

Integrating *Bright Futures* into Public Health at the State and Local Levels

Oral Health Theme

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Objectives of this Bright Futures Series

- Explain the structure of the BF guidelines, 3rd ed., as they relate to the community and public health systems.
- Describe the role of state and local public health in promoting the 10 BF themes at the family, community, health systems, and policy levels.
- Discuss examples of successes and barriers to partnership formation between public health/MCH at the state and local level around the BF themes.

The 10 Bright Futures Health Promotion Themes

- Family support
- Child development
- Mental health
- Healthy weight
- Healthy nutrition
- Physical activity
- Oral Health
- Healthy sexual development and sexuality
- Safety and injury prevention
- Community relationships and resources

The 10 Bright Futures Health Promotion Themes

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From: BF 3rd, Ed., p591

Oral Health Risk Assessment at Bright Futures Visits

- **6 & 9 months:** assess fluoride; brush with soft toothbrush and water; discuss bottle propping and “grazing,” and other feeding practices; (discuss “knee to knee” and “lift the lip”)
- **12 -24 months:** dental home, if available; otherwise, risk assessment; assess fluoride supplement; brush teeth twice daily with water and soft toothbrush; only water in bottle; don't share cup
- **3 and 6 years:** dental home; assess need for fluoride

Bright Futures: Promoting Oral Health

Background

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Objectives

- To provide information and resources to support implementation of *Bright Futures* guidelines
- To provide oral health resources, information and opportunities within each of the public health core functions

Why Does Oral Health Matter?



Poor oral health can affect a child's...

- Nutrition
- Overall health
- Social adjustment
- Appearance
- School performance
- Ability to thrive

Core Functions

- Assessment
- Policy Development
- Assurance

Core Functions - Oral Health

Assessment

- Assess oral health status and needs so that problems can be identified and addressed.

Core Functions – Oral Health

Assessment

- Conduct statewide oral health surveys
 - Basic Screening Survey – 3rd grade children
 - Basic Screening Survey – Head Start children
 - Survey of the Health of WI (SHOW) – adults
 - Oral Health Survey of Hmong Population
- Conduct local oral health surveys
- Document percent of population visiting the dentist yearly (BRFSS)
- Collaborate with Delta Dental/WDA – Workforce Study
- Identify dental health professional shortage areas
- Assess fluoridation status of water systems
 - Water Fluoridation Reporting System (WFRS)

Core Functions – Oral Health

Policy Development

- Develop plans and policies through a collaborative process that support individual and community oral health efforts to address oral health needs.

Core Functions – Oral Health

Policy Development

- Wisconsin Oral Health Coalition
- Regional Coalitions
- MCH Block grant proposals
- Foreign trained dentist licensure (DEB)
- Oral health newsletter
- Head Start Forum
- Dental Education Feasibility Study
- Medicaid program changes

Policy Development

Medicaid coverage of topical application of fluoride for children

Effective for dates of service on and after February 26, 2004, Wisconsin Medicaid will reimburse nurses and dental hygienists employed at certified HealthCheck nursing agencies, physicians, physician assistants, and nurse practitioners for topical applications of fluoride provided to children.

Core Functions – Oral Health

Assurance

- The provision of services necessary to achieve mutually agreed-upon goals, either directly, by encouraging other entities to supply them, or by regulation

Assurance

Prevention Strategies: Dental Caries



Dental caries is the most common chronic childhood disease.

It occurs 5x more often than asthma.



Assurance

Prevention Strategies: Dental Caries

- Community Water Fluoridation
- Fluoride Supplements
- School Fluoride Mouthrinse Programs
- Topical Fluoride Applications (fluoride varnish)
- Dental Sealant Programs

Population Based Fluoride Programs

- Community Water Fluoridation
- School-based fluoride mouthrinsing
- Dietary fluoride supplements

Community Water Fluoridation

A diagram illustrating community water fluoridation. It shows a cross-section of a landscape with a body of water on the left and a cliff on the right. The word 'FLUORIDE' is written in large, glowing blue letters in the water. Several blue lines representing light rays or beams originate from the top right and converge on the word 'FLUORIDE' in the water. The ground on the right is shown in cross-section, revealing a rocky interior with a small plant growing on the surface.

FLUORIDE

Dietary Fluoride Supplements



School-based Fluoride Mouthrinse



Indicated for high risk populations



Assurance

Fluoride Varnish Initiative

Contributing to the Problem...

- Lack of access to dental services
- Few dentists treat children under 3 years
- Only 30% of WI dentists accept Medicaid

Why primary care providers?

- Primary providers have early access to these high risk children
- Prevention is preferred to treatment
- Medicaid reimburses for procedure

Assurance

Training of Non-dental Providers

Fluoride Varnish Placement



Assurance

School-Based Dental Sealant Programs

Seal-A-Smile

School-based or School-linked Dental Sealant Programs: Definition

These programs are defined as programs that provide direct delivery of dental sealants to children in school-based or school-linked (clinic or private practice) settings.

Task Force on Community Preventive Services

In 2002, the Task Force on Community Preventive Services, a national independent, nonfederal, multidisciplinary task force appointed by the director of the CDC, strongly recommended school sealant programs as an effective strategy to prevent tooth decay.

Public Health Issue

■ *Over 80% of tooth decay in school children is on chewing surfaces of teeth that dental sealants can protect*

■ 55% of Wisconsin third graders had experienced tooth decay

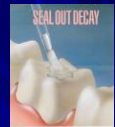
■ 20% of Wisconsin third graders had untreated tooth decay

■ 51% of Wisconsin third graders had at least one dental sealant

Public Health Issue

- Children receiving dental sealants in school-based programs have 60% fewer new decayed pit and fissure surfaces in back teeth for up to 2 to 5 years after a single application

School-Based Dental Sealant Programs



State Oral Health Program Funding

- GPR
- HRSA
- Delta Dental



Dental Access Grants

- Funding for dental access initiatives in 2007 = \$4,082,300
- Funding for dental access initiatives in 2009 = \$3,200,000

Supporting State Oral Health Programs

Center for Disease Control and Prevention (CDC)
Cooperative Agreement

Building national oral health infrastructure through strong state programs

CA – Process Objectives

(Short Term - by the end of the funding period)

- Increase policies and programs supporting oral disease prevention
- Increase community-based public health prevention services for prioritized populations based on disease burden
 - community water fluoridation
 - school-based/linked sealant programs in particular

CA – Outcome Objectives

(Long Term – beyond period of funding)

- Reduce prevalence of caries among prioritized populations
- Reduce disparities in oral health

Infrastructure Building Recipient Activities

CA

- Staffing, management and support
 - Oral epidemiologist
 - Fluoridation specialist/Program coordinator
 - Dental sealant coordinator/Program coordinator
- Data collection and surveillance
- State oral health plan
- Partnerships and coalitions
- Preventive Interventions
 - Fluoridation
 - Dental sealants
- Policy Development
- Evaluation
- Program Integration

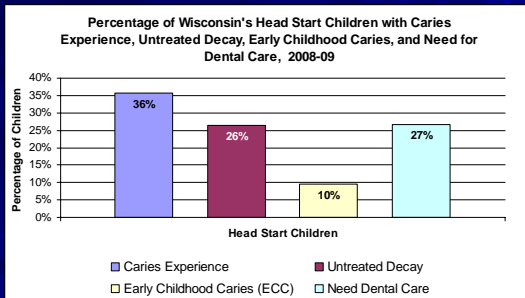
Current State of Oral Health in Wisconsin

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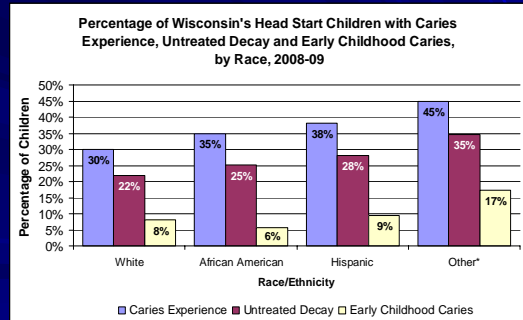
2009 Healthy Teeth for a Healthy Head Start Survey



Head Start Results

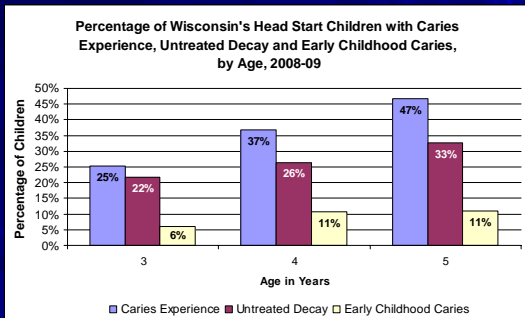


Head Start Results



* Other includes: American Indian/Alaska Native, Native Hawaiian/Pacific Islander, multi-racial and missing/unknown

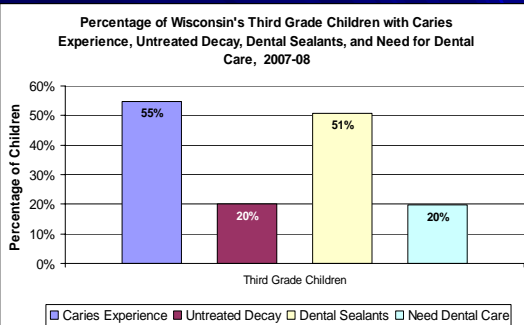
Head Start Results



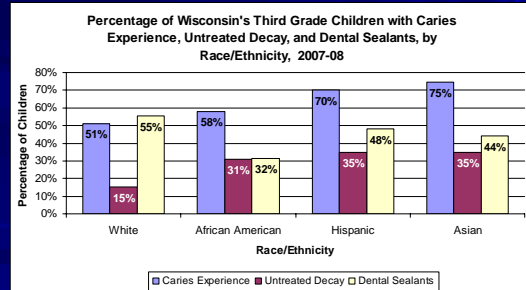
2008 Make Your Smile Count Survey



Third Grade Results



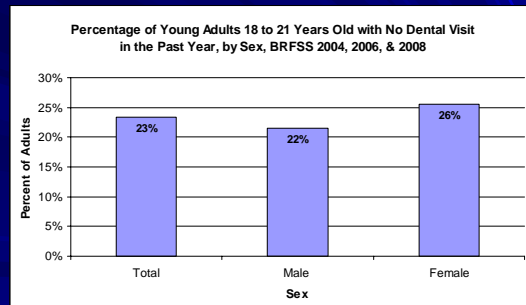
Third Grade Results



2008 Wisconsin Behavioral Risk Factor Survey (BRFS)



BRFS Results



Wisconsin Medicaid



Wisconsin Medicaid

- Of Wisconsin licensed dentists, 40% submitted at least one fee-for-service claim for Medicaid reimbursement in 2008.
- Of the 955,336 state Medicaid members in 2008, **23% received a dental service**. The percent of members obtaining a dental service has remained level over the past five years, but the number of Medicaid enrollees has increased over that timeframe and the actual number of members obtaining services has also increased.
- In 2008 there were nine counties without a Medicaid billing dentist who saw 50 or more beneficiaries under age 21.

Oral Health Workforce



Workforce

- State population estimate (2008)
= 5.6 million
- 3,511 in-state licensed dentists (July 2009)
- Nationally 1 dentist per 1,700 people; WI has 1 dentist per 1,600 people*
- 4,487 in-state licensed dental hygienists (July 2009)

*crude measure

Surveillance Projects



SHOW - The Oral Health Status of Wisconsin Adults

- The Survey of the Health of Wisconsin (SHOW) is a statewide study of adults modeled after the National Health and Nutrition Examination Survey (NHANES).
- The data collected from SHOW provide a comprehensive picture of Wisconsin residents' health and include a variety of data collection methods.
- The Department of Health Services Oral Health Program is partnering with SHOW to add an oral health screening of all study participants.

SHOW - The Oral Health Status of Wisconsin Adults

- Oral health questions are being collected as a part of the questionnaire portion of the study.
- The oral health screening will be a part of the physical measures collected in the SHOW clinics.
- Indicators from the screening include: any natural teeth, untreated decay, and treatment need.

County Level Third Grade Surveys

- Oral Health Program staff are available to assist in county level third grade oral health surveys.
- Consultation on sample size and random sample can be provided prior to the survey and assistance with data analysis can be provided after the survey.
- In addition, the hygienists in the Oral Health Program can assist in conducting the surveys or provide training.

Fluoride for Healthy Smiles and Bright Futures

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Early intervention for disease prevention through integration of oral health into medical practice

- Physicians have early and regular access to children
- Greater than 90% of physicians think oral health should be addressed at well visits, yet...
- 50% had little or no oral health training
- 9% could answer 4 simple questions correctly

Caries Process Transmissible



- Host-Tooth
- Agent-Bacteria
 - Strep. Mutans
- Environment-pH
 - Acidic
- Time-Frequency
 - 20 minute reaction time



Caries Prevention

1. Anticipatory Guidance
 - Healthy Parent, Healthy Child
2. Screening / Lift the Lip
3. Fluoride, Fluoride, Fluoride !
 - Prevents, Slows Progression
 - Reverses Decay
4. Referral



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.

Supervised Toothbrushing

Fluoridated Water— Systemic Prevention

When prescribing systemic supplements consider:

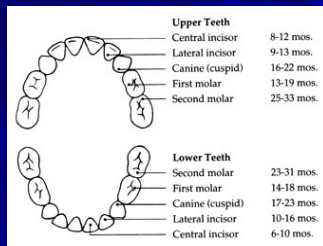
- Water fluoridation
- Natural fluoride in water
- Halo effect
- Family oral health
- Nutritional habits
- Other risk factors



Assess the Teeth and Oral Condition



Primary Tooth Eruption Chart



Positioning the Child— Whatever Works



Lift the Lip to Assess Condition Of Teeth and Mouth



Use of Mouth Mirror and
Directed Light—i.e., flashlight

Identify Healthy Teeth

- Monitor teeth, refer
- Fluoride 2-4 times per year depending on risk



Identify White Spot Lesions

- Monitor, refer
- Fluoride imperative 2-4 times yearly



Identify Dental Decay

- Referral imperative
- Fluoride imperative 2-4 times per year



Identify Fillings and Dental Sealants



Identify Fluorosis

Excessive systemic fluoride during tooth formation:
Irreversible



Fluoride Varnish

- Safe for early intervention
- Alternative topical fluoride delivery system
- Dries in wet environment
- Evidence-based effectiveness
- Cost effective
- Efficient
- Interdisciplinary



The Power of Partnerships: Working Together to Meet the Need...

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Seal-A-Smile

- State, Federal and Private Sector funding, increased available \$\$ by \$440,000/yr/3yrs
- Targeted funding and technical assistance to areas with high need and no current programming.



Head Start

- Established regular, ongoing meetings to address needs
- Statewide Oral Health Forum
- Cavity Free Kids!



Wisconsin Dental Association

- Collaboration on policy development related to workforce issues
- WIC program
- Valuable partnership not many states enjoy
- Joint advocacy

Just a Few More!!!!

- Children's Health Alliance of Wisconsin
- Wisconsin Technical College System
- Wisconsin Women's Health Foundation
- Marquette University
- WI Chapter American Academy Pediatrics
- Wisconsin Primary Healthcare Association

Program Integration

- CDC Pilot program to develop integrated messages that span across internal programs, and impact external partners.
- Increased oral health outreach and messaging to improve oral health and overall health status

Wisconsin Oral Health Coalition

- The Coalition, consisting of diverse public and private partnerships, works to create meaningful change to improve oral health and access to care in Wisconsin.
- Currently holding regional meetings to improve networking and strengthen Coalition membership

Oral Health Program Staff

- Warren LeMay DDS, MPH, Chief Dental Officer
- Lisa Bell RDH, BASDH, State Public Health Dental Hygienist
- Melissa Olson MS, Epidemiologist
- Midge Pfeffer RDH, BS, Fluoridation Specialist
- Emily Roedl RDH, Dental Sealant Coordinator
- Website:
http://dhs.wisconsin.gov/health/Oral_Health/

***“How wonderful it is that
nobody need wait a single
moment before starting to
improve the world”***

Anne Frank