

# Treating tooth decay

There is bacteria in your mouth that forms acid when you eat or drink. This acid can break down the outer surface of teeth, causing tooth decay.

Many children develop tooth decay in their baby teeth. In children, this decay often affects the **enamel (e-NAM-uhl)**, the hard outer surface of the teeth that you can see. Older adults also are at higher risk than other adults for decay. In older adults, the decay often affects the tooth root, the part of the tooth below the gumline. This is because, as many adults age, the gums pull away from the teeth, exposing the roots.



Decay in between teeth  
(Interproximal decay)



Root decay  
(Radicular decay)

Tooth decay can be painful, and, if left untreated, it can cause a hole to form in the tooth or tooth root. This can lead to an infection, which can spread to other parts of the mouth, and may even cause tooth loss.

When caught early, tooth decay can be treated with various fluoride products (for example toothpastes, mouthrinses, etc.), filling materials or a product called **silver diamine fluoride (DYE-uh-mean FLOOR-eyed) (SDF)**. SDF is a colorless liquid that can be used to slow or stop tooth decay.

## In this brochure:

- What silver diamine fluoride (SDF) is and who can benefit from it
- Why SDF can be helpful for young children, the elderly and others who have trouble sitting for lengthy treatment
- The benefits and drawbacks of SDF, including a black staining on treated decay

## ADA Healthy Smile Tips

- Brush your teeth twice a day with a fluoride toothpaste.
- Clean between your teeth daily.
- Eat a healthy diet that limits sugary beverages and snacks.
- See your dentist regularly for prevention and treatment of oral disease.

For more information about taking care of your mouth and teeth, visit **MouthHealthy.org**, the ADA's website just for patients.



*SDF pre-treatment and post-treatment pictures are courtesy of Travis Nelson, DDS, MSD, MPH.*

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Dental Treatment

# Silver Diamine Fluoride (SDF)



**ADA** American Dental Association®

America's leading advocate for oral health

# What is SDF?

**Silver diamine fluoride (SDF)** is a liquid that can be easily applied in the dental office. Your dental care provider can brush SDF right over tooth decay without using a dental drill or local anesthesia. The silver in SDF kills the germs that cause tooth decay. SDF also has fluoride in it that helps prevent, slow down or stop decay.

SDF also can be used to help relieve tooth sensitivity and treat tooth decay on roots that may become exposed in adults.

Many people can benefit from SDF, but it is especially helpful for those who have trouble sitting for long periods of time to allow the dentist to place a traditional filling.

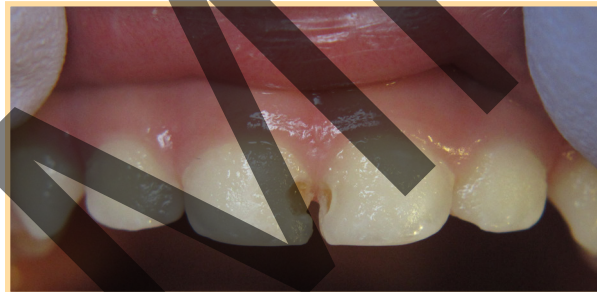
People who may benefit from SDF include:

- Young children
- People with mental or physical disabilities
- Elderly adults
- People who cannot use sedation during treatment

In addition, SDF is less expensive than other cavity treatment options and easy to apply.

*Your dental care provider can brush SDF right over tooth decay without using a dental drill or local anesthesia.*

SDF does, however, have some drawbacks—the main one being a black staining of the treated decay. Despite the staining, **it is safe to use** and does not stain the untreated, healthy surfaces of the tooth, surrounding teeth or permanent teeth that have not yet come in. This staining of the treated decay does not fade over time. However, the treated decay can always be treated with a cosmetic filling later on if desired. The gums next to the decay may also develop a temporary stain or irritation, but this is rare. Some people also may experience a temporary metallic taste during treatment. SDF needs to be reapplied about every six months for continued benefit in stopping decay.



Decay on baby teeth



Decay after SDF is applied. SDF can create black staining on teeth. Despite the staining, **it is safe to use** and does not stain the untreated, healthy surfaces of the tooth, surrounding teeth or permanent teeth that have not yet come in.



## Benefits of SDF

SDF carries a number of benefits. It is:

- Easy for the dental professional to apply
- Less expensive
- Pain free, even without local anesthesia or sedation
- Helpful in treating young children, elderly patients or patients with mental or physical disabilities, who may have trouble sitting still during longer procedures