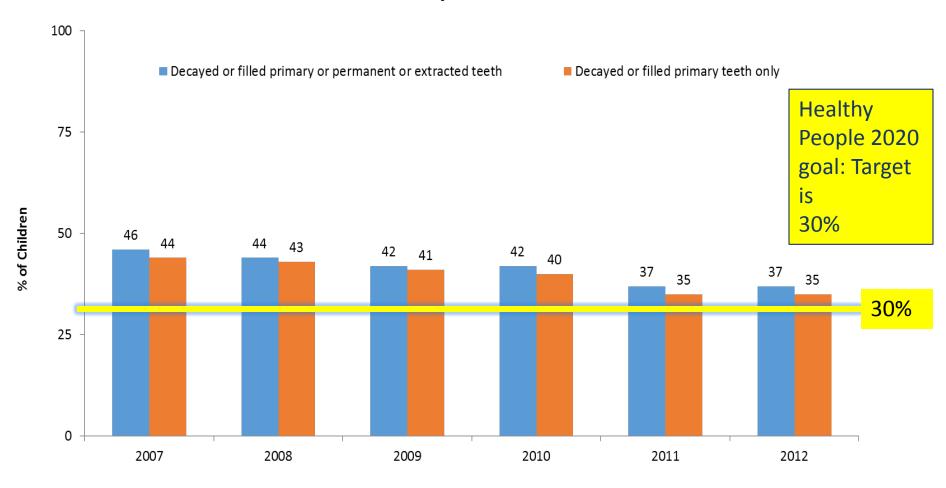
# Students' absences due to dental problems cost CA school districts approximately \$29.7 million annually<sup>2</sup>

- Students with toothache in last 6 months were 4x more likely to have low grade point average<sup>3</sup>
- More than 5 million American school-age children missed ≥ 1 day of school due to a dental problem<sup>3</sup>



### **Caries Experience**

### % of Children in SFUSD Kindergarten who have Experienced Caries in their Primary or Permanent Teeth



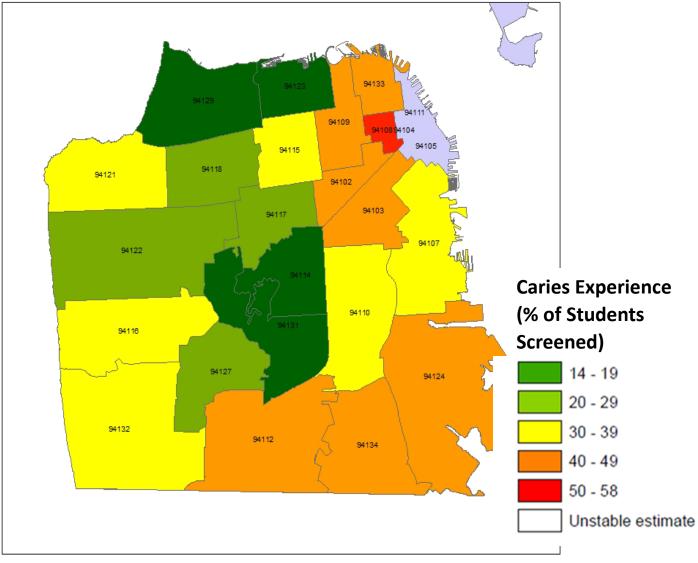
Data source: San Francisco Unified School District Oral Health Screening Program.



# Children in some SF neighborhoods have experienced 2-3x more caries

Chinatown North Beach Nob Hill/Russian Hill/Polk Tenderloin South of Market Bayview/Hunter's Point **Visitation Valley Excelsior** Portola

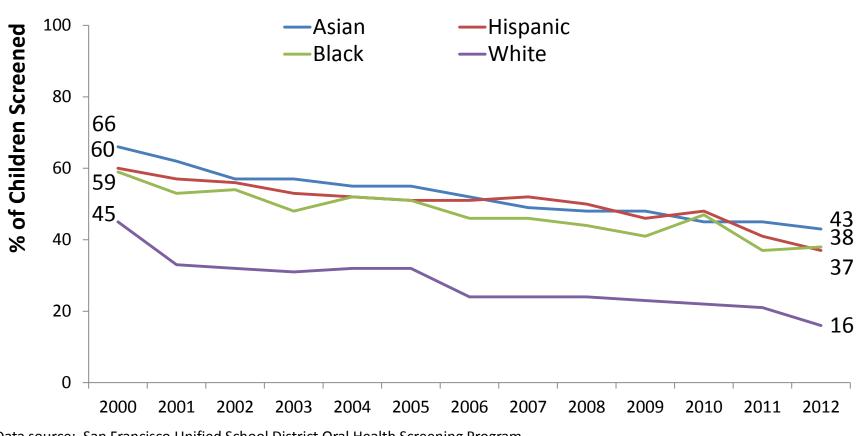
#### Caries experience in San Francisco Kindergarteners



Source: San Francisco Unified School District, Kindergarten Oral Health Screening, 2012-2013.



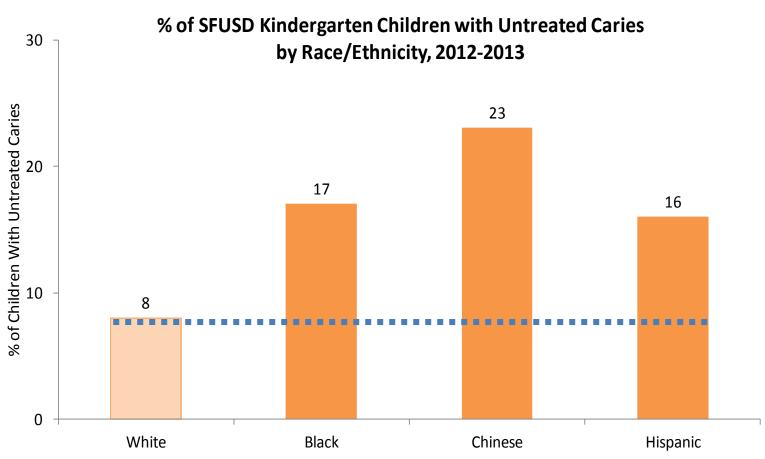
# % of Children in SFUSD Kindergarten with Caries Experience in San Francisco by Race/ethnicity



Data source: San Francisco Unified School District Oral Health Screening Program.



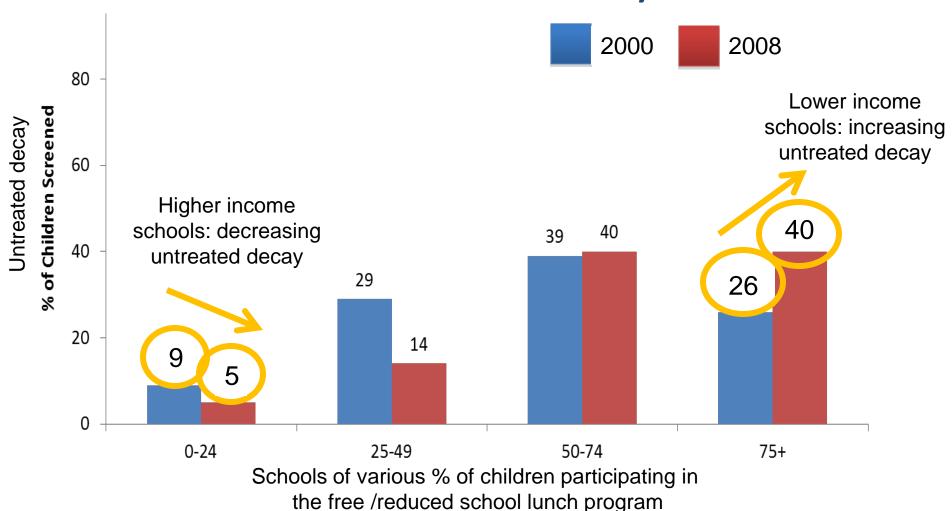
### Children of color are 2-3 x as likely to have untreated decay as white children



SFUSD: San Francisco Unified School District; Untreated caries: A loss of at least 1/2mm of tooth structure at the enamel surface, with brown coloration of the walls of the cavity. Data represent the proportion of children needing any dental care beyond routine checkups, dental care within the next few weeks for caries without symptoms, or urgent dental care for large carious lesions with pain infection or swelling.

Data source: San Francisco Kindergarten Dental Screening Project data collected by the SFDPH, SF Dental Society, National Dental Association & SFUSD

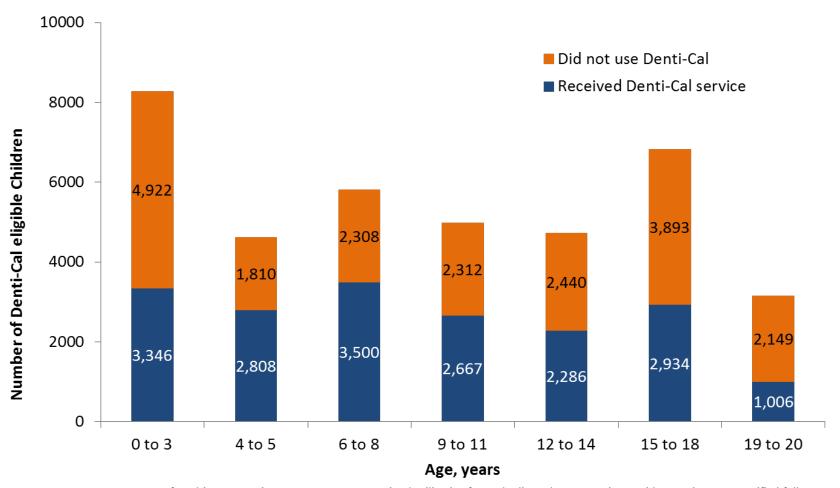
### Low income children in SF are 8x more likely to have untreated tooth decay





### Half (52%) of Denti-Cal enrolled children in SF did not see a dentist in the past year

Denti-Cal Utilization by Age in San Francisco, 2011-2012



Data source: CA Department of Health Care Services, Run 02-07-13. Denti-Cal utilization for unduplicated, San Francisco residents, who were certified full scope beneficiaries enrolled for at least 11 months during the year. Services could have been received anywhere. Totals represent undercounts because of delay in getting data from plans.



# CDC promotes sealants and fluoride as proven strategies to prevent oral disease<sup>1</sup>

Sealants: Prevents 88% of decay in permanent molars<sup>2</sup>

Plastic resin protects grooves on molars. CDC recommends school-based application, which requires RDH/DDS/RDA with special equipment, and about 30 minutes.







Fluoride Varnish: Prevents 37% of decay in high risk 0-5 y.o.<sup>3</sup>

Rx strength fluoride is brushed on by any trained care provider. It is low cost, low tech, and can be applied in 5 minutes in almost any setting.

- 1. <a href="http://www.cdc.gov/oralhealth/">http://www.cdc.gov/oralhealth/</a>
- 2. Ahovuo-Saloranta et al. Sealants for preventing dental decay in the permanent teeth. Cochrane Database Syst Rev 2013
- 3. Marinho et al. Fluoride varnishes for preventing dental caries in children and adolescents. Cochrane Database Syst Rev 2013



### **COH Strategic Plan Guiding Principles**

#### Focus on:

- Prevention not to the exclusion of treatment
- Ages 0-10 and pregnant women
- Populations who are most at-risk, including low-income, communities of color and recent immigrants
- Sustainable efforts— i.e. utilize all available funding streams
- Policy and systems levels change
- Coordinate city-wide efforts
- Include community perspective



### Three-Year Indicators



### **Caries Experience**

•Reduce the percentage of kindergartners with dental caries experience from 37% in 2012 to 27% in 2017

### **Untreated Decay**

•Reduce the percentage of kindergartners with untreated dental decay from 16% in 2012 to 8% in 2017

### **Caries Disparities**

•Reduce the gap between Chinese, Black and Hispanic/Latino kindergartners and White kindergarteners with respect to risk of caries experience from a 20 percentage point difference in 2012 to a 15 percentage point difference in 2017.



### Three-Year Indicators cont. Access



### Increase the percentage of:

- children on Medi-Cal under 10 y.o. who received any dental service billed to Denti-Cal during the past year by absolute increase of 10%\*
- children on Medi-Cal who have seen a dental provider by age 1, by an absolute increase of 10%
- women on Medi-Cal that had a dental visit during pregnancy by an absolute increase of 20%

#### **Dental Sealants**

• Increase the percentage of low-income children in SFUSD aged 7-8 years old who have received dental sealants on their permanent molar teeth by an absolute increase of 10%. (FY 12/13 sealants applied on 248 second graders.)



### **Overarching Strategies**

- ACCESS: Increase access to oral health prevention and treatment for San Francisco children and pregnant women
- INTEGRATION: Integrate oral health with overall health
- PROMOTION: Promote good oral health practices and services to parents/caregivers, people who work with children and families, and the general public
- EVALUATION: Develop and establish an ongoing oral health population based surveillance system to address the oral health of San Francisco children.
- COORDINATION: Provide coordination and oversight for the implementation of the Strategic Plan.



### Recommendations for DPH Next Steps

- Institute FV application protocols in all DPH primary care settings
- Integrate oral health messaging into existing health promotion efforts
- Explore cost/benefit of expanding billable dental services
- Explore cost/benefit of sustainable funding "billing outside the 4 walls"

