

# Fluoride Varnish: A New Opportunity to Help Prevent Tooth Decay in Young Children

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Health professionals can provide a valuable service by performing an oral health risk assessment and oral screening, assuring adequate use of fluorides (including prescribing dietary fluoride supplements if indicated), demonstrating toothbrushing, providing anticipatory guidance and referring children for dental examinations and care. Now you can also perform a simple preventive procedure for children in your offices, clinics or other community-based settings and be reimbursed by Medi-Cal.

## What is Fluoride Varnish?

Fluorides have been used for many years to help prevent dental decay. Today, most dental professionals apply fluoride in their offices as a foam, gel or varnish. Fluoride varnish (5% sodium fluoride) has been widely used in Europe for several decades and its use is increasing in the United States. Varnish comes in tubes for multiple applications using a cotton swab or as prepackaged single doses with a small disposable applicator brush. Currently four types are available for use in the United States:

1. Duraphat®: <http://www.colgateprofessional.com/app/cop/jsp/products/productHome.jsp?prodcode=011400100> (multi-use tube)
2. Duraflo®: <http://www.medicom.com/faq.ch2> (available in unit-dose package)
3. CavityShield®: <http://www.omniipharma.com/cavityshield.asp> (available in unit-dose package)
4. VarnishAmerica™: <http://www.medicalproductslaboratories.com/products/varnishamerica/varnishamerica.html> (available in unit-dose package)

## Which Children Would Most Benefit From Fluoride Varnish?

Fluoride varnish is not a substitute for fluoridated water or toothpaste, but provides an

average added benefit of 38% for children at moderate to high risk for dental decay. Risk factors include insufficient dietary fluoride, high-carbohydrate diets, caretakers who transmit cariogenic bacteria to their children via saliva, areas of tooth decalcification, reduced salivary flow and poor oral hygiene. The younger the child is when the varnish is applied to the primary teeth, the better—usually as soon as the front teeth erupt. See information on risk assessment on the First Smiles website at <http://www.first5oralhealth.org>.

## How is Fluoride Varnish Different From Other Professionally Applied Fluorides?

Fluoride varnish offers several advantages:

1. Varnish now comes in child-friendly flavors and is tolerated by infants, toddlers and developmentally disabled children.
2. Providers find it easy to use and fast to apply. Fluoride varnish can be swabbed directly on the teeth in less than three minutes and sets within a minute of contact with saliva.
3. Fluoride varnish is safe. Only a small amount is used and less is swallowed.
4. It can be applied in any setting and does not require dental equipment or instruments.

## Who Can Apply Fluoride Varnish in California?

Dental professionals are not the only health professionals who can apply fluoride varnish. The Medical Board of California has stated that nothing in the Medical Practice Act precludes application of fluoride varnish by a physician, who may also delegate the procedure to a nurse or medical assistant.

## Does Medi-Cal Reimburse Medical Providers for Applying Fluoride Varnish?

Medi-Cal children have higher rates of tooth decay and less access to dental care than other children in the state. Early screening and preventive care by health professionals can help to reduce this disparity.

Medi-Cal will now reimburse medical professionals \$18 per fluoride varnish application (procedure code D1203) for up to three applications in a 12-month period for children less than six years of age. Providers can also bill for an office visit if the procedure is done at a separate visit (i.e., no other procedure is provided at that office visit). If a fluoride varnish application is provided in conjunction with a CHDP health assessment visit, no additional charge for an office visit will be covered. Currently, reimbursement is limited to fee-for-service medical providers but procedures for claiming by providers in managed care plans and in Healthy Families are under review. For



more details on billing, view the following Medi-Cal Update, Part 2, Billing and Policy, May 2006, Bulletin 382.

## How is Fluoride Varnish Applied?

Fluoride varnish is most easily applied to the teeth of infants and toddlers in the “knee-to-knee” position, with the parent sitting in one chair and the clinician in another. This allows better access and control of the head by the clinician, and the parent can help with communication. The procedure can also be done on an exam table.

Remove plaque and food debris from the teeth with a toothbrush, cotton gauze, or a cotton roll. Don't excessively dry the teeth because varnish needs saliva to set properly. Using a toothbrush promotes demonstration and discussion of tooth brushing with the caregiver and makes sure the child has a child-size brush. Toothbrushes purchased in bulk are an inexpensive way to promote good oral health practices at home.

Paint the varnish on all sides of the teeth as a thin film; the slight yellow or tooth-colored tint aids in seeing how much is applied. The child can leave immediately after the application; the layer of varnish stays on the teeth for six-eight hours.

## What Counseling Is Given to Parents?

Make sure parents understand that the slight coloration will be gone when the varnish wears off, usually after a day or two. The child shouldn't eat or drink anything for 30-60 minutes, and ask the parent to refrain from brushing the child's teeth until the following morning. Finish the appointment by summarizing your findings, anticipatory guidance and recommendations for follow-up. Varnish applications are most effective if done 2-3 times per year, which can be coordinated with other well child visits or immunizations.

## REFERENCES

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- Marinho VCC, Higgins JPT, Logan S, et al. Fluoride varnishes for preventing dental caries in children and adolescents (Cochrane Review). Available at: <http://www.cochrane.org/cochrane/revabstr/AB002279.htm>.
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