

**State of Tennessee Department of Health  
Division of Community Health Services  
Oral Health Services**

# **FLUORIDE VARNISH GUIDE**

**Provider Information  
Advantages  
Application Protocol  
Information for Caregivers**

Adapted from materials developed by the  
State of Nevada  
Department of Human Resources  
Health Division  
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## **Advantages of Fluoride Varnish**

- Fluoride is the single most effective tool we have to prevent dental cavities.
- Does not require special dental equipment.
- It is an inexpensive preventive measure.
- Does not require a professional dental cleaning prior to application.
- Is easy to apply.
- Sets 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.
- Placement requires minimal training.
- Nurses and physicians are able to apply the varnish after an oral screening

# Fluoride Varnish Information for Providers

## What is Fluoride Varnish?

Fluoride varnish is a topical fluoride used to prevent tooth decay.

## How does Fluoride Varnish work?

Fluoride in varnish enters the tooth enamel and makes the tooth hard. It prevents new cavities and slows down or stops decay from getting worse. If tooth decay is just starting, it repairs the tooth.

## 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 months can get cavities. Cavities in children's teeth can cause pain and can prevent children from being able to eat, speak, sleep and learn properly. Most children do not lose all their baby teeth until they are about 11 or 12 years old.

## Is Fluoride Varnish safe?

Yes, fluoride varnish is safe. It can be used on babies from the time they have their first teeth. Only a very small amount of fluoride varnish is painted onto the teeth with a small brush. The varnish sets as soon as it comes in contact with saliva.

## How is Fluoride Varnish applied?

A small piece of gauze is used to clean and dry the teeth. The varnish is painted onto the front, back, top, and bottom of the teeth, in a thin layer, with a tiny brush. It forms a sticky covering over the tooth and becomes hard as soon as saliva in the mouth touches it. It takes 2 minutes to varnish the teeth.

## Will Fluoride Varnish make the teeth look different?

Some brands of fluoride varnish coat the teeth with a yellow film. Other brands are white and may make the teeth look dull. This is normal and does not hurt the teeth. When the varnish comes off the next morning when the teeth are brushed, the teeth will be white and shiny.

## How often should Fluoride Varnish be applied?

Fluoride varnish can be applied up to 4 times per year or every 3 months. Studies show that children who get fluoride varnish every 3 months have fewer cavities than those who get it less often or not at all. Make sure to check if the child receives fluoride varnish applications from another provider.

## Why is the Nurse or Physician applying Fluoride Varnish?

Very young children usually do not see a dentist unless there is a problem. Yet they will see a doctor 11 times for check-ups and shots by the time they are three. Dental health is an important part of the total health of your child.

# 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 cariogenic snacks/drinks
- 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

Low risk children who consume optimally fluoridated water or receive routine fluoride treatments through a dental office.

# Fluoride Varnish Cautions

## Contraindications:

-  Ulcerative gingivitis and stomatitis (trench mouth)
  
-  Known allergies or reactions to colophony (Rosin)
  - Rosin is sap or sticky substance that comes from pine trees.
  - Found in cosmetics, adhesives, medicines, and chewing gum
  
-  Professional fluoride application within the past 3 months

## 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 at least five 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

- Advise the parent that the child's teeth may become discolored temporarily, if the fluoride varnish has a slight tinge.
- Tell the parent that the varnish can be brushed off the following day.

## Materials

- Disposable gloves
- Gauze sponges (2 x 2)
- Fluoride varnish – single use application with disposable brush

## Position the Child

For an infant

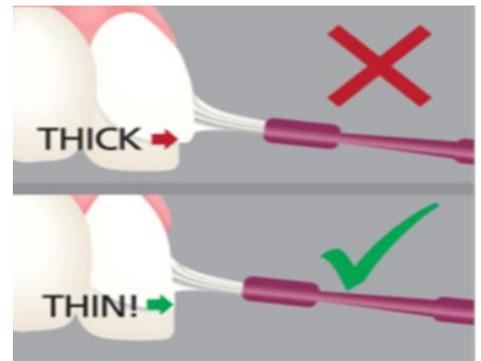
- Place the child on the caregiver's lap, facing the caregiver and the child's legs around the caregiver's waist. Position yourself knee-to-knee with the caregiver and gently lower the child's head onto your lap, treating the child from behind the head.
- Or, place the infant on an exam table and work 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**.
- Once the varnish is applied, you need not worry about moisture (saliva) contamination. The varnish sets quickly.



## Post-application Instructions

- Patient can leave immediately after application
- Do not brush or floss the child's teeth for at least 4 hours, preferably 24 hours
- Avoid hot drinks and products containing alcohol (beverages, oral rinses) for 4 hours

## **Remember**

1. Even though the child may fuss, the varnish application is not unpleasant.
2. Tell the parent that the teeth will return to normal after the varnish is removed.

## **Fluoride Varnish Protocol**

1. Low Risk Children – repeat application once every six months
2. High Risk Children – that do not have a dental home, does not receive optimally fluoridated water, and show signs of visible decay-- repeat the application once every three months



## Fluoride Varnish Information for Caregivers

### 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.

### Is fluoride varnish safe?

Yes, fluoride varnish is safe. It can be used on babies from the time they have their first teeth. Only a very small amount of fluoride varnish is painted onto the teeth with a small brush. The varnish sets as soon as it comes in contact with saliva. The American Dental Association approves and recommends fluoride varnish.

### 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 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.

### 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 may be slightly stained after the fluoride varnish is painted on, but the color will come off when you brush your child's teeth.*



### How often should my child get Fluoride Varnish?

For children at a high risk of dental cavities fluoride varnish should be applied 4 times per year or every 3 months.

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

*Remember, do not clean your child's teeth for at least 4 hours, preferably wait until tomorrow to brush your child's teeth. Start cleaning your child's teeth tomorrow morning.*

