PUBLIC HEALTH – SEATTLE & KING COUNTY SPRING 2009

Child Health Notes

Promoting early identification and partnerships between families, primary health care providers & the community.

Distributed by Public Health-Seattle & King County–Children with Special Health Care Needs Program. This newsletter provides physicians, nurse practitioners, primary health care providers, public health centers and community partners with current information regarding identification and management of special health issues for children. Contributing agencies and programs include: Washington State Department of Health and UW – Center on Human Development & Disability

"You're not healthy without good oral health."
-- *Former Surgeon General C. Everett Koop*

"Tooth decay is the most common chronic disease of childhood; it is five times more frequent than asthma, for example. Twenty million children - 25% of persons under age 19 - suffer 80% of all tooth decay. For an estimated 4-5 million of these children, tooth decay interferes with routine activities."

-- The Reforming States Group.

ORAL HEALTH FOR CHILDREN – EARLY CHILDHOOD CARIES

WHAT IS ORAL HEALTH AND WHY IS IT IMPORTANT?

Healthy teeth with surrounding bones and tissues are necessary for normal speech and nutritional intake across the lifespan. Dental appearance and function can impact quality of life and self esteem.

EARLY CHILDHOOD CARIES

Early childhood caries (ECC) is reported by the Centers for Disease Control and Prevention to be one of the most prevalent infectious disease of children in the US. Dental caries is 5 times more common than asthma and it is estimated that 40% of children have tooth decay before they reach kindergarten. Children with ECC are at risk for poor growth and have higher rates of caries in their permanent dentition.

ECC is an infectious, bacterial disease caused by an overgrowth of organisms that are part of the normal oral flora. *Streptococcus mutans* and *Lactobacillus* are two principle organisms considered responsible for caries. Usually mother, or another close adult, passes the infection to the child by shared utensils (a shared spoon, cleaning a dropped pacifier with their mouth, etc.). Adults with untreated caries or high colonization of *S. mutans* are more likely to infect their child. High caries rates tend to run in families.

Bacterial growth and acid production are heightened during feeding, particularly at night when saliva flow is lower. Enamel is thinner in primary teeth than in permanent teeth and erupting tooth surfaces are readily colonized, leading to a greater risk of decay in early childhood. Children with enamel hypoplasia are at additional increased risk for ECC.

ORAL HEALTH PREVENTION – PRIMARY HEALTH CARE PROVIDER ROLE

ECC is preventable. Prevention begins with early identification of children at greater risk for caries. Primary health care providers are more likely to encounter mothers and infants than dentists, and thus you have a role in early oral health supervision. Consider taking an oral health history from parents, or other care providers, including history of adult caries, dental hygiene practices and dental care utilization, and dietary practices.

Early infant and toddler oral health supervision includes:

- Review of proper infant tooth cleaning
- Review of good dietary habits (attend to snacking habits and avoid cariogenic foods)
- Evaluation of fluoride status
- Use of topical fluorides, where appropriate
- Recommendation of visit to the dentist within 6 months of first tooth eruption for high risk chil

WHO IS AT HIGHER RISK FOR EARLY CHILDHOOD CARIES?

- Infants whose mothers or siblings have multiple caries
- Infants in families of lower socioeconomic status
- Infants who:
  - sleep with a bottle containing cariogenic substances
  - snack frequently at breast or bottle, use the bottle past 12 months of age
  - if older, snack on cariogenic foods (e.g. sweet liquids, candy, cookies)
- Children with developmental or oromotor dysfunction – due to increased exposure to cariogenic factors as a result of decreased ability to clean food off the teeth or out of the oral cavity and/or decreased salivary flow
- Children with GE reflux – due to increased risk of erosive effects of regurgitated fluids
- Children on certain medications (e.g. anticholinergics and sedative-antihistaminic-antiemetic drugs) - due to side effects such as decreased saliva flow or gum hypertrophy and/or due to sugar content and consistency of liquid medications

ORAL HEALTH ANTICIPATORY GUIDANCE:

Well-child visits afford you an excellent opportunity to talk with parents and children to encourage good oral health habits.
Perform an oral screening examination at every visit.

Prenatal	- Review mother's dental history; refer mother for dental care, if needed.
	- Review importance of primary teeth - they help maintain good nutrition by permitting proper chewing, allow good pronunciation and speech habits, guide eruption of permanent teeth, improve appearance & self-esteem.
2 - 4 Months	- Review feeding practices, cariogenic foods, sleeping patterns – avoid bottles in bed.
	- Provide tooth cleaning instruction.
6 Months	- Introduce fluoride supplements (as appropriate), toothbrush and toothpaste use.
	- Provide anticipatory guidance on the use of feeder cup, and giving sweets with meals, and other feeding practices.
	- If appropriate, plan for fluoride varnish application, and review importance of primary teeth if not previously done.
12 Months	- Review diet, feeding patterns (including weaning from bottle), and oral hygiene measures. Practice cleaning teeth.
	- Assess risk for decay. If appropriate, plan for fluoride varnish application.
	- Refer high risk children for dental visit within 6 months of eruption of first tooth; assist family in referral, including making a statement of concerns and medical history available to dentist.

Through 36 Months – Review fluoride status. Review diet, snacking, and feeding practices. Review dental hygiene measures.

FURTHER INFORMATION:

Resources:

- American Academy of Pediatric Dentistry
  AAPD Caries Risk Assessment Tool
  http://aapd.org
  www.aapd.org/media/Policies_Guidelines/P_CariesRiskAssess.pdf
- The Natl. Maternal and Child Oral Health Resource Ctr.
  www.ncemch.org/oralhealth
- Oral Health in America:A Report of the Surgeon General
  www.surgeongeneral.gov/library/oralhealth/
- Bright Futures in Practice: Oral Health
  http://brightfutures.aap.org/practice_guides_and_other_resources.html
- WA State Dept. of Health: Oral Health Program
  www.doh.wa.gov/cfh/oral_health/

Washington State Local Health Jurisdictions

- Oral Health Program Coordinators
  www.doh.wa.gov/cfh/Oral_Health/Documents/ohcoor.pdf

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