

## Salud Family Health Centers Standard Operating Procedure and Collaborative Agreement

Document Title:	Silver Diamine Fluoride SOP	Index Number:	
Major Business Process:	Dental	Related Policy:	
Sub-Process:	Process to apply Silver Diamine Fluoride	Effective Date:	12.01.2016
Approved by:	Chief Dental Officer	Approved Date:	12.01.2016
Primary Contact:	Chief Dental Officer	Last Review Date:	11.8.2018

### Purpose of Policy:

To provide guidance to dental providers on the use of silver diamine fluoride and to outline the details of the Collaborative Agreement between supervising dentists and hygienists to administer SDF under direct, indirect or telehealth supervision.

### Background:

Silver diamine fluoride (SDF) is a clear liquid that can help stop tooth decay. SDF can postpone the need for traditional dental treatment (fillings, crowns, nerve therapy) and delay/possibly eliminate the need for sedation/general anesthesia to complete dental treatment. Although SDF has been used in other countries for decades, it was just introduced into the United States in 2014, when the US Food and Drug Administration approved the use of SDF to treat hypersensitivity in adults. At this time, 38% SDF solution is the only concentration available in the United States.

With the passage of Colorado House Bill 1045, dental hygienists in Colorado gained the ability to apply SDF on patients through cooperation with a supervising dentists.

Minimum qualifications for Dental Hygienist to Affiliate in a Collaborative Agreement to Apply SDF under HB 1045:

- have a license in good standing,
- be covered by professional liability insurance,
- have complete training on the use and limitations of SDF, and
- have a collaborative agreement with a supervising dentist that outlines treatment protocols, restrictions or limitations, and follow up and referral mechanisms.

A dental hygienist can enter into a collaborative agreement with a licensed dentist which designates authorization for the services provided by the dental hygienist regarding the application of SDF.

### Areas of Responsibility:

- Dentists
- Dental Hygienists

### Procedure:

- Indications:
  - Patients at an extreme risk for caries, from severe early childhood caries to severe adult root caries
  - Patients with complex behavioral or medical management issues
  - Patients with limited access to care
  - Patients who live in institutions like nursing homes
  - Patients who require treatment under general anesthesia. SDF may postpone (and in some cases eliminate) the need for treatment in an operating room.
  - Patients with difficult teeth to restore (posterior teeth needing restorations, failing or compromised restorations)
  - Patients with sensitivity
- Contraindications:
  - Allergy to silver (does not include patients with allergy to nickel or other trace metals)
  - Patients with ulcerative gingivitis or stomatitis
  - Not indicated for use in a tooth with pulpal involvement
- Maximum Dose: 25 uL (1 drop)/10kg per treatment visit
- Informed Consent
  - Because silver diamine fluoride is new in the U.S., it is important to communicate effectively to inform patients, parents and caregivers. We must ensure awareness of the expected change in color of the dentin as the decay arrests, likelihood of reapplication, and contraindications in the presence of silver allergy and stomatitis.
- Instructions for Use
  - Place plastic coverings on exposed hard surfaces of operatory
  - Educate patient or guardian regarding SDF and obtain informed consent.
  - Wear standard personal protective equipment (PPE), and make sure the patient is wearing safety glasses and plastic-lined bib.

- Apply a protective coating (i.e. petroleum jelly) to the proximal gingival tissue with a cotton applicator for safety. This could help to prevent staining of the gingiva if the silver diamine fluoride touches it.
- Dispense one to two drops of silver diamine fluoride into a plastic dappen dish, depending on how many teeth you are treating. One drop will treat five surfaces.
- Clean teeth (gross plaque removed)
- Dry affected tooth surfaces with air or a cotton swab. Use a saliva ejector when possible.
- Isolate the tongue and cheek from the affected teeth using gauze or cotton rolls. Absorbent triangles work well. Dry the tooth.
- Immerse a microbrush into the solution in your dappen dish and remove any excess on the side of the well. This is best done with a dental assistant to avoid spilling.
- Apply SDF directly onto the affected tooth surface(s) with the microbrush.
- Allow the silver diamine fluoride to absorb for one minute.
- Remove the excess with gauze, a cotton roll, or a cotton-tip applicator.
- Use air to dry the SDF on the teeth
- Place fluoride varnish on top of the SDF to allow more absorption time
- Place all used cotton, the microbrush, and the dappen dish into a glove so it can't drip on any surface or skin. Dispose of it in a trash can.
  
- **Follow-up**
  - Estimations of SDF effectiveness in arresting dental caries lesions range from 47 to 90 percent with one-time application depending on size of the cavity and tooth location. Anterior teeth have higher rates of arrest than posterior teeth. Therefore, follow-up for evaluation of caries arrest is advisable.
    - Follow-up at 2-4 weeks after initial treatment to check the arrest of the lesions treated.
    - Reapplication of SDF may be indicated if the treated lesions do not appear arrested (dark and hard). Additional SDF can be applied at recall appointments as needed, based on the color and hardness of the lesion or evidence of lesion progression.
    - When a Salud dentist authorizes a hygienist to place SDF, they are also authorizing the hygienist to reapply at follow-up.
    - Carious lesions can be restored after treatment with SDF.
    - When lesions are not restored after SDF therapy, bi-annual re-application shows increased caries arrest rate versus a single application.
  
- **Billing**
  - Use code D1354: Interim caries arresting medicament application;

## Collaborative Agreement

Notice of supervising dentist and contact form attached below.

**Annual Agreement Review** At least once a year or upon change, this Agreement must be reviewed and signed by the collaborating dentist and dental hygienist named in this Agreement. Copies of the original and updated agreements must be maintained by the Dentist, the Dental Hygienist, and the Dental Director.

I, \_\_\_\_\_, RDH, agree to serve as a Collaborative Dental Hygienist with \_\_\_\_\_, DDS/DMD and agree to follow the attached protocols pertaining to my dental hygiene services rendered with the application of Silver Diamine Fluoride.

**TO BE COMPLETED BY THE AFFILIATED DENTIST ENGAGED IN A COLLABORTIVE AGREEMENT WITH A COLORADO LICENSED DENTAL HYGIENIST**

Name of Collaborating Dentist:

\_\_\_\_\_

Signature: \_\_\_\_\_ Date:

\_\_\_\_\_

CO License Number: \_\_\_\_\_

Name of Dental Hygienist:

\_\_\_\_\_

Signature: \_\_\_\_\_ Date:

\_\_\_\_\_

CO License Number: \_\_\_\_\_