Fluoride Varnish:

An Overview for Health Professionals

Prepared by the Kids Oral Health Partnership Project, a project funded by Grant # H47MC02027 from the Maternal & Child Health Bureau, US Health Resources and Services Administration, to the Oral Health Program, Maine DHHS.

2008

Courtesy of Kids Oral Health Partnership, www.kohp.org
Fluoride Varnish

Fluoride varnish is a topical fluoride-containing lacquer that is simply painted on tooth surfaces.

It is a suitable source of topical fluoride for infants and toddlers and may be applied multiple times.

Fluoride varnish has been used in Europe and Canada for more than 30 years.
Fluoride Varnish

- 5% sodium fluoride or 2.26% fluoride in a viscous resinous base in an alcoholic suspension with flavoring agent (e.g., bubble gum)
- Has not been associated with fluorosis
- Treatment does not replace the dental home or comprehensive dental care
Fluoride Varnish Application

Courtesy of Kids Oral Health Partnership, www.kohp.org
Fluoride Varnish Application

• Using gentle finger pressure, open the child’s mouth.

• Gently remove excess saliva or plaque with a gauze sponge.

• Use your fingers and sponges to isolate the dry teeth and keep them dry.

• Isolate a quadrant of teeth at a time, or a few teeth at a time.

• Apply a thin layer of the varnish to all surfaces of the teeth.

• Once the varnish is applied, you need not worry about moisture (saliva) contamination. The varnish sets quickly.
Fluoride Guidance

- Tooth decay can be reduced by 40 to 49% in teeth with ingestion of proper amounts of fluoride.

- Fluoride is a mineral that strengthens the outside layer of the teeth. It is found naturally, occurring in ground water and rock beds.

- If the usual drinking water source is not providing adequate levels of fluoride, fluoride supplementation should be discussed.
Systemic and Topical Fluoride Delivery

**SYSTEMIC**
- Water/or
- Tablets
- Drops
- In Vitamins

**TOPICAL**
- Toothpaste
- Anti-Cavity Rinses
- Fluoride Applications
  (Varnish or in office – e.g., gels)

Courtesy of Kids Oral Health Partnership, www.kohp.org
# Fluoride: Recommendations

<table>
<thead>
<tr>
<th>Age</th>
<th>Fluoride ion level in drinking water (ppm)$^1$</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 0.3 ppm</td>
</tr>
<tr>
<td>Birth – 6 months</td>
<td>None</td>
</tr>
<tr>
<td>6 months – 3 years</td>
<td>0.25 mg/day$^2$</td>
</tr>
<tr>
<td>3 – 6 years</td>
<td>0.50 mg/day</td>
</tr>
<tr>
<td>6 – 16 years</td>
<td>1.0 mg/day</td>
</tr>
</tbody>
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1. According to the American Dental Association.
2. Assuming water intake of 0.5 gallons per day.

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Fluoride is good - but fluorosis can occur

- Fluorosis of teeth may result from high levels of fluoride during infancy during the developmental stages of teeth (up to eight years).

- May occur from swallowing excessive fluoridated toothpaste or consuming multiple sources of fluoride enhanced products.

Courtesy of Kids Oral Health Partnership, www.kohp.org
Fluorosis

- Fluorosis usually appears as small white areas in the enamel.

- It is a cosmetic concern only – at this level it does not affect tooth structure.

Courtesy of Kids Oral Health Partnership, www.kohp.org
Child Oral Health Assessment

**Prepare for the Examination**

- Provide rationale.
- Describe caregiver role.
- Ensure adequate lighting.
- Assemble necessary equipment.

Courtesy of Kids Oral Health Partnership, www.kohp.org
Positioning Child for Oral Examination

• Position the child in the caregiver’s lap facing the caregiver.

• Sit with knees touching the knees of caregiver (or use pillow as barrier to make caregiver more comfortable).

• Lower the child’s head onto your lap.

• Lift the lip to inspect the teeth and soft tissue.

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What to Look For

- Lift the lip to inspect soft tissue and teeth.

- Assess for
  - Presence of plaque
  - Presence of white spots or dental decay
  - Presence of tooth defects (enamel)
  - Presence of crowding
  - Provide education on brushing and diet during examination.

Courtesy of Kids Oral Health Partnership, www.kohp.org
Check for Normal Healthy Teeth

Courtesy of Kids Oral Health Partnership, www.kohp.org
Check for Early Signs of Decay: White Spots

Courtesy of Kids Oral Health Partnership, www.kohp.org
Check for Later Signs of Decay: Brown Spots

Courtesy of Kids Oral Health Partnership, www.kohp.org
Check for Advanced/Severe Decay

Courtesy of Kids Oral Health Partnership, www.kohp.org
Children With Special Health Care Needs (CSHCN)

- Be aware of oral health problems/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.

Damage caused by holding medications in mouth

Courtesy of Kids Oral Health Partnership, www.kohp.org
When to refer to a dentist

Refer if risk is assessed as “moderate” or “high”

Urgent need for dental care (within 24 hrs) if:

- Pain or infections, swelling
- Overriding accompanying signs (multiple decay)
What Your Practice Can Do

- Integrate oral health risk assessments into well-child visits.
- Provide patient education regarding oral health.
- Provide appropriate prevention interventions (fluoride varnish, hygiene etc.).
- Document findings and follow-up.
What Your Practice Can Do

- Identify dentists (pediatric/general) in your area who accept new patients/MaineCare patients.

- Take a dentist to lunch to establish a referral relationship.

- Investigate fluoride content in area water supply.

Courtesy of Kids Oral Health Partnership, www.kohp.org
Additional Training Available

- Fluoride Varnish Application
- In-Office Oral Assessment Training
- Children with Special Health Care Needs
- Pre-Natal Oral Health Conditions
- Dental Home Referral Networks

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Resources on special needs and many other topics available at www.kohp.org