



## Aerosol Safety in Response to COVID-19

Welcome Back! Your safety matters.

Dr. Hicks and the staff at Stafford Family Dental Care understand that SARS-CoV-2 safety and COVID-19 prevention are of the utmost importance. The following information is being provided to educate and reassure our patients about standard clinical sterilization and the additional aerosol<sup>1</sup> safety measures Dr. Hicks has implemented in response to that challenge.

### Disinfection and Sterilization



Figure 1. BioSonic ultrasonic disinfectant bath. Source: (Scott's Dental Supply, 2021)

**Barrier Protections.** Barrier protections are plastic covers that are used over light handles, headrests, mice, keyboards, x-ray buttons, sensors, etc. The barriers keep the amount of saliva and debris contamination to a minimum. This makes it easier to ensure thorough cleaning of commonly contacted surfaces after use.

**Surface Disinfection.** After a patient leaves a treatment room, all surfaces are cleaned with solutions that are effective against up to 100 microorganisms, including coronaviruses, TB, HIV, and MRSA.

**Ultrasonic and HYDRIM Disinfection.** All instruments that can be submerged in liquid are first subjected to a disinfectant bath cycle. For

this we use an ultrasonic bath, shown in Figure 1, or a HYDRIM instrument washer, shown in Figure 2. For more information about HYDRIM washers, click [here](#).



Figure 2. HYDRIM disinfectant instrument washer. Source: (SciCan, 2021)

### Autoclave and STATIM Sterilization.

Following disinfection, all instruments are steam sterilized in an autoclave, shown in Figure 3, or STATIM sterilizer before being reused. A STATIM, shown in Figure 4, uses less water and sterilizes small loads faster than an autoclave; learn more [here](#).



Figure 3. Midmark UltraClave™ instrument sterilizer. Source: (Dental Compare, 2021)

## Upgrades for Aerosol Safety



Figure 4. STATIM instrument sterilizer. Source: (Statim, 2021)

## Upgrades for Aerosol Safety

**Reme Halo® and UVC Scrubber.** A [Reme Halo](#) in-duct air purifier and UVC scrubber have been installed in the office HVAC system. These devices have been proven, “to safely remove the risks of airborne and surface bacteria, mold spores and viruses.” (RGF, 2020) The Reme Halo generates hydro-peroxide to clean the air, which recreates a method of air purification that occurs naturally in the earth’s atmosphere. For more information about hydro-peroxide, click [here](#).

**OCTOdent.** Each operatory is equipped with an [OCTOdent](#) aerosol suction unit, shown in Figure 5. These units have an aerosol capture cone at the end of a positional arm, internal UV light disinfection, and a HEPA filtration system.

The cone is placed adjacent to the patient’s mouth when procedures are performed that generate aerosols.

**ReLeaf™.** A [ReLeaf](#) high-power suction adapter system was installed in each of the hygiene treatment rooms. Typically, using the high-power suction system is not possible without an assistant. This system allows the dental hygienists to use the more powerful suction attachment, even without waiting for additional help.

**Butler Prophecy™.** Paste-free polishing is available with [Butler Prophecy](#) Prophecy Angles, which virtually eliminate splatter.

**DolphinPods™.** [DolphinPods](#) hypochlorous acid solution is being used as an adjunctive disinfectant to spray down clinicians’ gowns, lead x-ray shields, patient chairs, and is misted into the air after a patient leaves a treatment room. Hypochlorous acid is, “Bactericidal, Virucidal, Fungicidal (and) Kills 99.99% of Bacteria and Viruses in 1 Minute.” (Toppen Health, 2020)



Figure 5. OCTOdent aerosol capture system. Source: (OCTOdent, 2021)

## Rest Assured

We hope that you can now rest assured that because your safety matters, Dr. Hicks and the staff at Stafford Family Dental Care have provided and implemented every possible protection against COVID-19 for our patients and our team. We look forward to serving your dental needs soon, in an environment that is safer now more than ever.

## References

## References

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<sup>i</sup> Aerosol is defined as, “a suspension of fine solid or liquid particles in gas,” as in, “airborne transmission of infective viral particles.” (Merriam-Webster, 2020)