

Introduction to Aquarium UV Sterilizers

Drs. Foster & Smith Educational Staff



Algae, parasites, and bacterial diseases are a nuisance in any aquarium. There is nothing more disheartening than watching hours of meticulous aquarium maintenance come undone. If green water, algae blooms, or persistent diseases plague your aquarium, consider combating the problem with a [UV sterilizer](#).

A Little Light Goes a Long Way

Even the best cleaned aquariums can be a haven to aggressive algae. Normal feeding, biological filtration, and inhabitant activity can easily contribute to excessive algal nutrient levels. Also, our aquariums are exposed to light on a daily basis. Both nutrients and light encourage algae growth. After all, algae are in essence plants, and all plants thrive on nutrients and light.

Similarly, any aquarium - new or established - is susceptible to parasitic and bacterial infections. Whether existing populations reach disease-causing numbers or hitchhike on a new addition, parasites and bacteria can wreak havoc on your aquarium. Further complicating the dilemma is that oftentimes, the juvenile stages of parasites, such as ich, are hidden from sight. This means your aquarium inhabitants only exhibit symptoms when their immune system is weakened, and they are unable to ward off the infection.

The main issue with algae, parasites, and bacteria is that each develop unseen. Hobbyists are only aware of their presence after the nuisance has gotten a strong lead. Excellent cleaning, filter maintenance, and the quick quarantine of any infected aquatic species are still the best ways to prevent problems. Medications are also effective; however, they must be administered carefully or else other aspects of your aquarium's health are put to risk.

This is where UV light can be an effective addition to almost any aquarium. UV light targets the smallest of microorganisms, without harm to your other aquarium inhabitants. It works by altering the invader's genetic material. This ultimately shortens the organism's life cycle, thereby limiting its reproduction. Thus, that one single, tiny cell has less chance to blossom into an algae bloom or rapid-spreading disease.



I have a recurring problem with green water. Every time I get rid of it, back it comes - more aggressive than before. What can I do?

Maintain good water quality with regular partial water changes, filter maintenance, and proper nutrient control. In addition, consider adding an EPA-registered UV sterilizer to your aquarium for extra algae control.



Choosing the Right UV Sterilizer

Adding a [UV sterilizer](#) to your aquarium is like insurance for your home or apartment. Proper use is reliant upon proper aquarium care, such as regular water changes and filter maintenance. UV only targets



free-floating microorganisms, not nuisances attached to your fish, substrate, plants, decorations, or corals.

For optimum performance, UV sterilizers should be placed after your biological or mechanical filtration. Also, the flow rate through the sterilizer should be controlled, based on the manufacturer's recommendations. This ensures the UV sterilizer is targeting microorganisms - not debris - and has the correct amount of exposure time to eradicate (kill) the nuisance. Your chosen UV sterilizer will have easy-to-follow guidelines for both setup and use.

UV sterilizers can be set up in a variety of configurations, be it stand-alone or housed inside a canister filter, hung on your aquarium walls or tucked inside your aquarium stand. They are available in a variety of models, each designed to target aquatic nuisances, not your budget.

By incorporating an UV sterilizer to your impressive aquarium husbandry skills and effective filtration components, you can easily boost the cleanliness, clarity, and health of your prized aquarium.