

Healthy Teeth



for Mom & Me

State of Wisconsin  
Department of Health and Family Services  
Division of Health Care Financing

# Fluoride Varnish Guide

Advantages  
Application Protocol  
Information for Caregivers

Adapted from materials developed by the  
State of Nevada  
Department of Human Resources  
Health Division  
Bureau of Family Health Services  
Maternal and Child Health  
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## **Fluoride Varnish Advantages**

- Fluoride is the single most effective tool we have to prevent dental cavities.
- Does not require special dental equipment.
- Cost per application ranges from \$.77 to \$4.
- Does not require a professional dental cleaning prior to application.
- Is easy to apply.
- Dries immediately upon contact with saliva.
- Minimal ingestion during and after treatment.
- It enhances remineralization of the tooth surface.
- Is safe and the taste is well tolerated by infants, young children, and individuals with special needs.
- Is inexpensive.
- Placement requires minimal training.
- Wisconsin Medicaid will reimburse dental providers at the current Medicaid program reimbursement rate (please reference the Medicaid Provider Fee Schedule, updated July 2003).

# Fluoride Varnish Application Protocol

## Introduction

Fluoride varnish is 5% sodium or 22,600 PPM fluoride resin that is applied to the tooth surface as a thin coating to protect it from decay. According to the FDA, fluoride varnish falls under the category of “drugs and devices” that presents minimal risk and is subject to the lowest level of regulation.

## Purpose

The purpose of applying fluoride varnish is to retard, arrest, and reverse the process of cavity formation.

## Indications/Risk Factors

Fluoride varnish application is indicated for infants and children with a moderate or high risk of developing cavities. A child is considered at risk if he/she:

- Has had cavities in the past or has white spot lesions and stained fissures
- Continues to use the bottle past 1 year of age or sleeps with a bottle containing liquids other than water
- Breastfeeds on demand at night
- Has a developmental disability
- Chronically uses high sugar oral medications
- Has frequent (three or more times per day) cariogenic snacks
- Has visible plaque on the teeth
- Has parents/caregivers who neglect brushing the child's teeth
- Does not drink water with an optimal amount of fluoride or does not get proper fluoride supplementation
- Has family members with a history of caries or untreated decay
- Engages in prolonged or ad lib use throughout the day of a bottle or sippy cup containing liquids other than water





## Contraindications

Fluoride varnish application is contraindicated for children with a low risk of cavity formation who consume optimally fluoridated water or children who receive routine fluoride treatments through a dental office.


# Fluoride Varnish Cautions







## Contraindications:

-  Ulcerative gingivitis and stomatitis.
-  Known allergies or reactions to colophony (colophonium) or similar agents.
-  Avoid ingestion during application.
-  Not to be used as a systemic treatment.

## Interactions:

-  When Dental Varnish is applied, other fluoride preparations, such as gels or foams, should not be administered during the same day. The routine use of fluoride tablets and rinses should be interrupted for several days after initial treatment.

## Adverse Reactions:

-  Edematous swellings have been reported only in rare instances, especially after application to extensive surfaces.
-  Dyspnea, although extremely rare, has occurred in asthmatic people.
-  Nausea has been reported when extensive applications have been made to patients with sensitive stomachs.
-  If required, varnish is easily removed with a thorough brushing and rinsing of the teeth.

## **Pre-application Instructions**

- Remind the parent to give the child something to eat and drink before coming to receive a fluoride application.
- Advise the parent that the child's teeth may become discolored temporarily as fluoride varnish has an orange brown tinge.
- Tell the parent that the varnish can be brushed off the following day.

## **Materials**

- Infant - sized toothbrush or infant safety brush (for take home)
- Disposable gloves
- Disposable Mask
- Eye Protection
- Gauze sponges (2 x 2)
- Fluoride varnish - one to two drops
- Small disposable fluoride applicator (if not included with the varnish)
- Paper towels or disposable bibs to place under the child's head (optional)

## **Position the Child**

- For an infant
  - Place the child on the caregiver's lap, facing the caregiver and the child's legs around the caregiver's waist. Position yourself knee-to-knee with the caregiver and gently lower the child's head onto your lap, treating the child from behind the head.
  - Or, place the infant on an exam table and work from behind the head.
- For a young child
  - Place the child in a prone or sitting position and work from above the head as with an infant.
  - Or, adapt a method that works best for you.

## **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.
- You will usually be able to isolate a quadrant of teeth at a time, but may have to work with fewer teeth in some children. Infants are easiest because they have only anterior teeth.

- Apply a **thin** layer of the varnish to **all surfaces of the teeth**. Avoid applying varnish on large open cavities.
- Once the varnish is applied, you need not worry about moisture (saliva) contamination. The varnish sets quickly.

### **Post-application Instructions**

- The child should eat at a soft, non-abrasive diet for the rest of the day.
- Do not brush or floss the child's teeth until the next morning.
- It is normal for the teeth to appear dull and yellow until they are brushed

### **Remember**

1. Even though the child may fuss, the varnish application is not unpleasant.
2. Tell the parent that the teeth will not be white and shiny until the next day.

### **Fluoride Varnish Protocol**

1. Low Risk Children -- Repeat application once every six months
2. High Risk Children -- Repeat the application once every three months

### **Fluoride Varnish Ordering Information**

1. **Cavity Shield** (5% NaF in a natural colophonium resin)
  - Available in a unit-dose with a built in applicator.
  - Omni Products at 1-800-445-3386
2. **Duraphat** (5% NaF in a natural colophonium resin)
  - Colgate Oral Pharmaceuticals at 1-800-225-3756 or 1-800-2-COLGATE
3. **Durafluor** (5% NaF in a natural colophonium resin)
  - Medicom at 1-800-435-9267

# Fluoride Varnish Information for Providers

## Why do we recommend putting fluoride varnish on children's teeth?

Tooth decay is one of the most common preventable diseases seen in children. Children as young as 12-18 months can get cavities. Cavities in baby teeth can cause pain, is unsightly, can cause economic hardships for families and can prevent children from being able to eat, speak, sleep and learn properly. Children do not lose all their baby teeth until they are about 11 or 12 years old.

## What is fluoride varnish?

Fluoride varnish is a protective coating that is painted on teeth to help prevent new cavities and to help stop cavities that have already started.

## Is fluoride varnish safe?

Yes, fluoride varnish can be used on babies from the time they have their first teeth. Only a very small amount of fluoride varnish is used. This method of providing fluoride to teeth has been used in Europe for more than 25 years. The FDA has approved varnishes for off-label use. Because the clinical evidence of effectiveness and safety is so convincing, the off-label use of these varnishes as caries preventive agents does not involve a risk of liability<sup>12</sup>.

## How is it put on the teeth?

The varnish is painted on the teeth. It is quick and easy to apply and does not have a bad taste. There is no pain, but your child may cry just because babies and children don't like having things put in their mouths especially by people they don't know! Your child's teeth will be yellow after the fluoride varnish is painted on, but the yellow color will come off when you brush your child's teeth tomorrow.

## How long does the fluoride last?

The fluoride coating will work best if it is painted on the teeth 3-4 times a year.

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<sup>1</sup> Berlin CM, May DG, Notterman DA. American Academy of Pediatrics Committee on Drugs. Unapproved uses of approved drugs: the physician, the package insert, and the Food and Drug Administration. *Pediatr* 1996;98:143-5.

<sup>2</sup> Cote CJ, Kauffman RE, Troendle GJ, Lambert GH. Is the "therapeutic orphan" about to be adopted? (commentary). *Pediatr* 1996;98:118-22.

## Fluoride Varnish Information for Caregivers

### Why do we recommend putting fluoride varnish on children's teeth?

Tooth decay is one of the most common avoidable diseases seen in children. Children as young as 12-18 months can get cavities. Cavities in baby teeth can cause pain and even stop children from being able to eat, speak, sleep and learn properly. Children do not lose all their baby teeth until they are about 11 or 12 years old.

### What is fluoride varnish?

Fluoride varnish is a protective coating that is painted on teeth to help prevent new cavities and to help stop cavities that have already started.

Fluoride varnish is an easy, effective, and safe way to help protect your child's teeth and prevent cavities. The varnish is painted on your child's teeth.

### Is fluoride varnish safe?

Yes, the coating can be used on babies from the time they have their first teeth. Only a very small amount of the coating is used. This way of placing fluoride on teeth has been used in Europe for more than 30 years. In the United States, the FDA approved its use as a cavity liner and desensitizing agent. However, one of the most promising uses for fluoride varnish is in the prevention of tooth decay. The American Dental Association approves fluoride varnish.

### How is it put on the teeth?

The coating is painted on the teeth. It is quick and easy to apply and does not have a bad taste. There is no pain, but your child may cry just because babies and children don't like having things put in their mouths especially by people they don't know! *Your child's teeth will be yellow after the fluoride varnish is painted on, but the yellow color will come off when you brush your child's teeth tomorrow.*

### How long does the fluoride last?

The fluoride coating will work best if it is painted on the teeth 2-4 times a year.

### **Baby Teeth are Important! Don't Delay – Prevent Decay**

*Remember, do not clean your child's teeth today and do not give them hard or sticky foods. Start cleaning your child's teeth tomorrow morning. The yellow color will come off when you brush your child's teeth.*

