## **Dentistry During the COVID-19 Outbreak & Beyond**

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The recent outbreak of COVID-19 has prompted state dental boards to mandate that practices only treat dental emergencies. Dentists, amongst other healthcare professionals, generally work by a high moral and ethical code and quickly complied. For the safety of their patients and their team, dental practices across the nation temporarily closed or set limited hours. Patients that had scheduled appointments for restorative work and prophylactic care are just going to have to wait. Meanwhile, many dental team members were asked to stay home in an effort to comply with social distancing. In many cases, this has left the dentist alone to deal with any emergency patients. This is what I would like to really focus on – how does the dentist safely and effectively perform a much-needed procedure without the help of their dental assistant?

Dentists do not work alone for a reason – it is difficult and cumbersome! Imagine trying to do a large MODB composite on tooth #15 by yourself... you have your mirror for indirect vision and retraction in one hand, the handpiece in the other, and the HVE in another. Oh wait – you don't have a third hand! Not to mention the fourth hand you need for the air/water syringe to keep the mirror clear of water and debris. So, can doing a MODB composite on tooth #15 be done by a dentist who is working alone? Well sure, but at what cost?

As a dentist works alone, it would be nearly impossible to effectively suction in a way that eliminates the aerosols that are being emitted from the handpiece. And what about isolation? Can we really be sure that a dry field was maintained for superior bond strength? The dentist has now put themselves at risk for a potential respiratory disease and possibly placed an inferior composite in addition to taking up an extra 20 minutes of chair time.

Dental professionals should be aware of the invisible dangers which linger in the operatory. Aerosols created by high-speed handpieces, ultrasonic scalers, lasers, electrosurgery units, air polishers, prophy angles, and air/water syringes can create bioaerosols. These aerosols contain blood and saliva which can carry fungi, bacteria, and viruses. As a licensed dental assistant and dental professional like most of you who are reading this, I'm well aware of the risks aerosols create during dental procedures. This is why we wear our personal

protective equipment and use high-volume evacuation. But what I didn't know is aerosols can hang out in the operatory for up to 30 minutes after the procedure has been completed!

According to an article by Kandis Garland, RDH, MS in Dimensions of Dental Hygiene magazine, the droplets from the aerosol evaporate into droplet nuclei, which can become airborne again as dust particles. With that said, we can clearly see the need to reduce these airborne pathogens found in dental aerosols. Routinely, upon the completion of a procedure, gloves and masks are removed and the clinicians chat with their patients and review post-op instructions. Once the patient is dismissed, they return to turn over the room. I can assure you – most clinicians don't bother to put a mask back on and those nasty aerosols could still be hanging around, putting the clinician at risk for contracting an airborne/respiratory disease!

So what is the solution for dentists that are struggling to do four-handed dentistry with just two hands? Mr. Thirsty® One-Step. Mr. Thirsty® One-Step offers hands-free isolation and evacuation! Mr. Thirsty® One-Step provides a built-in bite block, tongue retraction, cheek and airway protection, all while providing high-volume evacuation, making it the perfect solution when having to work alone. Dentists can take comfort knowing that Mr. Thirsty® One-Step allows them to perform efficient, quality, and safe dental care, even in the absence of their assistant.



Stephen Harrel, DDS, a professor at the Baylor College of Dentistry, has stated that high-volume evacuation has been shown to significantly reduce airborne pathogens – up to 98%. He goes on to note that high-volume evacuation is a "mandatory infection control precaution" when using ultrasonic and high-speed handpieces. Mr. Thirsty® One-Step is always ready to assist and help reduce those airborne pathogens for both you and your patients' safety.

Mr. Thirsty<sup>®</sup> One-Step comes completely pre-assembled and is disposable, so there is no risk of cross-contamination. With no set up, cleaning, or maintenance, Mr. Thirsty<sup>®</sup> One-Step will save you time too!

A time and motion study found that utilizing Mr. Thirsty<sup>®</sup> One-Step can reduce chair time by up to 29 percent! For me and the thousands of Mr. Thirsty<sup>®</sup> One-Step users, it also makes sense to incorporate this device into everyday dentistry! Think about how much more efficient and productive practices could be if the dental assistant could do other tasks while the dentist preps a tooth! The assistant could be seeing a patient in

another treatment room, fabricating a night-guard, complete charting, doing a room turnover, sterilizing, and still make it back in time to help the dentist complete the procedure.

We need to keep our hygienists safe too. Most dental hygienists use an ultrasonic scaler on a regular basis, and I can guarantee that the majority are not utilizing high-volume evacuation to reduce aerosols. I sure can't blame them, as hygienists generally do not get an assistant. Trying to maneuver the HVE while scaling is not only difficult, it's just not practical. Mr. Thirsty<sup>®</sup> One-Step will not only help protect them from the harmful aerosols, but also help them become more efficient and reduce chair time! A hygienist will find that placing sealants will be easier and more effective with the outstanding isolation and evacuation that Mr. Thirsty<sup>®</sup> One-Step provides. I have placed dental sealants and tried to wrangle wiggly tongues while attempting to maintain a dry field. Whew! I wish I knew about Mr. Thirsty<sup>®</sup> One-Step when I was practicing.

We will get through this unprecedented time. Like we have heard so often during the COVID-19 crisis; we are all in this together. Whether the dentist is struggling while working alone on their emergency patients or the clinic is bustling to get caught up with a full schedule of patients, Zirc has your back – and an extra hand with Mr. Thirsty<sup>®</sup> One-Step!