



Photo courtesy Daniel Raether, D.D.S.

SILVER DIAMINE FLUORIDE GUIDELINES

What is Silver Diamine Fluoride?

Silver diamine fluoride (SDF) is an inexpensive topical medicament used extensively in other countries, and more recently in the US, to treat dental caries across the age spectrum. No other intervention approaches the ease of application and efficacy. (UCSF Silver Caries Arrest Comm., 2016). For more information, review the Association of State and Territorial Dental Directors (2017) Silver diamine fluoride (SDF) fact sheet. Available at <https://www.astdd.org/www/docs/sdf-fact-sheet-09-07-2017.pdf>.

SDF Application is NOT a Definitive Procedure

When SDF is applied to a carious lesion, the product turns the decalcified and carious portions of the lesion black. SDF is successful in 76 percent of the lesions to which it is applied, but it does require reevaluation and reapplication at set intervals on teeth that are not restored (James D. Nickman, 2018).

Who Can Apply SDF?

According to the rules and as governed by the State of West Virginia dental practice acts, dentists, registered dental hygienists, and dental assistants holding an expanded duties license are permitted to apply SDF under the same authorization or restriction as other topical fluorides.

Can RDHs apply SDF in public health and general supervision settings?

Yes, RDHs can apply SDF in both public health and general supervision settings. In the public health setting, application of SDF should be included within the collaborative agreement between the RDH and the supervising dentist.

Required and/or recommended training

There are no continuing education courses required for SDF application. However, a number of training videos can be found on-line.

SDF is used to arrest cavitated lesions

SDF may turn decayed areas black

SDF helps patients with access to care issues

SDF is a painless treatment method

SDF is not fluoride varnish

Indications for Use in Private and Public Health Settings

Dental providers should consider whether SDF application is appropriate for the individual. SDF is indicated in treating caries in people who are unable to access or tolerate dental treatment or have behavioral or medical management issues. SDF is a painless method used without local anesthesia (ASTDD, 2017). It should only be used on active lesions without pulpal involvement. Treatment with SDF may require more than one application and does not eliminate the need for restorations to repair function or esthetics. In instances where the patient is not likely to return for subsequent treatment, the referral and follow-up process becomes extremely important. Development of referral protocols for SDF is recommended.

Separate Consent Needed for SDF

A separate consent should be obtained before applying SDF. Obtaining parent/guardian consent may not always be in person, but rather through electronic or paper forms. It is important to communicate the potential outcomes regarding application of SDF including documenting the risks and benefits of all treatment options, including no treatment. The consent should include specifics on changes in color (specifically darkening of the active lesions), complications, failure to arrest, and the possible need for definitive care. The consent **MUST** include color pictures of possible changes, and the possibility of multiple applications. **The SDF consent may be included on another patient registration or consent form, but the consent for SDF must be separate.** A sample consent form for SDF can be found at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4778976/figure/F4/>

West Virginia Medicaid Reimbursement

Procedure code D1354 Interim caries arresting medicament application – per tooth (Conservative treatment of an active, non-symptomatic carious lesion by topical application of a caries arresting or inhibiting medicament and without mechanical removal of sound tooth structure.) is a covered benefit for Medicaid beneficiaries under the age of 21. Procedure code D1354 is billable two per tooth, per year, and “Per Quadrant” (UR, UL, LL, LR) must be included on claim form for payment consideration. Refer to the West Virginia Medicaid Provider Manual for more information at: <https://dhhr.wv.gov/bms/Pages/Chapter-505-Dental-Services-.aspx>

WV Children’s Health Insurance Program (CHIP) Reimbursement

Procedure code D1354 Interim caries arresting medicament application is a covered benefit for CHIP beneficiaries under the age of 21. Procedure code D1354 is billable two per tooth, per year, and tooth numbers (1-32 or A-T) must be documented on claim form for payment consideration. Refer to the WV Children’s Health Insurance Program Dental Provider Guide for more information at: <https://chip.wv.gov/providers/Pages/default.aspx> .

CONTRAINDICATIONS

DO NOT USE ON

- **People with allergies to silver, or other heavy-metal ions**
- **Teeth evident with pulpitis or pulp necrosis**
- **People who have**
 - **oral ulcerations**
 - **stomatitis**
 - **ulcerative gingivitis**

POSSIBLE RISK

- **Contact with skin or gum tissue may stain white or brown but will disappear within one to four weeks**



AMERICAN DENTAL ASSOCIATION– DENTAL PROCEDURE CODES CDT 2020

D1354 Interim Caries arresting medicament application–per tooth:

- Conservative treatment of an active, non-symptomatic carious lesion by topical application of a caries arresting or inhibiting medicament and without mechanical removal of sound tooth structure.