



Silver Diamine Fluoride (SDF)

38% Silver Diamine Fluoride is an FDA-approved liquid antibiotic that helps with:

- **active tooth decay**
- **tooth sensitivity**

It does not require numbing or drilling.



BEFORE



AFTER

Why do we use this medicine?

SDF is a liquid antibiotic that can be applied to teeth with certain kinds of cavities or sensitivity. SDF kills the bacteria causing the cavity and strengthens that part of the tooth. It makes the cavity hard like concrete so the cavity does not get bigger and the tooth becomes less sensitive. Using SDF “buys time” to fix the cavities – especially if your child is young or anxious and cannot cooperate for fillings or crowns.

How do we do the treatment?

1. The dentist will dry the affected tooth or teeth.
2. The dentist will paint a small drop of SDF on the tooth with a small brush.
3. The dentist will allow SDF to dry for up to one minute.
4. The dentist will rinse the area or apply fluoride varnish or foam on top of the SDF.
5. The dentist will re-evaluate the tooth in about a month and then may re-apply this medicine to the teeth in the dental clinic every 6 to 12 months after that.

Things you should know:

- This medicine will stain the cavity dark black. The healthy parts of the tooth will not be stained. **The black color indicates that the SDF is working.** Stained areas can later be covered with fillings or crowns. Tooth-colored fillings that are exposed to SDF may change color. These may be able to be polished off.
- This medicine will not put back tooth structure that has been lost because of the cavity. Thus, if your child has a hole in the tooth, we may still recommend a filling or crown (cap) for the tooth.
- Not all tooth decay can be treated with SDF, and tooth decay treated with SDF is not guaranteed to stop. It is possible that multiple applications of SDF may be required. Decay that continues to progress will require further treatment with SDF and/or fillings, crowns, root canal treatment or extraction.
- Tell other doctors or dentists treating your child that SDF has been used. They may wonder why the cavities are stained black.
- We do not use SDF in patients with a silver allergy or with painful sores or cuts anywhere in the mouth.
- If SDF accidentally gets on the skin, tongue, gums, cheek, or lip, you will see a stain that causes no harm, like a temporary tattoo. This stain should disappear on its own within one to three weeks.
- SDF may cause a temporary metallic taste. This is why we rinse or apply fluoride varnish afterwards.
- Additional side effects are possible. Please let us know if you have concerns.

Alternatives to SDF include:

- No treatment, which may lead to progression of tooth decay.
- Alternative treatments depend on location and extent of tooth decay and may include fluoride varnish, fillings/crowns, extraction, or referral for advanced treatment.