

Control of Fish Diseases

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Fish diseases are either systemic or infectious. Systemic diseases are either iatrogenic (induced by an external condition) or congenital. Nothing can be done about a congenital condition. An iatrogenic condition can usually be reversed by removing the cause. A congenital disease can usually be recognized as some kind of deformity or behavior that affects only one fish, while an iatrogenic disease is more likely to affect many or all fish.

Common iatrogenic conditions are fast breathing, from ammonia; gasping at the surface, from overcrowding or overheating; lethargy, from poisoning. Medications are generally not indicated for such conditions. However, consider CupriSorb™ for metal poisoning, Safe™, Prime™, or AmGuard™ for chlorine, chloramine, or ammonia problems. Neutral Regulator™ or Marine Buffer™ can help restore and stabilize the environment.

Infectious diseases pose a unique problem of diagnosis. Most are external and parasitic in nature. Parasitic infestations, however, are often accompanied or followed by secondary bacterial or fungal infections. Even the experts have problems identifying specific disease conditions. Internal infections are even more difficult to diagnose and treat. Internal infections should be treated with antibiotics added to food or with Focus™.

The best treatment for infectious diseases is prevention. Unless the fish has exceptional value, a sick fish should be disposed of before the disease spreads. New fish should be placed in quarantine and treated prophylactically before being added to a community tank. This is particularly true for a reef tank! If a sick fish is found in a community tank and it has been determined that it should be saved, then quarantine it for

treatment. Treat both the known sick fish and the community tank. Treatment of healthy fish in the community tank may be dispensed with if the infection is not particularly contagious. If not sure of the infectious agent, then treat with a broad spectrum agent of low cost. If that fails, then try more expensive medication. If you know specifically what the disease agent is, then treat with the appropriate specific medication. Do not use antibiotics indiscriminately. Use non-antibiotic disinfectants first. If they fail, then turn to antibiotics. Frequent water changes and replenishment of medication are important.

Avoid the use of chemical filtration, ozone, and ultraviolet sterilizers during treatment. Any effective UV sterilizer will rapidly destroy just about any medication on the market. Do not treat a community tank unless the biological filter is strong and well established. Even medications that do not permanently damage the filter will retard it temporarily. Do not medicate and try to establish a biological filter at the same time. Be alert to the potential danger of ammonia or nitrite during treatment.

General Do Not's of Aquarium Medications

Do not use any Seachem or other medications while running either an ozonizer or UV sterilizer on a system. This is a safe rule to stick to with any medications. Ozone and UV light destroy most medications but will, in some cases, convert the medications to more toxic substances: e.g. chelated coppers are converted to standard copper sulfate if the chelating agent is destroyed producing a more toxic form of copper

Do not use any Seachem or other medications while running any form of chemical filtration: e.g., activated carbon, most resins, protein skimmer. These modes of



chemical filtration will usually remove most forms of medications quite rapidly. The exception to this rule is Seachem's Purigen™ which focuses on organic removal specifically and will not remove many forms of medication from solution.

Do not combine any Seachem or other medications without knowing that the specific combination is not toxic. Combinations of medications, as with humans, can often be toxic in the aquarium: e.g., combining aldehyde medications with copper medications can increase toxicity of the copper tremendously. The safest bet is not to combine medications at all.

Do not use any Seachem or other medications outside of intended use of the product or its instructions: e.g., use of saltwater medication in freshwater. This voids any responsibility that any manufacturer may have regarding the product and it is assumed that the product is being used at one's own risk.

Do not dose any aquarium for the dimensional volume: e.g., a fully decorated 75 gallon aquarium may have only 60 gallons of actual water volume. Failure to dose according to the actual water volume may lead to potentially toxic overdoses of many medications.

Do not dose invertebrate aquariums with medications unless you are certain all of the invertebrates will not react negatively. There is no manner of testing medications on all of the different types of invertebrates. Dosing a system with invertebrates is usually quite risky.

Do not treat a system without being aware of potential risks the medication may pose to individual species; e.g., “scaleless” species, delicate species, etc.