

Fluoride Varnish Applications by Pediatric Primary Care Providers

Connecticut Dental Health Partnership

From the First Tooth

Connecticut Chapter of the American Academy of Pediatrics CT-AAP)

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The United States Preventive Services Task Force (USPSTF) recommends that primary care clinicians apply fluoride varnish to the primary teeth of all infants and children starting at the age of primary tooth eruption. (Prevention of Dental Caries in Children From Birth Through Age 5 Years: US Preventive Services Task Force Recommendation Statement; Virginia A. Moyer, MD, MPH, on behalf of the US Preventive Services Task Force; PEDIATRICS Volume 133, Number 5, May 2014;

<https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/dental-caries-in-children-from-birth-through-age-5-years-screening> accessed 3/2/2017)

The USPSTF concludes that there is limited evidence about the harms associated with fluoride varnish or other preventive interventions for dental caries, but that these risks are likely small.

The application of fluoride varnish is included in Bright Futures/American Academy of Pediatrics (AAP) Recommendations for Preventive Pediatric Health Care. The complete Clinical Report: Fluoride Use in Caries Prevention in the Primary Care Setting is attached or can be found at

<http://pediatrics.aappublications.org/content/early/2014/08/19/peds.2014-1699>.

The occasional application of fluoride varnish is safe according to a study published in *Pediatrics*, the journal of the American Academy of Pediatrics. According to the study, blood plasma level increase in toddlers from the application of fluoride varnish dissipates within a few hours of the application and its peak level is about one-third of the minimum level to avoid mild fluorosis. The retained fluoride level was 253 times lower than the acute toxic dose. (Pharmacokinetics of Fluoride in Toddlers After Application of 5% Sodium Fluoride Dental Varnish; Peter Milgrom, Donald M. Taves, Amy S. Kim, Gene E. Watson and Jeremy A. Horst; *Pediatrics*, originally published online August 18, 2014; DOI: 10.1542/peds.2013-3501)

Another analysis found that “Fluoride varnish was not associated with treatment-related adverse events in young children. Our findings support its safety as an effective prevention intervention for caries in young children.” (Absence of Fluoride Varnish–Related Adverse Events in Caries Prevention Trials in Young Children, United States; Garcia RI, Gregorich SE, Ramos-Gomez F, Braun PA, Wilson A, Albino J, et al.; *Prev Chronic Dis* 2017;14:160372.

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https://www.cdc.gov/pcd/issues/2017/16_0372.htm accessed 3/2/2017)