

# Aeromonas Infections

Drs. Foster & Smith Educational Staff

What is *Aeromonas*?

*Aeromonas* is a type of bacteria that is commonly found in aquarium fish. There are several varieties of this bacterium:

- *Aeromonas hydrophilia*
- *Aeromonas caviae*
- *Aeromonas subria*
- *Aeromonas schubertii*

All of the *Aeromonas* listed are commonly found in freshwater aquariums or backyard ponds. In addition, the *Aeromonas* bacteria can survive in a wide range of water temperatures. The most common bacterium in this group is *Aeromonas hydrophilia* which is considered to be a normal part of the intestinal flora in healthy fish.

When does *Aeromonas* cause disease?

This bacteria is already present in the fish's environment, therefore *Aeromonas* infections are most often secondary to other stressors such as:

- Poor water quality
- Parasitism
- Nutritional deficiencies
- A generally poor environment in the aquarium/pond

It is very important that you reduce these stressors as much as possible.

What are the symptoms of *Aeromonas* infections in fish?

*Aeromonas* bacteria are normally present in fish and usually do not cause signs of disease. However, if they overgrow, a fish may show any or all of the following symptoms:

- Ulcerative lesions of the skin around the base of the fins and anus
- Raised scales
- Abdominal distention
- Exophthalmia (protrusion of the eyeball)

Unfortunately, these symptoms are common in many bacterial diseases of captive fish.

How is an infection with *Aeromonas* treated?

An *Aeromonas* infection in fish is treated with antibiotics, usually tetracycline or a sulfonamide.

Can people become infected with *Aeromonas*, and how is infection prevented?

People can become infected with *Aeromonas*. The most common source of infection with *Aeromonas* is contact with mucous or tissues from infected fish. Most often this bacterium will enter the body through a break in the skin such as a wound or cut.

The best way to prevent an infection from your captive fish environment is by wearing gloves.

Waterproof gloves protect the handler from exposure to these bacteria. Gloves also protect the fish. Bare hands can be abrasive and they contain oils; both can damage the delicate outer layers of fish making them susceptible to disease.

In addition, persons working in or around aquariums or ponds should wash their hands immediately after they have finished their work.



Persons with a disease or condition that compromises the immune system such as HIV/AIDS, chemotherapy, transplant recipients, etc. should not handle captive fish or aquarium/pond ornamentals.