
Wisconsin Health Literacy

Summit

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A Multidisciplinary Approach to Improving the
Oral Health Status of Wisconsin Children

Lisa Bell RDH, MPH
State Public Health Dental Hygienist
Wisconsin Division of Public Health

Steve Stoll, DDS
Private Dentist
Wisconsin Dental Association

Connie Welch
WIC Nutrition Coordinator
Wisconsin Division of Public Health

Mara Brooks
Director of Government Services
Wisconsin Dental Association

Objectives...

- Increase knowledge of the oral disease burden in Wisconsin
- Understand the oral disease process and its relationship to overall health
- Demonstrate effective collaborative strategies to resolve health issues
- Utilize oral health literacy tools with patients, providers, and caregivers



Understanding the Message...

- Health literacy - the ability to read, understand and act on health information - is one of the least recognized yet most widespread challenges to achieving better health outcomes and lowering health care costs in the United States
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Statistics That Drive the Cause...

- Nearly half of the U.S. adult population (90 million people) have low functional health literacy (*National Adult Literacy Survey (NALS) data*)
 - 11 million adults are non-literate in English (*2003 National Assessment of Adult Literacy (NAAL) data*)
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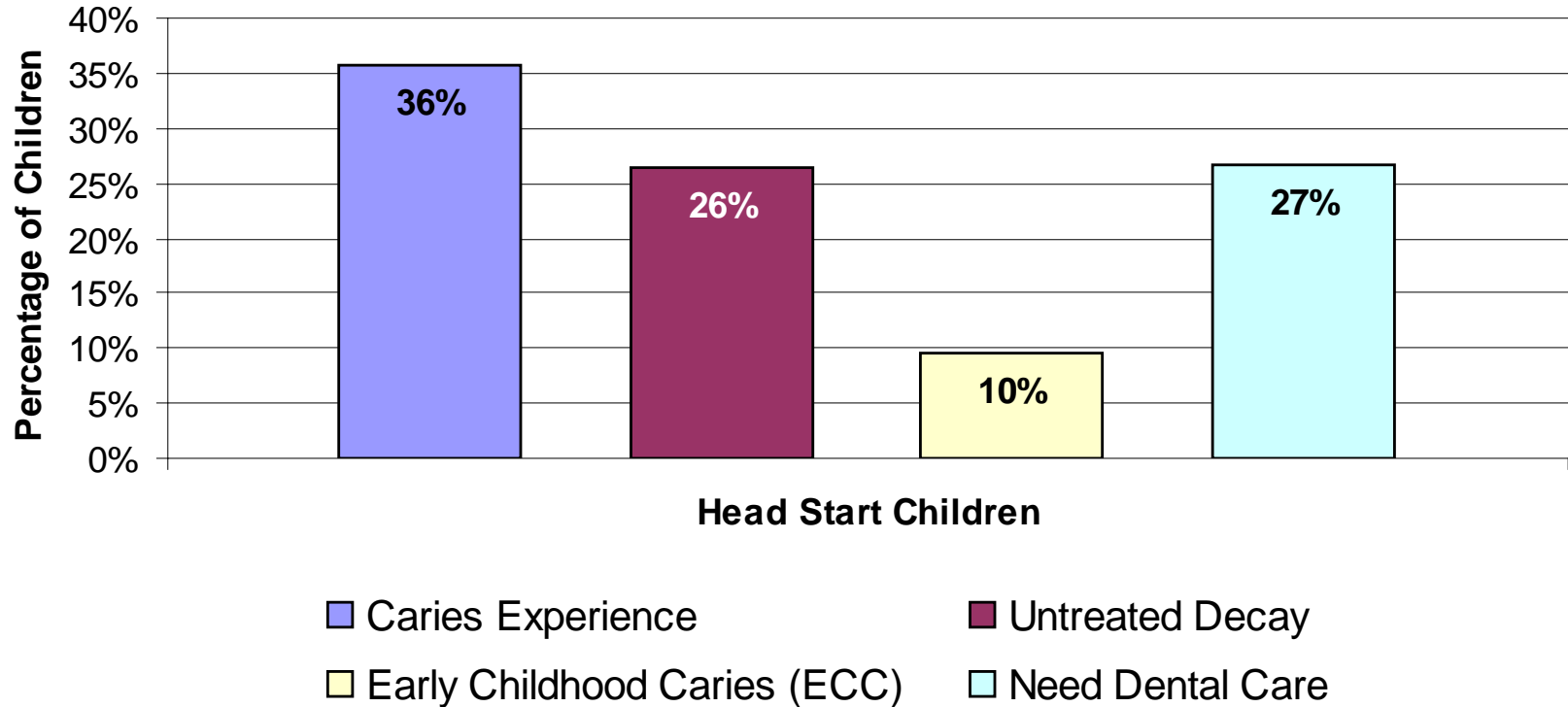
More Statistics...

- Literacy skills are a stronger predictor of health status than age, income, employment status, education level or racial/ethnic group (*Partnership for Clear Health Communication*)
- Lower caregiver literacy has been associated with poorer oral health status of children
- Caregiver oral health literacy has a multidimensional impact on oral health outcomes of infants and young children

Van,WF, Lee,JY & Baker, D., 2010, Journal of Dental Research, 89 (12), 1395-400

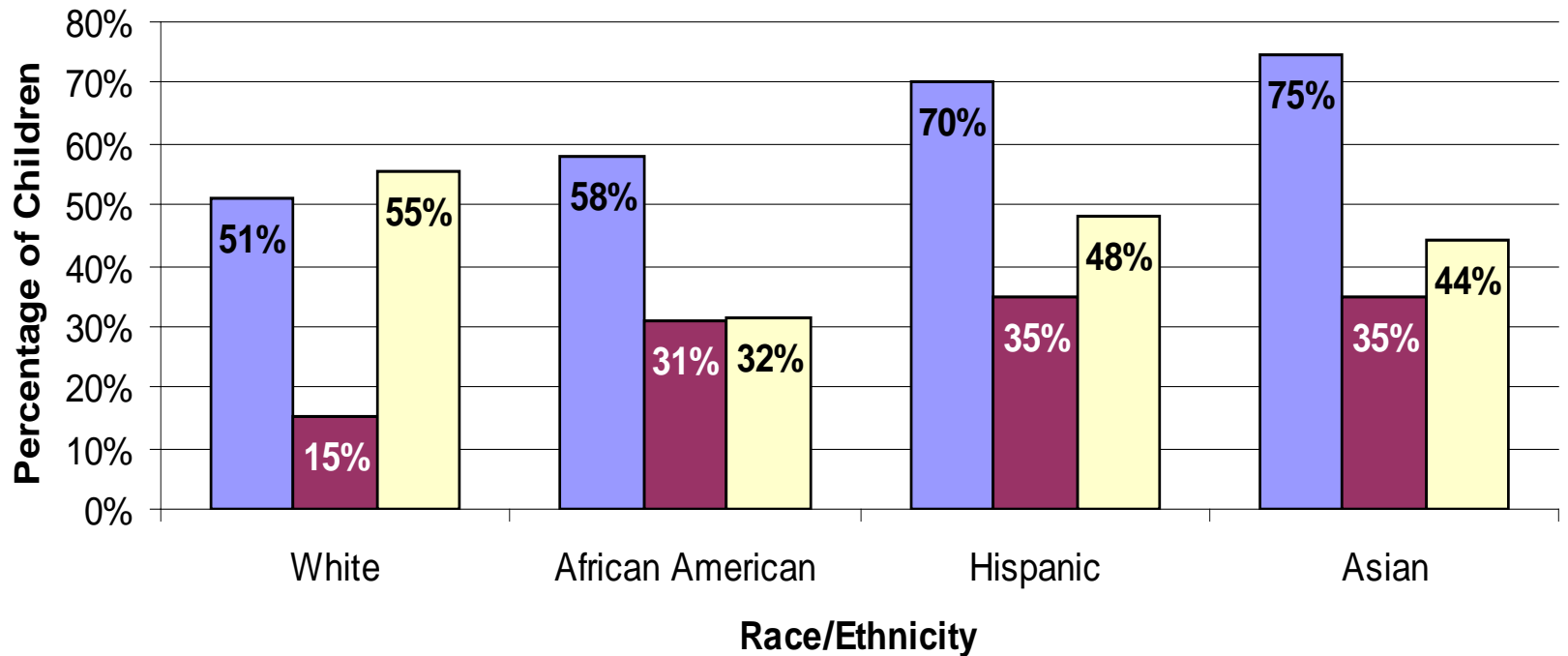
In Wisconsin...

Percentage of Wisconsin's Head Start Children with Caries Experience, Untreated Decay, Early Childhood Caries, and Need for Dental Care, 2008-09



In Wisconsin...

Percentage of Wisconsin's Third Grade Children with Caries Experience, Untreated Decay, and Dental Sealants, by Race/Ethnicity, 2007-08



■ Caries Experience ■ Untreated Decay ■ Dental Sealants

Just the Facts...



- **Tooth decay remains a substantial problem in young children and is made worse by existing barriers that prevent them from obtaining dental care**

Why the Message is So Critical...

- In Wisconsin less than 38% of all Medicaid eligible enrollees received any dental services
 - Statewide financial constraints will potentially impact service provision
 - The need for restorative dental care can be prevented with increased knowledge
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Baby Teeth Do Matter!

- A common myth is that baby teeth don't matter...they fall out anyway right?
- Well...really wrong!



Early Childhood Caries...



What is Dental Caries?



- Dental caries is an infectious disease known to most of us as decay
- Bacteria organize into a biofilm and feed on the sugars and starches in our diets and produces an acid that is the catalyst to dental decay

What is Early Childhood Caries...

- An infectious transmissible disease - bacteria passed from parent/caregiver to child very early on
 - Completely preventable
 - Progresses rapidly
-

Early Childhood Caries

- Early Childhood Caries
 - The presence of 1 or more decayed, missing (due to caries) or filled tooth surfaces in any primary tooth in a child 71 months of age or younger.



Early Childhood Caries...

- Increased in children 2-5 years-old
 - Associated with:
 - Facial and oral infections
 - Hospitalization and emergency department visits
 - Failure to thrive (insufficient development in height & weight)
 - Loss of school days
 - Decreased ability to learn
 - Increased treatment costs
-

- Dental caries is the most common infection of children in the USA
- The prevalence of caries is decreasing in every segment of the population except children under 5
- 28% of children will experience a cavity by the time they enter kindergarten



Early Childhood Caries

- ECC is a particularly virulent form of dental caries
- Develops rapidly (occurs in six months or less)
- Affects the upper front teeth first (these teeth erupt at about 8 months of age)
- Primary molars, which erupt at about 12 months of age are next to be affected
- Lower front teeth are affected when the disease is severe



Early Childhood Caries...

- 28% of children will develop caries/ECC by age 5.
- Early childhood caries progresses through stages:
 - White line lesions
 - Cavitated lesions
 - Rampant decay
 - Pulpal infection
 - Oral infection
 - Facial infection



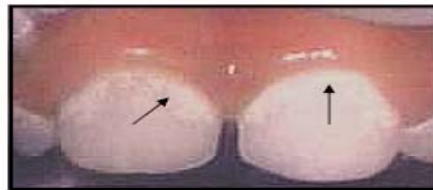
Disease Progression

Oral Health Screening Guide

White spot lesions lead to progressive decay



Normal primary teeth



White spot lesion



White spot lesion



White spot lesion



Early cavitated lesion



Early childhood caries



Moderate decay



Severe decay



Abscess

High-Risk Groups for Caries

- CYSHCN
 - Children from low socioeconomic and ethno cultural groups
 - Children whose caregivers or siblings have caries
 - Children with poor diets
 - Children who don't have optimal exposure to fluoridated community water
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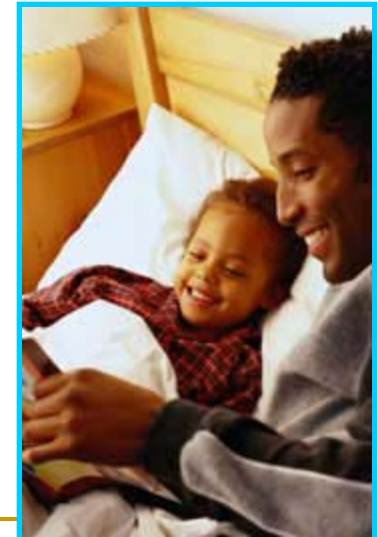
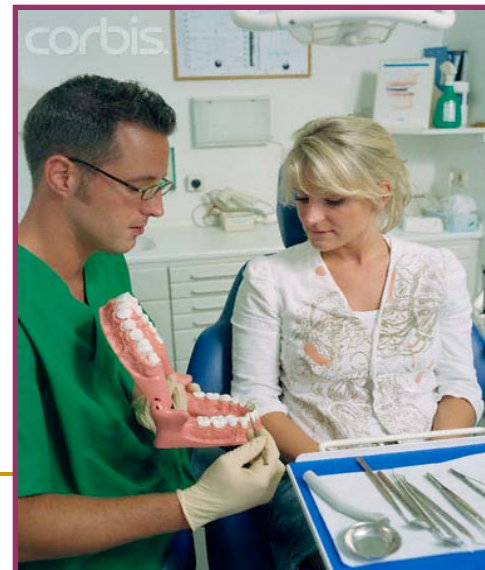
Early Childhood Caries Risk Factors

**We know how to prevent or control dental caries
with the appropriate use of fluorides and dental sealants**

- Diet high in fermentable carbohydrates and sugars
 - Bottle feeding
 - Sweetened pacifiers, sippy cups
 - Sweetened/non-sweetened medication
 - Parent/caregiver issues
 - Lack of appropriate fluorides
-

How Do We Prevent Early Childhood Caries?

- Identify and control individual risk factors
- Address cultural or health literacy concerns so the message can be broadly understood
- Get parent/caregiver and siblings healthy



Nutritional Habits—

Frequency is the Culprit



**20 Minutes of
destruction for each
sip and bite**



**Reinforce need for making
healthy food choices, especially
low sugar choices.**



The WIC Program

- Supplemental Nutrition Program for Women, Infants and Children (WIC)
 - Funded by USDA, administered primarily by State Health Departments
 - The DHS in WI contracts with 70 agencies (local health departments, tribes, private non-profit health agencies, CAPs)
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Key Nutrition Goals

- Increase recommended prenatal weight gain: reduce low birth weight
 - Increase BF incidence, duration, and exclusivity
 - Increase normal weight gain/growth in infants and children: reduce overweight/obesity
 - Improve dietary intake
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WIC Eligibility

- Pregnant women, breastfeeding women (up to 12 months postpartum), nonbreastfeeding women (up to 6 months postpartum), infants, children through age 4 years
- Lower income: 185% FPL or higher if enrolled in BadgerCare/BC+ or FoodShare
- At nutritional risk

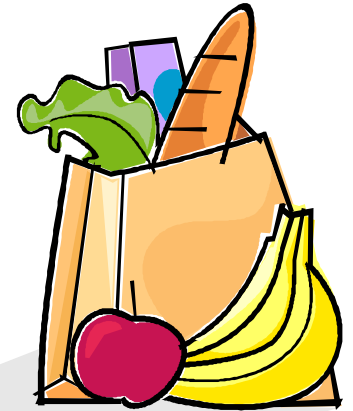


WIC Benefits

- Supplemental foods: specific nutritious foods based on age and nutritional need
 - Milk, high iron/low sugar cereals, eggs, 100% juice, peanut butter/legumes
 - 100% whole wheat bread/buns/rolls or brown rice or corn or whole wheat tortillas; cash value check for fruits and vegetables (\$6 or \$10) (in addition to WIC Farmers' Markets checks in summer)
 - Breastpumps (if not provided by BadgerCare)
 - Baby fruit, vegetables, cereals (meats for fully breastfed), some special formulas/medical foods and regular formula
 - Tuna or salmon (fully breastfeeding mothers)

- Breastfeeding promotion and support
- Nutrition education

- Referrals



Examples of Risks

- Anthropometric: underweight, overweight, low or high prenatal weight gain, low birth weight, prematurity
 - Biochemical: low hemoglobin, elevated blood lead
 - Clinical/Health/Medical: diabetes, young age, short interconceptional period, multifetal gestation, nutrition-related medical condition, smoking, dental problems
 - Dietary: failure to meet *Dietary Guidelines*, inappropriate nutrition practices
 - Other: special breastfeeding needs, homeless, victim of abuse
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Check Pick-up/Education



- Check pick-ups days:
 - Individual appointments with dietitian and/or breastfeeding counselor
 - Group, interactive displays, review of on-line nutrition education results, self-paced modules, ideal for this tool
- Breastfeeding support starting after delivery:
 - Breastfeeding Peer Counselors
 - Protect milk supply!

WIC Projects, Caseload

- 70 WIC Projects in WI
 - # WIC participants/project range: ~80/mo (Florence Co) to ~7,450 (Milwaukee City)
 - Current # served/month (2/11): 117,490
 - 26,254 W, 27,328 I, 63,908 C
 - Served in 2010 (1/11): 205,988
 - 32,841 W, 38,871 I, 108,872 C
 - 68% White, 19% Black, 3% American Indian, 4% Asian, 6% 2 or more races (23% Hispanic)
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Oral Health-Related WIC Risk Factors for Infants and Children

- Using bottle to feed fruit juice or giving more than 10-12 oz juice/day;
 - Feeding soda/soft drinks, sweetened tea;
 - Propping the bottle or allowing to fall asleep or be put to bed with bottle;
 - Allowing all day use of bottle or covered or training cup/bottle (note: frequent BF does NOT cause tooth decay).
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The Benefits of Collaboration...

- ~40% of children have one or more of these risk factors!
- Over 4% have severe dental problems (e.g., ECC)
- Thus, WIC has a need to provide education and increase health literacy related to good oral health practices!



The Wisconsin Dental Association

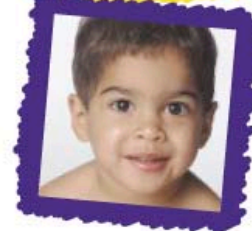
- 2900 member dentists , 85% of all actively practicing licensed dentists in Wisconsin
- WDA's Focus on Prevention through Education
- Current public education TV campaign "Why Baby Teeth Matter"
- Dental Home Initiative educational materials developed for general dentists

WDA Baby Teeth Matter
WISCONSIN DENTAL ASSOCIATION



The Tool...

Something to
smile about..



The Nutrition Program for Women, Infants, and Children

Wisconsin Department of Health Services

Designed To Be Interactive...



Start now
to give
your child
a healthy
smile.

Start now to give your child a healthy smile...

- Did you know that baby teeth are important for your child's healthy smile?
- Baby teeth help your child chew food, talk clearly, and they save space for the permanent teeth.
- A healthy smile will make your child look and feel great.
- Good overall health depends on good dental health.
- You can give your child a healthy smile... the time to start is now.

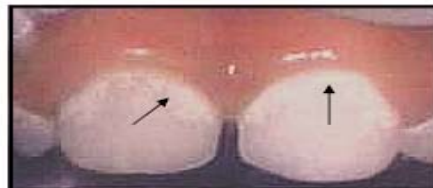
Companion Tool...

Oral Health Screening Guide

White spot lesions lead to progressive decay



Normal primary teeth



White spot lesion



White spot lesion



White spot lesion



Early cavitated lesion



Early childhood caries



Moderate decay



Severe decay



Abscess

Motivational Interviewing

ORAL HEALTH PARENT / CAREGIVER GOALS

Wean off bottle.

Brush with a smear of fluoride toothpaste 2 times per day.

Family receives dental treatment.

Regular dental visits for child.

Healthy snacks. (2-3 snacks or less per day).

Only water in sippy cup.

Drink water with fluoride.

Parents chew xylitol gum or mints.

No soda. Drink only water between meals.

Less or no candy and junk food.

Less or no juice. (4-6 oz. or less per day). Drink only water between meals.

Circle three goals you will focus on.

Children's Health Alliance of Wisconsin • www.chawisconsin.org

Supported in part by Grant No. H47MC00002 from the Maternal and Child Health Bureau, Health Services Administration, Department of Health and Human Services.

- **Circled goals**
- On a scale of 1 – 10 (1=least likely, 10=most likely) how confident was the caregiver/parent that goals could be accomplished? 1 2 3 4 5 6 7 8 9 10
- Parent/Caregiver name _____
- Date _____ Comments _____ -- Staff initials _____
- Date _____ Comments _____ -- Staff initials _____
- Date _____ Comments _____ -- Staff initials _____

Who Should Use This Tool.....Why?

- Primary care providers
 - Children are 3x more likely to see a medical provider than a dental provider
 - Home visitors
 - Family advocates
 - WIC staff
 - Public Health Nurses
 - Health and Nutrition Counselors
-

Why this Partnership Works...

- Three components essential for success
 - WIC – to convey the literacy level of their clientele and to help develop a piece that will be easy to use in WIC facilities
 - WDA – to convey the clinical aspects of ECC and potential steps for prevention
 - State Oral Health Program – to facilitate meetings and develop state-sanctioned educational materials based on input from both WIC educators & dental providers



Thank You....

Never doubt that a small group of thoughtful citizens can change the world.

Indeed it is the only thing that ever has.

Margaret Mead
