

## The Role of Primary Care



## The Link Between Primary Care and Oral Health

- Children visit medical providers about six times during the first year of life
- Primary care providers play a major role in educating families about good health practices
- Existing well child care model is easily adaptable to oral health
- Focusing on prevention and advocacy is a long-standing tradition in medicine

## Role of the Primary Care Provider



- Incorporate oral health promotion into well child care
- Screening and referral
- Advocacy
- Tools
  - Age appropriate fluoride

## Partnerships for Prevention

- Increase interaction between medical and dental communities
- Creative collaborations
  - Pediatric clinic
  - Dental clinic
  - PNCC/WIC
  - Head Start/Schools
  - Other models (ABCD for Kids)
  - KGC(Kids Get Care)

## Medical Provider's Role

- Conduct caries risk assessment
- "Lift the Lip" as part of each well-child exam
- Conduct anticipatory guidance
- Provide caregiver with prevention information (oral hygiene, diet and nutrition, and fluoride)
- Determine "decay risk (caries risk)" and prescribe appropriate fluoride
- Refer the child for follow-up dental care, as needed

## Screening and Assessments

## Caries Risk Assessment

- Is there visible plaque on the teeth?
- Are there cavities, white spots or enamel hypoplastic areas on the teeth?
- Is there a history of decay in the family?
- Does the child have a history of low birthweight or pre-maturity?
- Is there impaired salivary flow?

## How to Screen for Dental Decay

- Position child in caregiver's lap, facing caregiver
- Sit with knees touching knees of caregiver
- Lower the child's head onto your lap
- Child's mouth will automatically open



### What to look for: Check for normal, healthy teeth



### What to look for: Check for tooth defects

#### A Risk for Decay



### What to look for: Check for early signs of ECC

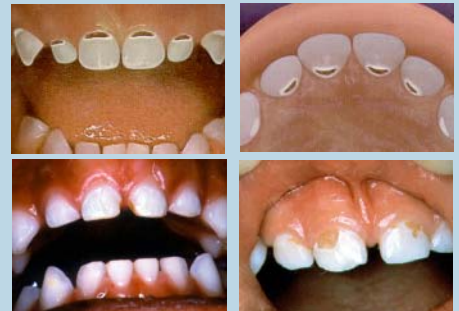


#### White Spots



### What to look for: Check for early signs of ECC

#### Brown Areas



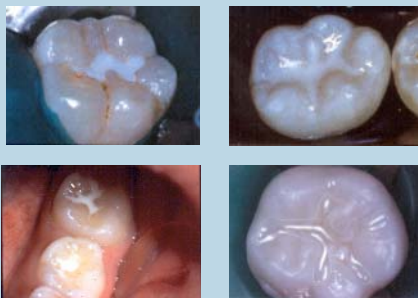
What to look for:  
Check for advanced severe ECC



What to look for:  
Check for presence of restorations



What to look for:  
Check for presence of sealants



Determine what to do next

Risk Level: Low Disease Status: None	Risk Level: High Disease Status: None	Risk Level: L to H Disease Status: Early	Risk Level: L to H Disease Status: Advan
<ul style="list-style-type: none"> <li>• Counseling to maintain low risk</li> <li>• Anticipatory guidance</li> <li>• Primary prevention</li> <li>• Refer to dentist, identify a dental home</li> <li>• Record findings</li> <li>• Monitor</li> </ul>	<ul style="list-style-type: none"> <li>• Risk management program</li> <li>• Anticipatory guidance</li> <li>• Primary prevention</li> <li>• Refer to dentist, identify a dental home</li> <li>• Record findings</li> <li>• Monitor</li> <li>• Reassess in 6 mos</li> </ul>	<ul style="list-style-type: none"> <li>• Risk management program</li> <li>• Anticipatory guidance</li> <li>• Begin disease management</li> <li>• Refer to dentist for Dx &amp; Tx</li> <li>• Record findings</li> <li>• Monitor</li> <li>• Reassess in 6 mos</li> </ul>	<ul style="list-style-type: none"> <li>• Risk management program</li> <li>• Anticipatory guidance</li> <li>• Advanced disease management</li> <li>• Refer to dentist for Dx &amp; Tx</li> <li>• Record findings</li> <li>• Monitor</li> <li>• Reassess in 3-6 mos based on risk</li> </ul>

Conducting  
Age-Appropriate  
Anticipatory Guidance

Anticipatory Guidance

Providing counseling or  
intervention that helps prevent  
and/or reduce diseases,  
disorders and their impact

## Anticipatory Guidance Prenatal

- Review mother's dental history
- Refer mother for dental care, if needed
- Review the importance of maternal health in the formation of fetal tooth buds

## Anticipatory Guidance 0-3 months

- Review the function and importance of primary teeth
- Review feeding practices
- Review comforting tips
- Explain how decay occurs
- Provide oral hygiene instruction

## Anticipatory Guidance 6 to 9 months

- Educate regarding causes, effects, and prevention of ECC
- Explain the importance of cleaning baby teeth
- Identify fluoride sources
- Introduce toothbrush and toothpaste use
- Provide guidance on feeding practices (including use of a Sippy cup)
- Demonstrate the "Lift the Lip" technique

## Anticipatory Guidance 12 months

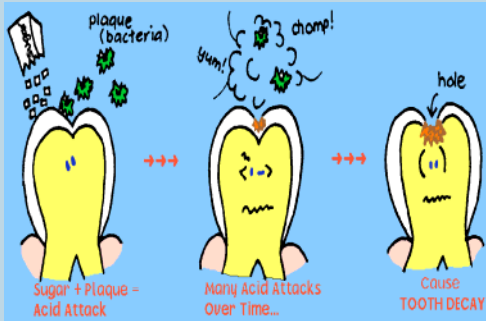
- Review diet and feeding patterns (including weaning from bottle)
- Assess risk for decay
- Review importance of regular dental care and provide resources
- Apply fluoride varnish, as appropriate
- Refer for dental visit within 6 months of first tooth

## Anticipatory Guidance Through 36 months

- Review fluoride status
- Review diet, snacking and feeding practices
- Review dental hygiene measures

## Caregiver Education

## What Caregivers Need to Know



## Preventing ECC

### Dietary Guidance:

- Avoid prolonged breast- and bottle-feeding, especially at sleep times
- Do not fill bottles with liquids containing sugar
- Limit sugary, sticky snacks and juices
- Do not dip pacifiers in honey or other sugary substances
- Introduce a cup by 6 months of age

## Preventing ECC

### Oral Hygiene:

- Wipe infant's mouth out before first teeth erupt
- Medications may contain sugar which increases the importance of daily oral hygiene
- Schedule the first dental visit by 12 months of age
- Begin tooth brushing when first tooth appears
- Floss teeth that touch each other
- Brush a child's teeth for them at least once a day until the child is 6 or 7 years old

## Preventing ECC

### "Lift the lip"

- "Lift the lip" to examine child's teeth
- Look for decay on the outside and inside surfaces of the four upper front teeth
- It takes less than one minute!
- Do this at least one time per month

## Take Home Messages for Caregivers

- Teeth, including baby teeth, are essential for general health and proper development
- Dental decay in early childhood is a serious infectious disease that is entirely preventable
- Decay develops in the presence of teeth, bacteria and sugars
- A child should have their first dental visit by their first birthday

## Treatment and Follow-up

## Fluoride

Age	Dietary Fluoride Supplement		
	Fluoride ion level in drinking water (ppm) <sup>1</sup>		
	<0.3 ppm	0.3 - 0.6 ppm	>0.6 ppm
Birth - 6 mos	None	None	None
6 mos - 3 yrs	0.25 mg/day <sup>2</sup>	None	None
3 - 6 yrs	0.50 mg/day	0.25 mg/day	None
6 - 16 yrs	1.0 mg/day	0.50 mg/day	None

<sup>1</sup> 0.1 part per million (ppm) = 1 milligram / liter

<sup>2</sup> 2.2 milligrams sodium fluoride contains 1 milligram fluoride ion

## Inflammation

### Signs & Symptoms

- Painful tooth
- Tender tooth
- Red puffy gums
- Red tender facial swelling
- Painful mouth or jaw
- Tender gums
- Tender gum swelling over root of tooth
- Low grade fever

### Treat Inflammation

Vigorous rinses 3 - 4 times / day with a small cup (approx. 6 ozs.) of warm water containing approximately:

- $\frac{1}{2}$  tsp. table salt
- $\frac{1}{4}$  tsp. baking soda
- 1 oz. hydrogen peroxide

## Pain and Infection

Treat Pain	Non-steroidal anti-inflammatory drug (NSAID) Narcotic/Acetaminophen combination analgesic	
Treat Infection	Adult (15 yrs. old +)	Pediatric (2 - 14 yrs old)
Penicillin VK	500 mg, 1 QID	25 - 50 mg/kg/day, q6h
Penicillin Allergy: Erythromycin	250 mg QID	30 - 50 mg/kg/day, q6h
Second line: Cephalexin	500 mg, 1 QID	25 - 50 mg/kg/day, q6h

## Fluoride Varnish

## Caries Risk Analysis

- There is visible plaque on the teeth.
- There are cavities, white spots or enamel hypoplastic areas on the teeth.
- There is a history of decay in the family.
- The child has a history of low birthweight or pre-maturity.
- Impaired salivary flow.

## Fluoride Varnish Application

- Safe
- Effective
- Quickly completed

## Characteristics

- Dry tooth facilitates fluoride uptake
- Sets on contact with moisture
- Not rendered inactive by plaque
- Taste is tolerable
- Can reverse early decay and can arrest active lesions

## Fluoride Varnish Products

- Cavity Shield (Omni)
- Duraflor (Pharmascience)
- Duraphat (Colgate)

## Fluoride Varnish

- More than 25 years of use and research in Europe
- Available in Canada for many years
- Currently, more than 90% of all professionally applied topical fluorides in Scandinavia are varnishes

## Efficacy

- Meta-analysis of Duraphat trials reveals 38% caries reduction\*
- Fluoride varnish and APF have comparable efficacy

\*Helfenstein and Steiner, Community Dentistry and Oral Epidemiology, 1994

## Safety

- Fluoride varnish as safe as other topical fluoride applications\*
- APF can not be used safely and effectively on infants and toddlers

\*Vaikuntam, Pediatric Dentistry, 2000

## Fluoride Varnish Facts

### Two types of fluoride:

- Dietary or ingested fluoride which is swallowed and laid down within developing tooth enamel before tooth erupts
- Topical fluoride which is applied to the actual tooth after it has erupted
  - Fluoride varnish has been widely used in Canada and Europe since the 1970s to prevent dental caries