What is silver diamine fluoride?

Silver diamine fluoride (SDF) is a clear liquid containing silver and fluoride. The silver in SDF kills bacteria and the fluoride helps strengthen tooth enamel. SDF is painted onto teeth to stop cavities from getting worse, help with sensitive teeth, and keep teeth healthy.

Is SDF safe?

Yes. No major health risks or serious side effects associated with SDF have ever been reported. While SDF is newer in the United States (approved in 2014), SDF has been used in other countries for more than 80 years.

How is SDF applied?

SDF is applied in a dental setting by a dental professional. The dental professional will dry the tooth and paint SDF on it, allowing time for it to soak into the tooth’s surface. SDF application does not require the dental professional to use drills or needles and is a quick procedure, usually taking only a few minutes. The dentist will re-evaluate the tooth at each dental visit and may re-apply SDF every six to 12 months, as needed.

What are the benefits of SDF?

Treatment is painless with no need for drills or needles.

SDF can be applied in one visit as soon as cavities are found.

SDF can offer an alternative to fillings and crowns for patients who can’t tolerate more complicated dental procedures.

SDF placement is quick. It generally only takes a few minutes to apply.

SDF is affordable and is often covered by both public and private dental insurance companies.

What are the disadvantages of SDF?

The main disadvantage of SDF is the way it looks. SDF stains the cavity black, and the stain is permanent (photos below). The healthy parts of the tooth will not be stained. The black color indicates that the SDF is working. The appearance of SDF is generally more widely accepted by patients, and the parents of children, when it’s on back teeth. Sometimes a tooth-colored material can be placed over the darkened area of the tooth to improve the tooth’s appearance.
Resources Used:


