



Caries Risk Assessment

Dental Transformation Initiative (DTI)

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Why Primary Care Clinicians?

Primary care clinicians are well positioned to promote oral health:

- ▶ 96% of children have access to primary medical care.
- ▶ Primary care clinicians have regular, consistent contact through well-child visits.
- ▶ Clinicians see children for well and acute care at least 8 times by age 2, and frequently thereafter.
- ▶ Few preschool children from low-income families receive regular dental care.

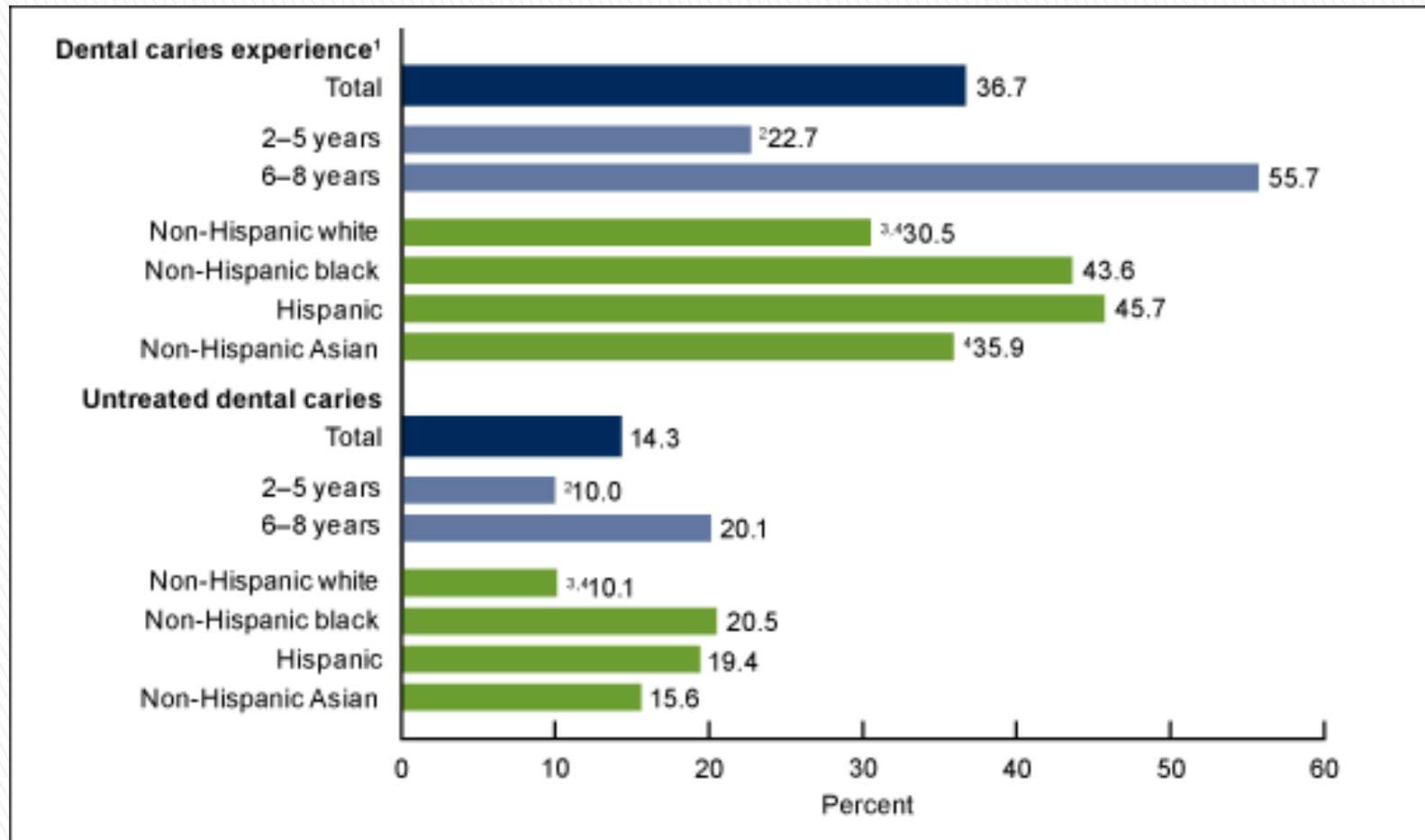
Prevalence of Tooth Decay— Primary Teeth

- ▶ ~37% of children aged 2–8
 - ~14% untreated
- ▶ ~23% of children aged 2–5
 - ~10% untreated
- ▶ ~56% of children aged 6–8
 - ~20% untreated



Data from the National Health and Nutrition Examination Survey, 2011–2012.

Prevalence of Tooth Decay— Primary Teeth



Data from the National Health and Nutrition Examination Survey, 2011–2012.

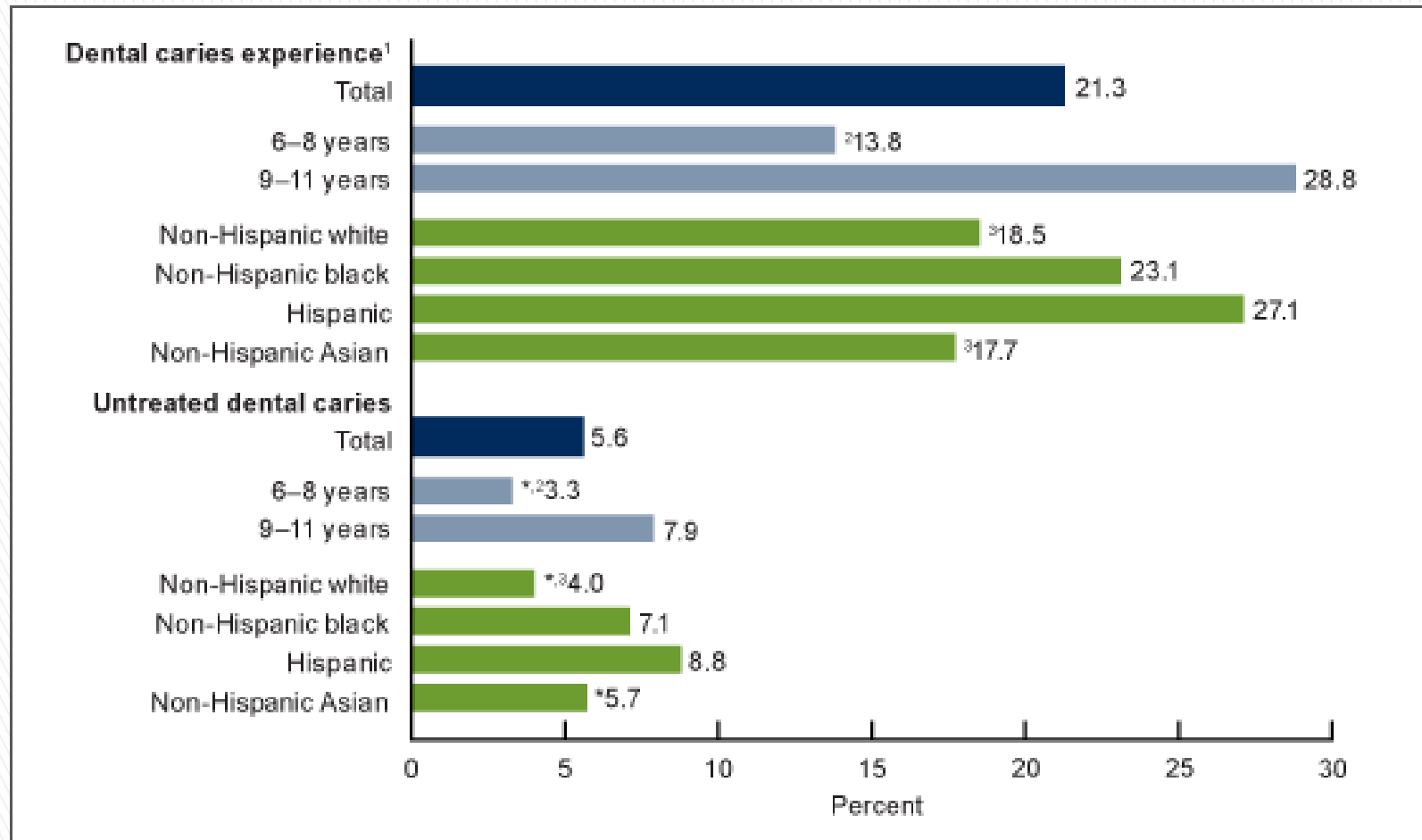
Prevalence of Tooth Decay— Permanent Teeth

- ▶ ~21% of children aged 6–11
 - ~14% age 6–8
 - ~29% age 9–11
- ▶ ~6% of children aged 6–11 with untreated caries
 - ~3% age 6–8
 - ~8% age 9–11



Data from the National Health and Nutrition Examination Survey, 2011–2012.

Prevalence of Tooth Decay— Permanent Teeth



Data from the National Health and Nutrition Examination Survey, 2011–2012.



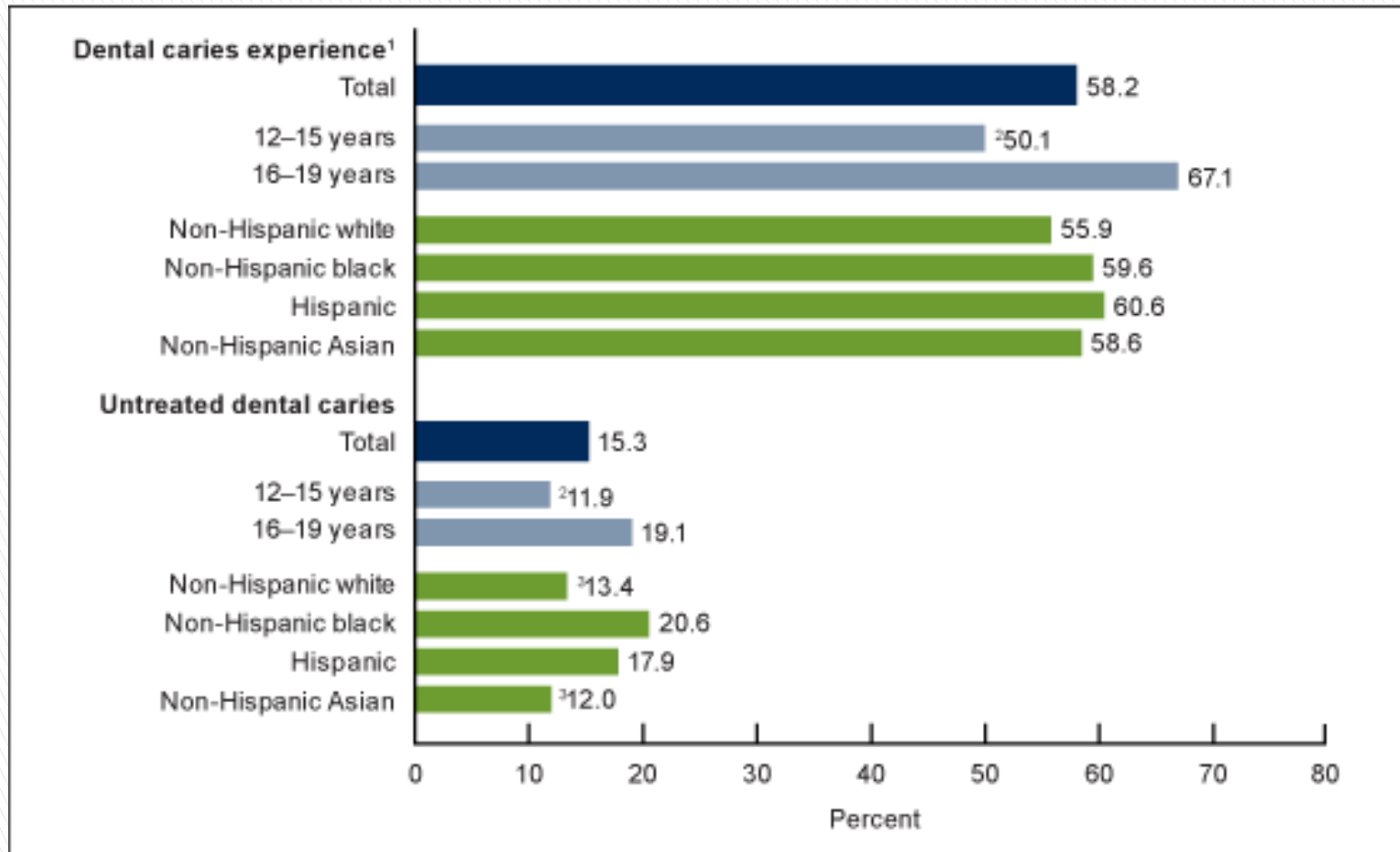
Prevalence of Tooth Decay— Adolescents

- ▶ ~58% of children aged 12–19
 - ~67% age 16–19
 - ~50% age 12–15
- ▶ ~15% of children aged 12–19 with untreated caries
 - ~19% age 16–19
 - ~12% age 12–15



Data from the National Health and Nutrition Examination Survey, 2011–2012.

Prevalence of Tooth Decay—Adolescents



Data from the National Health and Nutrition Examination Survey, 2011–2012.

Reducing Tooth Decay: Strategies in DTI Domain 4 Pilot Program

- ▶ Ensure caries risk assessment (CRA) for children 0–20.
- ▶ Ensure fluoride varnish application for children 0–20.
- ▶ Ensure individualized care plans for high–risk children.
- ▶ Educate and engage families in caries risk management.

Individual Caries Risk Assessment

- ▶ Fosters the treatment of the disease process instead of treatment of the disease outcome (caries).
- ▶ Gives an understanding of the disease factors for each specific child and aids in individualizing preventive discussions (motivational interviewing).
- ▶ Individualizes, selects, and determines frequency of preventive treatment for a patient.
 - Fluoride varnish frequency.
- ▶ Anticipates caries progression or stabilization.

Source: American Academy of Pediatric Dentistry.
Guideline on Caries-risk Assessment and
Management for Infants, Children, and
Adolescents. Clinical Practice Guidelines.



Individual Care Plans

- ▶ Provide dietary counseling.
- ▶ Guide and support parents and patients in self-management goals.
- ▶ Deliver preventive interventions.
 - Dental referrals
 - Fluoride varnish application
 - Recare based on caries risk

Caries Risk Assessment Tool

- ▶ Developed by the Department of Health Care Services CRA Workgroup for DTI.
- ▶ An adaptation of a nationally recognized caries risk assessment tool.
- ▶ Provides Oral Health Care Coordinators with a form to gather information for classifying children into high, moderate, or low caries risk categories.
- ▶ Identifies key clinical, risk, and protective factors for management of caries.
- ▶ Helps to set self-management goals and motivate patients.

California Department of Health Care Services
Domain #2 Caries Risk Assessment Form for Children <6 Years of Age

Patient Name: _____
ID# _____ Age: _____ Date of Birth: _____
Assessment Date: _____

Please indicate whether this is a BASELINE assessment or a FOLLOW-UP VISIT _____
Provide follow-up visit #) _____

RISK ASSESSMENT				
Assessment through interview and clinical examination	High Risk	Moderate Risk	Low risk	Priority for Self-management goal
Check All That Apply				
1. Risk factors (Biological and Behavioral Predisposing factors)				
(a) Child sleeps with a bottle containing a liquid other than water, or nurses on demand		Yes <input type="checkbox"/>	No risk factors	
(b) Frequent use beverages other than water including sugary beverages, soda or juice		Yes <input type="checkbox"/>		
(c) Frequent (>3 times/day) between-meal snacks of packaged or processed sugary foods including dried fruit		Yes <input type="checkbox"/>		
(d) Frequent or regular use of asthma inhalers or other medications which reduce salivary flow		Yes <input type="checkbox"/>		
(e) Child has developmental disability/CSHCN (child with special health care needs)		Yes <input type="checkbox"/>		
(f) Child's teeth not brushed with fluoride toothpaste by an adult twice per day		Yes <input type="checkbox"/>		
(g) Child's exposure to other sources of fluoride (fluoridation or fluoride tablets) is inadequate		Yes <input type="checkbox"/>		
2. Disease indicators/risk factors—clinical examination of child				
(a) Obvious white spots, decalcifications, enamel defects or obvious decay present on the child's teeth	Yes <input type="checkbox"/>	No disease indicators	No disease indicators	
(b) Restorations in the past 12 months (past caries experience for the child)	Yes <input type="checkbox"/>			
(c) Plaque is obvious on the teeth and/or gums bleed easily		Yes <input type="checkbox"/>		
OVERALL ASSESSMENT OF RISK* (Check)	HIGH <input type="checkbox"/> Code 0603	MODERATE <input type="checkbox"/> Code 0602	LOW <input type="checkbox"/> Code 0601	



Caries Risk Assessment Tool

Patient Name: _____

ID# _____ Age: _____ Date of Birth: _____

Assessment Date: _____

Please indicate whether this is a BASELINE assessment or a FOLLOW-UP VISIT _____

Provide follow-up visit #) _____

- ▶ Ensure that the top portion is completed with all the information.

Biological & Behavioral Risk Factors

RISK ASSESSMENT				
Assessment through interview and clinical examination	CIRCLE High Risk if any "Yeses" are present	CIRCLE Moderate Risk if any "Yeses" are present and there are no high risk factors	No Risk Factors CIRCLE Low risk	Priority for Self- management goal
1. Risk factors (Biological and Behavioral Predisposing factors)				
(a) Child sleeps with a bottle containing a liquid other than water, or nurses on demand		Yes	No risk factors	
(b) Frequent use beverages other than water including sugary beverages, soda or WIC juice		Yes		
(c) Frequent (>3 times/day) between-meal snacks of packaged or processed foods including dried fruit		Yes		
(d) Frequent or regular use of asthma inhalers or other medications which reduce salivary flow		Yes		
(e) Child has developmental disability /CSHCN (child with special health care needs)		Yes		
f) Child not brushed teeth by adult for 2 x day		Yes		
g) Child's exposure to other sources of fluoride (fluoridation or fluoride tablets) is inadequate		Yes		

- ▶ Section 1 items (a)–(g) are completed via interview with caregiver.
- ▶ Factors that predispose a child to dental caries.
- ▶ Indicators for **moderate risk**.

Fluoride Exposure—Is Your Water Fluoridated?

- ▶ To determine if a water system is fluoridated, visit the California State Water Resources Control Board at

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml.



Clinical Indicators of Disease

2. Disease indicators/risk factors – clinical examination of child

(a) Obvious white spots, decalcifications, enamel defects or obvious decay present on the child's teeth	Yes		No disease indicators	
(b) Restorations in the past 12 months (past caries experience for the child)	Yes			
(c) Plaque is obvious on the teeth and/or gums bleed easily		Yes		
OVERALL ASSESSMENT OF RISK (Circle)	HIGH Code 0603	MODERATE Code 0602	LOW Code 0601	

- ▶ Section 2 items (a)–(c) are completed by visually inspecting the child's mouth for signs of disease.
- ▶ Signs that the disease process has affected tooth structure automatically place a child into a **high risk** category.

How to Spot Dental Disease



- ▶ Look for obvious white spots, decalcifications, enamel defects, or obvious decay.

How to Spot Dental Disease



- ▶ White spot lesions and decalcifications occur in areas where plaque builds up.

Dental Plaque and Inflamed Gums



CRA Results

- ▶ YES to any one indicator in the HIGH RISK COLUMN = **HIGH RISK** [Presence of disease or recent disease experience].
- ▶ YES to one or more factors/indicators in the MODERATE RISK COLUMN in the absence of any HIGH RISK indicators = **MODERATE RISK** [Presence of a risk indicator; no disease].
- ▶ Absence of factors in either high or moderate risk categories = **LOW RISK.**

CRA Summary

Moderate Risk	High Risk
Frequent carbohydrates	White spot lesions
Visible plaque	Active caries
Low fluoride exposure	Restorations previous 12 months
Low saliva flow	
Low risk indicated by absence of factors in either category	

Self-Management Goals for Parent/Caregiver

Patient Name _____

DOB _____



Regular dental visits
for child



Family receives
dental treatment



Healthy snacks



Brush with fluoride
toothpaste at least 2
times daily



No soda



Less or no juice



Wean off bottle
(no bottles for sleeping)



Only water or milk in
sippy cups



Drink tap water



Less or no junk food
and candy



Use xylitol spray, gel
or dissolving tablets

IMPORTANT: The last
thing that touches
your child's teeth
before bedtime is
the toothbrush with
fluoride toothpaste.

Self-management goals 1) _____

2) _____

On a scale of 1–10, how confident are you that you can accomplish the goals? 1 2 3 4 5 6 7 8 9 10

Signature _____ Date _____

Practitioner signature _____ Date _____

Last Step—Self Management Goals & Plans

- ▶ We'll talk about this more next month.
- ▶ https://www.cda.org/Portals/0/pdfs/tyke_self_management_goals_for_parent.pdf.

Questions?