Silver Diamine Fluoride Facts

SDF treats tooth decay without anesthesia, needles or drilling.
SDF is a brush-on liquid containing silver and fluoride that’s applied to dental decay. Silver kills the germs (bacteria) that cause decay and fluoride helps strengthen the tooth. It works best when there are multiple applications. SDF may not work on all cavities and sometimes, more dental work is needed. Both the American Dental Association and the American Academy of Pediatric Dentistry recommend SDF as a treatment for dental decay.

SDF turns the decayed area black.
The dark color means the SDF treatment is working to kill germs and protect the tooth. If needed, a dental provider may cover the black area with a white filling material. This is called SMART or silver modified atraumatic (no needles or drilling) restorative technique.

SDF can be used on anyone, but may be especially useful for:

- **Children:** It can be hard for young children to sit still in order to have cavities filled, which is why many end up at the hospital in the operating room and sedated (or “put under”) to get dental treatment. SDF can help prevent treatment in the OR because it can be applied without needles or drilling.
- **Older Vermonters and people with disabilities:** SDF can be applied in assisted living facilities, schools, and in community settings. This way, dental decay can be treated where people live rather than at a dental practice or hospital.

SDF has been cleared by the FDA.
The U.S. Food and Drug Administration (FDA) approved the use of SDF in 2015. In 2017, the FDA granted SDF “breakthrough therapy designation” to stop tooth decay. Some dental providers in Vermont use SDF now. SDF has been used in other countries for many years.

Medicaid covers SDF.
Vermont Medicaid (sometimes called Green Mountain Care or Dr. Dynasaur) covers SDF treatment for children and adults.

Not everyone can get SDF.
SDF cannot be used if:
- You are allergic to silver
- You have painful sores or raw areas in your mouth.

Each year about 400 Vermont children under age 6 undergo general anesthesia to treat dental decay. People with disabilities are also often treated in this manner. Silver Diamine Fluoride (SDF) is a safe, easy, and effective treatment alternative that can help stop decay and keep children and adults out of the hospital setting.

For more information:
Vermont Department of Health, Office of Oral Health — VTOralhealth@vermont.gov