

# **VIOLight Toothbrush Sanitizer**

## ***Information Report***

### **Did You Know...?**

- A number of studies suggest that oral health is associated with general health. Advanced gum disease has been linked to heart disease, diabetes, premature delivery in pregnant women, and stroke.
- Researchers have found more than 10,000,000 bacteria living on a single toothbrush.
- Tooth decay is caused by bacteria that can survive on toothbrushes.
- Viruses that cause colds, flu, and fever blisters can survive for many days on toothbrushes.
- Droplets produced by flushing toilets can harbor bacteria and viruses that can remain airborne long enough to settle on surfaces. Thus, a person could acquire an infection from an aerosol produced by a toilet.

### **The Problem**

*USA Today* Health Review for April 27, 2000 reported: “The most serious threat to your everyday health may be hanging in plain sight in your bathroom.”

- Influenza (the “flu”) virus, herpes simplex I, streptococci, staphylococci, yeasts, and the bacteria that cause gum disease, cavities, and even diarrheal illness can survive — some even thrive — in high numbers on toothbrushes.
- Some researchers have even found “biofilm” — colonies of breeding bacteria — on toothbrushes, and numbers as high as 100,000,000 microorganisms have been recovered from individual brushes.
- Because most people keep their toothbrushes in the bathroom, bacteria from the mouth isn’t the only contaminant. Flushing propels germs from the toilet into the air, where they can land on toothbrushes.
- Toothbrushes are usually stored together, so contact between family members’ toothbrushes can spread germs from one brush to another.
- Bacteria, molds, and fungi love moist environments, like the bathroom. They also do well in the dark, so the medicine cabinet provides an ideal environment for germs to survive and even multiply.
- Toothbrushes become infected some time between one week and one month after initial use. The ADA and most dentists recommend changing toothbrushes only every three to four months.

- Some sources report that most American are likely to change their toothbrushes only twice a year.

### **The Solution**

Ultraviolet — “UV” — light is a proven germicide.

- It kills fungi like yeasts and molds; disease-causing bacteria like strep, salmonella, and *E. coli*; and even some hearty viruses like influenza and hepatitis.

### **The Proof**

Numerous studies have shown ultraviolet light to be effective in killing germs on toothbrushes.

- UV toothbrush sanitizers have been reported to kill of bacteria, yeasts, and viruses.
- A study\* performed on the VIOLight Toothbrush Sanitizer by Dr. Philip Tierno, Jr., PhD, Director Clinical Microbiology and Immunology, Associate Professor, Departments of Microbiology and Pathology, New York University Medical Center, found that the VIOLight eliminated up to 99.9% of bacteria tested on toothbrushes.
- Another study\* by Bureau Veritas, a global independent testing laboratory, also found that the VIOLight Toothbrush Sanitizer eliminated up to 99.9% of germs tested on toothbrushes.

### **The Benefits**

- The VIOLight Toothbrush Sanitizer measures just 6 inches high and 3-1/2 inches in diameter. Its small footprint easily fits on a bathroom counter.
- With a sleek, contemporary design created by renowned designer Philippe Starck, the VIOLight Toothbrush Sanitizer complements any decor.
- The VIOLight Sanitizer is automated. Simply place the toothbrush head-down in the VIOLight and press the “power” button to activate the UV light in the unit’s base. In 10 minutes, the unit automatically shuts off, leaving toothbrushes sanitized and ready for use. Virtually no changes in routine are required. With the VIOLight Toothbrush Sanitizer, it’s oral hygiene as usual, but cleaner and safer. Just brush, rinse, and sanitize.

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