Preventive Oral Health & Fluoride Varnish

Robin Onikul, D.D.S.
Pediatric Dentist

Nasreen Talib, MD, MPH
Pediatrician

Preventive Oral Health

- Both Dr. Onikul and Dr. Talib have no actual or potential conflict of interest in relation to this program.

This presentation incorporates materials from the American Academy of Pediatrics Oral Health Risk Assessment Training for Pediatricians and Other Child Health Professionals, the Policy Statement Preventive Oral Health Intervention for Pediatricians.

Learning Objectives

Upon completion of this course you will be able to:

- Describe the cause of Early Childhood Caries (ECC)
- Recognize caries on an exam
- Apply fluoride varnish
- Assess the risk of developing caries
- Recognize the importance of parental involvement, early dental screenings, counseling and interventions in preventing dental disease

Oral Health In America: A Report of the Surgeon General

Dental decay is:

- The most common chronic disease of childhood
- Five times more common than asthma
- Seven times more common than hay fever
- Once the process of tooth decay starts it is very difficult to reverse
- Prevention is the only way to eradicate this disease


Why Pediatricians & Family Physicians?

- Most children have access to primary care physicians (PCPs)
  - 89% of infants and children have an annual visit with their provider
  - 1.5% of infants and children have had their dental visits
  - PCPs have regular, consistent contact through well child visits

Role of Pediatric Care Providers

- AAPD recommends that each child should have an established dental home by one year
- 75% of children ages 3 to 4 years have not received the recommended dental visits
- Dental caries prevention by pediatricians will improve access for an increased numbers of children
- Oral health care training in medical school/Residency is minimal


AAP Profile of pediatric visits. National Ambulatory Medical Care Survey 2000-2004

Annual survey of graduating residents 2006
Impact of Dental Caries

- Significant impact on the Quality of Life
- Dental caries leads to poor nutrition and effect the speech
- Lead to depression, poor self esteem, financial security
- Poor oral health care has resulted in 51 million days lost from school attendance each year
- Death of Maryland boy resulting from spread of the dental abscess to the brain

Oral Health Affects Systemic Health

- Untreated caries can lead to local and systemic complications
  - Facial cellulitis
  - Malocclusion from lost teeth
  - Poor self-esteem

Embryology

Before the Baby is Born

- The earliest opportunity to provide education about infant oral health is during pregnancy
- Pregnant women are especially interested in their child's overall health and well-being
Primary Tooth Eruption

Newborn
6 - 12 months
Age 1
Age 3

Primary Dentition

8 incisors + 4 canines + 8 molars = 20 by age 3

Review

Enamel Structure

Enamel crystals in an organic matrix

Early Childhood Caries

(E.C.C.)

Early Childhood Caries

- Initially affects primary maxillary incisors
- Causes
  - Bottle or breast at bed time or at will after teeth have erupted
E.C.C. is an Infectious Disease

- Formerly known as Baby Bottle Tooth Decay
- Onset - 12 – 18 months
- Develops rapidly
- Upper front teeth are affected first
- Primary molars are secondarily affected
- Lower front teeth are affected when the disease becomes very severe

The Etiology Triad

Oral bacteria (Mutans Strep) break down dietary sugars into acids which eat away the tooth

Bacteria  Teeth  Caries  Sugars

Early Childhood Caries: Etiology

Etiology: Bacteria

- Mutans Streptococci is vertically transmitted from primary caregiver (usually mother)
- Caregivers with high bacteria levels usually have:
  - High levels of decay
  - Poor oral hygiene
  - High frequency of sugar intake
- Both bacteria and dietary habits are passed to child
It's not just WHAT, but HOW, children eat. Enamel demineralizes in response to oral acids, then remineralizes as acid is buffered. Oral bacteria produce acids that persist for 20-40 minutes after sugar ingestion. How often sugar is ingested is more important than how much sugar is eaten at once. If sugar intake is frequent demineralization predominates and teeth are at risk.

What Puts a Child at Risk?
- Family members with poor oral hygiene
- Poor oral hygiene for the child
- Diet high in sugar
- Improper bottle feeding
- Breastfeeding throughout the night
- Pacifiers dipped in sugar
- Children with a chronic illness
- Parents/caregivers with stressful characteristics

Role of Pediatrician
- Bright Futures & AAP Guidelines
- Oral health Risk assessment
- Anticipatory Guidance

AAP Recommendations for an Oral Health Risk Assessment
- Assess mother/caregiver’s oral health.
- Assess oral health risk of infants and children.
- Recognize signs and symptoms of caries.
- Assess child’s exposure to fluoride.
- Provide anticipatory guidance including oral hygiene instructions (brush/foam).
- Make timely referral to a dental home.
Well Child Visit

Your next patient is scheduled for a 1 yr check. You notice that the child is drinking from a Sippy cup filled with juice. While you are taking the history from his mother you notice that she has numerous fillings in her teeth.

Common Issues Among Children With Special Health Care Needs

- Children with asthma and allergies are often on medications that dry salivary secretions, increasing risk of caries.
- Children who are preterm or low birth weight have a much higher rate of enamel defects and are at increased risk of caries.
- Children with congenital heart disease are at risk for systemic infection from untreated oral disease.
- Children with asthma and allergies are at risk for systemic infection from untreated oral disease.
- Children whose caregivers and/or siblings have caries.
- Children with visible caries, white spots, plaque, or decay.

Caries - Risk Assessment Tool (CAT)

Physical: Oral Health Assessment

- Maternal Primary Caregiver Screening
- Child Oral Health Assessment
- Positioning Child for Oral Examination
- Primary Teeth Eruption
- What to Look For
- Check for Normal Healthy Teeth
- Check for Early Signs of Decay: White Spots
- Check for Early Signs of Decay: Brown Spots

High-Risk Groups for Caries

- Children with special health care needs
- Children from low socioeconomic and ethnic cultural groups
- Children with suboptimal exposure to topical or systemic fluoride
- Children with poor dietary and feeding habits
- Children whose caregivers and/or siblings have caries
- Children with visible caries, white spots, plaque, or decay

American Academy of Pediatric Dentistry Caries-Risk Assessment

<table>
<thead>
<tr>
<th>Risk Factors to Consider</th>
<th>Risk Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Part 1 – History (determined by interviewing the primary caregiver)</td>
<td>Yes</td>
</tr>
<tr>
<td>Child has special health care needs</td>
<td>Yes</td>
</tr>
<tr>
<td>Child has condition that impacts salivary</td>
<td>Yes</td>
</tr>
<tr>
<td>Child’s diet: mealtime</td>
<td>None</td>
</tr>
<tr>
<td>Time lapse since child’s last cavity</td>
<td>Less than 12 months</td>
</tr>
<tr>
<td>Child wears braces or orthodontic appliances</td>
<td>Yes</td>
</tr>
<tr>
<td>Child’s mother has active decay present</td>
<td>Yes</td>
</tr>
<tr>
<td>Socioeconomic status of child’s caregiver</td>
<td>Low</td>
</tr>
<tr>
<td>Daily between-meal exposure to sugars/carbohydrates</td>
<td>No fluoride tablet</td>
</tr>
<tr>
<td>Fluoride supplements</td>
<td>No fluoride tablets</td>
</tr>
<tr>
<td>Carbonated beverage</td>
<td>No fluoride tablets</td>
</tr>
</tbody>
</table>

American Academy of Pediatric Dentistry Caries-Risk Assessment

<table>
<thead>
<tr>
<th>RISK TO CONSIDER</th>
<th>RISK INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIGH</td>
</tr>
</tbody>
</table>

Part 1 - Clinical evaluation (determined by examining the child’s mouth)

- Visible plaque on anterior teeth: Present/Absent
- Gingiva: Present/Absent
- Areas of demineralization (white-spot lesions): More than 1/Absent
- Enamel characteristics: hypoplasia, defects, retentive pits/fissures: Present/Absent

Part 1 - Supplemental assessment (Optional)

- Radiographic enamel caries: Present/Absent
- Levels of mutans streptococci: High/Moderate/Low

High Caries Risk Protocol

- Appointment patient at 1-mo intervals X 3.
- Review dietary intake of sugars sources (juices, etc) at each appointment.
- Assess oral hygiene at each appointment, (plaque/inflammation).
- Review fluoride exposure and apply fluoride varnish at each appointment if risk factors persist.
- At the third 1-mo visit, if all risk factors are well managed: Reappoint at 3 mo, review diet, hygiene, fluoride exposure, and apply fluoride varnish. If risk factors are not controlled: Continue with 1-mo recalls until risk factors are managed.
- At 3-mo recall interval, if all risk factors are well managed: Reappoint every 6 mo, review diet, hygiene, fluoride exposure, and apply fluoride varnish.

Anticipatory Guidance

- Minimize Risk for Infection
  - Xylitol for Mothers
  - Substrate: Contributing Dietary and Feeding Habits
  - Toothbrushing Recommendations
  - Toothpaste and Children
  - Toothpaste
  - Optimizing Oral Hygiene: Flossing

Minimize Risk for Infection

- Address active oral health disease in mother/caregiver.
- Educate mother/caregiver about the mechanism of cariogenic bacteria transmission.
- Mother/caregiver should model positive oral hygiene behaviors for their children.
- Recommend xylitol gum to mothers/caregiver.

Xylitol for Mothers

Xylitol gum or mints used 4 times a day may prevent transmission of cariogenic bacteria to infants

- Helps reduce the development of dental caries
- A “sugar” that bacteria can’t use easily
- Resists fermentation by mouth bacteria
- Reduces plaque formation
- Increases salivary flow to aid in the repair of damaged tooth enamel
Substrate: Contributing Dietary and Feeding Habits

- Bottles at bedtime or nap time not containing water
- Dipping pacifier in sugary substances

Breastfeeding

- The AAP and AAPD strongly endorse breastfeeding.
- Although breastmilk alone is not cariogenic, it may be when combined with other carbohydrate sources.
- For frequent nighttime feedings with anything but water after tooth eruption, consider an early dental home referral.

Toothbrushing Recommendations

<table>
<thead>
<tr>
<th>Age</th>
<th>Toothbrushing Recommendations (CDC, 2001)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 year</td>
<td>Clean teeth with soft toothbrush</td>
</tr>
<tr>
<td>1–2 years</td>
<td>Parent performs brushing</td>
</tr>
<tr>
<td>2–6 years</td>
<td>Pea-sized amount of fluoride-containing toothpaste 2x/day</td>
</tr>
<tr>
<td>&gt; 6 years</td>
<td>Brush with fluoridated toothpaste 2x/day</td>
</tr>
</tbody>
</table>

Substrate: Contributing Dietary and Feeding Habits

- Frequent consumption of carbohydrates, especially sippy cups/bottles with fruit juice, soft drinks, powdered sweetened drinks, formula, or milk
- Sticky foods like raisins/fruit leather (roll-ups), and hard candies

Toothpaste and Children

- Children ingest substantial amounts of toothpaste because of immature swallowing reflex.
- Early use of fluoride toothpaste may be associated with increased risk of fluorosis.
  - Once permanent teeth have mineralized (around 6-8 years of age), dental fluorosis is no longer a concern.
Toothpaste

A small pea-sized amount of toothpaste weighs 0.4 mg to 0.6 mg fluoride, which is equal to the daily recommended intake for children younger than 2 years.

Optimizing Oral Hygiene: Flossing

When to Use Floss
- Once a day (preferably at night)
- Whenever any 2 teeth touch

Flossing

- Flossing should be slowly incorporated when the child has back molars that touch each other about age 4

Children With Special Health Care Needs (CSHCN)

Recommendations for Child Health Professionals:
- Be aware of oral health problems or complications associated with medical conditions.
- Monitor impact of oral medications and therapies.
- Choose non-sugar-containing medications if given repeatedly or for chronic conditions.
- Refer early for dental care (before or by age 1 year).
- Emphasize preventive measures.

Age 1 Dental Visit

- AAPD recommends all children see dentist at age 1
- AAP recommends age 1 visit for children at caries risk
- If no dental access Provider assumes responsibility for screening and guidance

Lift the Lip!

Damage caused by holding medications in mouth
Fluoride
Naturally occurring mineral present in Water and food
Reduces caries by 30%

Systemic Fluoride Supplementation

<table>
<thead>
<tr>
<th>Child's Age</th>
<th>Water Fluoride Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;0.3 ppm</td>
</tr>
<tr>
<td>6 mos-3 yrs</td>
<td>0.25 mg</td>
</tr>
<tr>
<td>3 yrs – 6 yrs</td>
<td>0.50 mg</td>
</tr>
<tr>
<td>&gt; 6 years</td>
<td>1.00 mg</td>
</tr>
</tbody>
</table>

Dosages are in milligrams F/day

Fluoride Varnish
- Does not require special dental equipment, or a professional dental cleaning
- Is easy to apply with minimal training
- Dries immediately upon contact with saliva
- Is safe and well tolerated by infants, small children and individuals with special needs
- Is inexpensive

Research Information
- Up to 75% reduction in # of cavities
- Mean reduction 45%
- U of Fla study – 80% remineralization
- Dental Schools – treatment option for decay
**Mechanism of Action**

- **Systemic (lesser effect)**
  - Reduces enamel solubility by incorporation into its structure

- **Topical (greater effect)**
  - Inhibits demineralization
  - Promotes Remineralization
  - Produces anti-bacterial activity

**Step 1**

- Assemble Equipment
  - Varnish
  - Toothbrush
  - Gauze
  - Mirror (optional but helpful)

**Step 2**

- Position Patient—either knee to knee or exam table
- Perform Visual Exam
- Inspect teeth and oral mucosa

**Step 3**

- Dry teeth and remove gross plaque with gauze or toothbrush

**Step 4**

- Apply varnish to all surfaces of teeth
- Some saliva contamination is acceptable

**Fluoride Varnish Application**
Benefits

- Can be quickly applied
- Application does not have to be done by physician
- Taste is tolerable and getting better
- Dry tooth facilitates fluoride uptake
- Sets on contact with moisture
- Can reverse early decay (white spots) and slow enamel destruction by active ECC

Indications

- Moderate and high risk children without caries
- Children with “white spots”
- Children with caries
- Generally applied twice per year beginning when teeth erupt

Instruction for Parents

- Teeth may be a yellow color (some varnishes are clear)
- Eat soft foods for the rest of the day, at least 4-6 hours
- Do not have hot food/drink
- Brush and floss the next morning, the dull or yellow color will disappear

Physician Reimbursement

Policies vary by state

Information compiled by AAP
Physician Reimbursement

- **CPT codes: Kansas**
  - D1203 Topical Application of Fluoride
    - MD, PA, NP
    - $17 --3 times a year, no age limit
    - Delegated to LPN, RN,

- **CPT codes: Missouri**
  - D1206 Topical Application of Fluoride
    - MD, NP
    - $13.56 --Two times a year, <6 yr
    - Cannot be delegated to LPN/RN

References

## Risk Factors to Consider

(For each item below, circle the most accurate response found to the right under "Risk Indicators")

<table>
<thead>
<tr>
<th>Risk Factors to Consider</th>
<th>High</th>
<th>Moderate</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part 1—History</strong> <em>(determined by interviewing the parent/primary caregiver)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child has special health care needs, especially any that impact motor coordination or cooperation</td>
<td>Yes</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Child has condition that impairs saliva (dry mouth)</td>
<td>Yes</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Child's use of dental home (frequency of routine dental visits)</td>
<td>None</td>
<td>Irregular</td>
<td>Regular</td>
</tr>
<tr>
<td>Child has decay</td>
<td>Yes</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Time lapsed since child's last cavity</td>
<td>&lt;12 months</td>
<td>12 to 24 months</td>
<td>&gt;24 months</td>
</tr>
<tr>
<td>Child wears braces or orthodontic/oral appliances</td>
<td>Yes</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Child's parent and/or sibling(s) have decay</td>
<td>Yes</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Socioeconomic status of child's parent</td>
<td>Low</td>
<td>Mid-level</td>
<td>High</td>
</tr>
<tr>
<td>Daily between-meal exposures to sugars/cavity—producing foods (includes on demand use of bottle/sippy cup containing liquid other than water; consumption of juice, carbonated beverages, or sports drinks; use of sweetened medications)</td>
<td>&gt;3</td>
<td>1 to 2</td>
<td>Mealtime only</td>
</tr>
<tr>
<td>Child's exposure to fluoride</td>
<td>Does not use fluoridated toothpaste; drinking water that is not fluoridated and is not taking fluoride supplements</td>
<td>Uses fluoridated toothpaste; usually does not drink fluoridated water and does not take fluoride supplements</td>
<td>Uses fluoridated toothpaste; drinks fluoridated water or takes fluoride supplements</td>
</tr>
<tr>
<td>Time per day that child's teeth/gums are brushed</td>
<td>&lt;1</td>
<td>1</td>
<td>2-3</td>
</tr>
</tbody>
</table>

**Part 2—Clinical evaluation** *(determined by examining the child's mouth)*

<table>
<thead>
<tr>
<th>Risk Factors to Consider</th>
<th>Present</th>
<th>Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visible plaque (white, sticky buildup)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gingivitis (red, puffy gums)</td>
<td>Present</td>
<td>Absent</td>
</tr>
<tr>
<td>Areas of enamel demineralization (chalky white-spots on teeth)</td>
<td>More than 1</td>
<td>1</td>
</tr>
<tr>
<td>Enamel defects, deep pits/fissures</td>
<td>Present</td>
<td>Absent</td>
</tr>
</tbody>
</table>

**Part 3—Supplemental professional assessment** *(Optional)*

<table>
<thead>
<tr>
<th>Risk Factors to Consider</th>
<th>Present</th>
<th>Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiographic enamel caries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levels of mutans streptococci or lactobacilli</td>
<td>High</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

*Each child’s overall assessed risk for developing decay is based on the highest level of risk indicator circled above (e.g., a single risk indicator in any area of the ‘high risk’ category classifies a child as being ‘high risk’)*.
Fluoride Varnish Reimbursement Table

This summary reflects results obtained from a survey of the 50 States and Washington, DC performed by Amos Deinard, MD, MPH on behalf of the American Academy of Pediatrics Oral Health Initiative, Medicaid/SCHIP Dental Association, and Chris Cantrell, et al, of the National Academy for State Health Policy.

<table>
<thead>
<tr>
<th>State Name</th>
<th>Current Reimbursed Providers $/Service(s)</th>
<th>Procedure Code(s)</th>
<th>Age Limit</th>
<th># Varnishes Reimbursed Annually</th>
<th>Training Required?</th>
<th>Delegation Allowed *</th>
<th>If no, plan/time line/barrier(s)</th>
<th>Payors (DHS; MCOs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>MD, NP $18.00 (OE/AG) $15.00 (FV)</td>
<td>D-0145 D-1206</td>
<td>6-36 mos. (moderate high risk)</td>
<td>3/yr; between 6-35 months</td>
<td>Yes (RA, AG, DH &amp; FV)</td>
<td>LPN RN</td>
<td>Start 1/09</td>
<td>Single</td>
</tr>
<tr>
<td>Alaska</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Trying to figure out how to code while waiting for new claims processing system to be installed.</td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>None</td>
<td></td>
<td>≤ 3 yrs.</td>
<td></td>
<td></td>
<td></td>
<td>Approved pending funding.</td>
<td></td>
</tr>
<tr>
<td>Arkansas</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>California</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Medicaid fiscal agent-Fee for service</td>
<td>Multiple</td>
</tr>
<tr>
<td>Colorado</td>
<td>Dental and Medical $15.37 (FV) $29.20 (OE) $20.49 (OE)</td>
<td>D1206 D0145 D0120</td>
<td>Under 5</td>
<td>4</td>
<td>Yes for medical limited</td>
<td>As of July 1, 2009</td>
<td>Multiple</td>
<td></td>
</tr>
<tr>
<td>Connecticut</td>
<td>MD NP PA #20.00 (FV) $25.60 (OE)</td>
<td>D-1206 D-0145</td>
<td>60 mos. (3rd birthday well-child visit)</td>
<td>With each well-child visit (per HEDIS)</td>
<td>Continuing ED CME course developed by Dental School</td>
<td>CMA LPN RN</td>
<td>20.00 fl 25.00 screening and oh</td>
<td>Multiple</td>
</tr>
</tbody>
</table>

* The assumption is that though the task may be delegated, billing for the procedure will be under the responsible provider’s name (MD, NP, PA).


FV = Fluoride Varnish Application
OE = Oral Exam
AG = Anticipatory Guidance
RA = Risk Assessment
DH = Recommendation for dental home by age 1
MCO = Managed Care Organization
FFS = Fee for Service
<table>
<thead>
<tr>
<th>State Name</th>
<th>Current Reimbursed Providers $/Service(s)</th>
<th>Procedure Code(s)</th>
<th>Age Limit</th>
<th># Varnishes Reimbursed Annually</th>
<th>Training Required?</th>
<th>Delegation Allowed *</th>
<th>If no, plan/time line/barrier(s)</th>
<th>Payors (DHS; MCOs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Plan being developed; sites being established (12-18 mos)</td>
<td></td>
</tr>
<tr>
<td>Delaware</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes – scope of practice (DDS/MD) being studied as Dental Practice Act limits application of fluoride to DDS &amp; RDH</td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td>MD PA ARNP $27.00 FV/AG</td>
<td>994999 with modifier SC</td>
<td>6-42 mos.</td>
<td>4</td>
<td>Training not required. U of FL Gator Kids Healthy Smiles Program provides training if requested by provider.</td>
<td>CNA LPN RNA</td>
<td></td>
<td>Single</td>
</tr>
<tr>
<td>Georgia</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>To start once Governor unfreezes budget</td>
<td></td>
</tr>
<tr>
<td>Hawaii</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No plan</td>
<td>Single</td>
</tr>
<tr>
<td>Idaho</td>
<td>MD NP PA $13.58 – MD $11.54 – NP, PA, FV</td>
<td>D-1203</td>
<td>0-21 yrs.</td>
<td>2</td>
<td>Public Health District Dental Program</td>
<td>CMA LPN RN</td>
<td></td>
<td>Single</td>
</tr>
<tr>
<td>Illinois</td>
<td>MD NP PA $26.00 FV</td>
<td>D-1203</td>
<td>Under age 3 with 4 erupted teeth</td>
<td>3</td>
<td>Coordinated by Illinois Chapter – AAP (ICAAP) and provided by practicing pediatric dentists. ICAAP informs HFS of training</td>
<td>Pilot program only in Cook County and surrounding counties. Physicians in FQHCs statewide can apply varnish and bill for the service but receive no separate reimbursement above the normal encounter rate.</td>
<td>Single</td>
<td></td>
</tr>
</tbody>
</table>

* The assumption is that though the task may be delegated, billing for the procedure will be under the responsible provider’s name (MD, NP, PA).


FV = Fluoride Varnish Application  
OE = Oral Exam  
AG = Anticipatory Guidance  
RA = Risk Assessment  
DH = Recommendation for dental home by age 1  
MCO = Managed Care Organization  
FFS = Fee for Service
<table>
<thead>
<tr>
<th>State Name</th>
<th>Current Reimbursed Providers $/Service(s)</th>
<th>Procedure Code(s)</th>
<th>Age Limit</th>
<th># Varnishes Reimbursed Annually</th>
<th>Training Required?</th>
<th>Delegation Allowed *</th>
<th>If no, plan/time line/barrier(s)</th>
<th>Payors (DHS; MCOs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana</td>
<td>None</td>
<td></td>
<td>0-36 mos.</td>
<td>3</td>
<td>Training by I-Smile (Oral Health Bureau).</td>
<td>CMA LPN RN</td>
<td>No</td>
<td>Single</td>
</tr>
<tr>
<td>Iowa</td>
<td>MD NP PA $14.55 FV</td>
<td>D-1206</td>
<td>None</td>
<td>3 (MD) + 3 (DDS) (total 6/yr)</td>
<td>Depends on State Licensing Board</td>
<td>CMA LPN RN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kansas</td>
<td>MD NP PA PHN $17.00 FV</td>
<td>D-1203</td>
<td>None</td>
<td>3 (MD) + 3 (DDS) (total 6/yr)</td>
<td>Depends on State Licensing Board</td>
<td>CMA LPN RN</td>
<td>Single</td>
<td></td>
</tr>
<tr>
<td>Kentucky</td>
<td>MD $15.00 FV</td>
<td>D-1206</td>
<td>1 – 5 yrs</td>
<td>Once every 90 days. (maximum of 2 times in a 12-month period.)</td>
<td>On-line</td>
<td>CMA LPN RN</td>
<td>Multiple</td>
<td></td>
</tr>
<tr>
<td>Louisiana</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maine</td>
<td>MD NP PA $12.00 FV</td>
<td>D-1206</td>
<td>Under 21 yrs</td>
<td>3</td>
<td>Yes - training by Office of Oral Health</td>
<td>LPN PA CMA</td>
<td></td>
<td>Single</td>
</tr>
<tr>
<td>Maryland</td>
<td>MD NP $24.92 FV</td>
<td>D-1206</td>
<td>9 mo – 3 yrs</td>
<td>4</td>
<td>Yes - training by Office of Oral Health</td>
<td>LPN PA CMA</td>
<td>Will start 7/09</td>
<td>ASO (Doral Dental)</td>
</tr>
</tbody>
</table>

* The assumption is that though the task may be delegated, billing for the procedure will be under the responsible provider’s name (MD, NP, PA).


FV = Fluoride Varnish Application
OE = Oral Exam
AG = Anticipatory Guidance
RA = Risk Assessment
DH = Recommendation for dental home by age 1
MCO = Managed Care Organization
FFS = Fee for Service
<table>
<thead>
<tr>
<th>State Name</th>
<th>Current Reimbursed Providers $/Service(s)</th>
<th>Procedure Code(s)</th>
<th>Age Limit</th>
<th># Varnishes Reimbursed Annually</th>
<th>Training Required?</th>
<th>Delegation Allowed *</th>
<th>If no, plan/time line/barrier(s)</th>
<th>Payors (DHS; MCOs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>MD, NP, PA, RN, LPN $26.00 FV</td>
<td>D-1206</td>
<td>Under age 21</td>
<td>No limit; recommended not to exceed one application every 180 days. **</td>
<td>On-line; group or office visit;</td>
<td>MD, NP, PA, RN</td>
<td>Single</td>
<td>Multiple</td>
</tr>
<tr>
<td>Michigan</td>
<td>MD, NP $9.00 FV</td>
<td>D-1206</td>
<td>&lt;3 yrs.</td>
<td>4x/Yr.</td>
<td>On-line</td>
<td>LPN, PA, RN</td>
<td>Single</td>
<td>Both FFS Medicaid, Medicaid Health Plans (MCOs) are payors</td>
</tr>
<tr>
<td>Minnesota</td>
<td>MD, NP, PA, PHN FFS - $14.00 MCO – variable ($14-$20)</td>
<td>D-1206</td>
<td>None</td>
<td>No limit.</td>
<td>University of Minnesota’s “Dental Health Screening and Fluoride Varnish Application”, available online.</td>
<td>CMA, LPN, RN</td>
<td>Single</td>
<td>Multiple</td>
</tr>
<tr>
<td>Mississippi</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missouri</td>
<td>MD, NP $13.56 FV</td>
<td>D-1206</td>
<td>&lt;6 yrs.</td>
<td>2 times/rolling year</td>
<td>Department of Health and Senior Services, Division of Community and Public Health</td>
<td>No</td>
<td>Single</td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td>$19.65 (FV) $22.93 (OE)</td>
<td>D-1206, D-0120</td>
<td>0-20 0-999</td>
<td>Up to 6</td>
<td>Preferred</td>
<td>MD’s/DDS DDS only</td>
<td>July 2009</td>
<td>Single</td>
</tr>
</tbody>
</table>

* The assumption is that though the task may be delegated, billing for the procedure will be under the responsible provider’s name (MD, NP, PA).

FV = Fluoride Varnish Application
OE = Oral Exam
AG = Anticipatory Guidance
RA = Risk Assessment
DH = Recommendation for dental home by age 1
MCO = Managed Care Organization
FFS = Fee for Service
<table>
<thead>
<tr>
<th>State Name</th>
<th>Current Reimbursed Providers $/Service(s)</th>
<th>Procedure Code(s)</th>
<th>Age Limit</th>
<th># Varnishes Reimbursed Annually</th>
<th>Training Required?</th>
<th>Delegation Allowed *</th>
<th>If no, plan/time line/barrier(s)</th>
<th>Payors (DHS; MCOs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nebraska</td>
<td>$10.00 FV</td>
<td>D-1206</td>
<td>0 - 20 yrs.</td>
<td>Every 6 months</td>
<td>On-line</td>
<td>CMA</td>
<td>on-line</td>
<td>Multiple</td>
</tr>
<tr>
<td>Nevada</td>
<td>MD NP PA PHN $42.64 - $53.30 (FV) $26.59 - $33.24 (OE)</td>
<td>D-1206</td>
<td>0 - 20 yrs.</td>
<td>Every 6 months</td>
<td>On-line</td>
<td>CMA</td>
<td>on-line</td>
<td>Multiple</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Jersey</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Mexico</td>
<td>$15 FV</td>
<td>D1206</td>
<td>0-3</td>
<td>6 treatments total up to age 3</td>
<td>No, but is recommended</td>
<td>Yes</td>
<td>No plans to expand</td>
<td>The MCOs are reimbursing PCP’s. The benefit is localized to Chaves County, NM.</td>
</tr>
<tr>
<td>New York</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. Carolina</td>
<td>MD NP $16.80 (FV) $38.07 (OE)</td>
<td>D-0145 D-1206</td>
<td>≤41 mos.</td>
<td>60 days (Max 6)</td>
<td>Into the Mouths of Babes</td>
<td>LPN</td>
<td></td>
<td>Single</td>
</tr>
<tr>
<td>N. Dakota</td>
<td>MD NP PA PHN $20.60 FV</td>
<td>D-1206 V 20.2</td>
<td>0-21 yrs.</td>
<td>2</td>
<td>Training approved by Board of Dental Examiners</td>
<td>CMA</td>
<td></td>
<td>Single</td>
</tr>
</tbody>
</table>

* The assumption is that though the task may be delegated, billing for the procedure will be under the responsible provider’s name (MD, NP, PA).


FV = Fluoride Varnish Application
OE = Oral Exam
AG = Anticipatory Guidance
RA = Risk Assessment
DH = Recommendation for dental home by age 1
MCO = Managed Care Organization
FFS = Fee for Service
<table>
<thead>
<tr>
<th>State Name</th>
<th>Current Reimbursed Providers $/Service(s)</th>
<th>Procedure Code(s)</th>
<th>Age Limit</th>
<th># Varnishes Reimbursed Annually</th>
<th>Training Required?</th>
<th>Delegation Allowed *</th>
<th>If no, plan/time line/barrier(s)</th>
<th>Payors (DHS; MCOs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio</td>
<td>MD NP $15.00 FV</td>
<td>D-1203</td>
<td>To age 3</td>
<td>Once every 180 days</td>
<td>On-line</td>
<td>LPN RN CMA</td>
<td>Multiple</td>
<td></td>
</tr>
<tr>
<td>Oklahoma</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12 mo. Planning ongoing (for children prior to age 3)</td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td>MD NP PA $13.65 FV</td>
<td>D-1206 V07.31</td>
<td>6 yrs. and younger</td>
<td>4</td>
<td></td>
<td></td>
<td>Single</td>
<td></td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>In discussion stage. Currently not in 2008-9 proposed budget.</td>
<td></td>
</tr>
<tr>
<td>Rhode Island</td>
<td>MCOs $13-$30 FV</td>
<td>D-1206</td>
<td>Varies based on MCO</td>
<td>2</td>
<td>Varies based on MCO</td>
<td>Yes</td>
<td>Three Rite Care MCOs</td>
<td></td>
</tr>
<tr>
<td>S. Carolina</td>
<td>MD $16.90 FV</td>
<td>D-1206</td>
<td>0-3 yrs.</td>
<td>2/yr (MD) + 2/yr (DDS) 4/yr (total)</td>
<td>On-line</td>
<td>CMA LPN RN</td>
<td>Single</td>
<td></td>
</tr>
<tr>
<td>S. Dakota</td>
<td>MD NP PA PHN $18.00 FV</td>
<td>D-1206 V20.2</td>
<td>Max. age 5</td>
<td>3</td>
<td></td>
<td></td>
<td>Single</td>
<td></td>
</tr>
<tr>
<td>Tennessee</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Planning; &lt; 12 mo.</td>
<td></td>
</tr>
</tbody>
</table>

* The assumption is that though the task may be delegated, billing for the procedure will be under the responsible provider's name (MD, NP, PA).


FV = Fluoride Varnish Application  
OE = Oral Exam  
AG = Anticipatory Guidance  
RA = Risk Assessment  
DH = Recommendation for dental home by age 1  
MCO = Managed Care Organization  
FFS = Fee for Service
<table>
<thead>
<tr>
<th>State Name</th>
<th>Current Reimbursed Providers $/Service(s)</th>
<th>Procedure Code(s)</th>
<th>Age Limit</th>
<th># Varnishes Reimbursed Annually</th>
<th>Training Required?</th>
<th>Delegation Allowed *</th>
<th>If no, plan/time line/barrier(s)</th>
<th>Payors (DHS; MCOs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>MD NP PA $34.16 FV</td>
<td>99429 (OE) billed with U5 modifier along with ICD-9 EPSDT code (99381, 99382, 99391, 99392)</td>
<td>6-35 mo.</td>
<td>6 over age range</td>
<td>In person and AAP on-line training</td>
<td></td>
<td>9/2008 (start date)</td>
<td>Multiple</td>
</tr>
<tr>
<td>Utah</td>
<td>MD NP PA PHN $15.00 FV</td>
<td>EP modifier added to age-appropriate ICD-9 well-child visit code</td>
<td>0-4 yrs.</td>
<td>At each well-child exam</td>
<td>AAP On-line</td>
<td>CMA LPN RN</td>
<td>All MCO’s included by 1/1/09</td>
<td>Multiple</td>
</tr>
<tr>
<td>Vermont</td>
<td>MD $39.00 AG OE RA</td>
<td>D-0145</td>
<td>2 yrs. old and younger</td>
<td>On line (AAP course) or hands-on (one-hour)</td>
<td></td>
<td>FV- pending</td>
<td>Single</td>
<td></td>
</tr>
<tr>
<td>Virginia</td>
<td>MD NP PHN $20.79 FV</td>
<td>D-1206</td>
<td>Under 3 yrs.</td>
<td>2</td>
<td>RN</td>
<td></td>
<td>Multiple</td>
<td></td>
</tr>
</tbody>
</table>

* The assumption is that though the task may be delegated, billing for the procedure will be under the responsible provider’s name (MD, NP, PA).


FV = Fluoride Varnish Application  
OE = Oral Exam  
AG = Anticipatory Guidance  
RA = Risk Assessment  
DH = Recommendation for dental home by age 1  
MCO = Managed Care Organization  
FFS = Fee for Service
<table>
<thead>
<tr>
<th>State Name</th>
<th>Current Reimbursed Providers $/Service(s)</th>
<th>Procedure Code(s)</th>
<th>Age Limit</th>
<th># Varnishes Reimbursed Annually</th>
<th>Training Required?</th>
<th>Delegation Allowed *</th>
<th>If no, plan/time line/barrier(s)</th>
<th>Payors (DHS; MCOs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington</td>
<td>MD DO ARNP PA PHN $13.25 (FV) $29.46 (OE) $27.58 (FOHE)</td>
<td>D-1203 D-0120 D-9999</td>
<td>&lt; 5 yrs. (FOHE &amp; OE) &lt; 20 yrs. (FV)</td>
<td>3 times in 12 month period through age 5</td>
<td>Course</td>
<td>CMA LPN RN</td>
<td></td>
<td>Multiple</td>
</tr>
<tr>
<td>West Virginia</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No – MDs have not asked to include this procedure. No training at this time for non-dental staff.</td>
<td></td>
</tr>
<tr>
<td>Wisconsin</td>
<td>MD NP PA $12.76 FV</td>
<td>D-1203</td>
<td>≤ 12 yrs.</td>
<td>Training provided by the Wisconsin Division of Public Health.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wyoming</td>
<td>MD $35.00 FV</td>
<td>D-1206</td>
<td>0-3 yrs.</td>
<td>3</td>
<td>Wyoming Health Department staff dentist</td>
<td>CMA LPN RN</td>
<td></td>
<td>Single</td>
</tr>
</tbody>
</table>

* The assumption is that though the task may be delegated, billing for the procedure will be under the responsible provider’s name (MD, NP, PA).


FV = Fluoride Varnish Application
OE = Oral Exam
AG = Anticipatory Guidance
RA = Risk Assessment
DH = Recommendation for dental home by age 1
MCO = Managed Care Organization
FFS = Fee for Service