

Aeromonas

Fish infected with *Aeromonas hydrophila* may have many different clinical signs. These range from sudden death in otherwise healthy fish to inappetence, swimming abnormalities, pale gills, bloat and skin ulcerations. The skin ulcers may occur at any site on the fish and often they are surrounded by a bright red rim of tissue. Because of the variability of these clinical signs, the diagnosis of this disease based only upon the clinical presentation of the fish is highly unreliable and may be economically disastrous to the fish producer.

What is Aeromonas?

Aeromonas are bacteria that causes two major diseases, gastroenteritis and wound infections. Other diseases include; cellulitis, septicemia, urinary tract infections, hepatobiliary, and ear infections. *Aeromonas* occasionally can cause food- and water-borne illness.

What sort of germ is Aeromonas?

The aeromonads are a Gram-negative, rod-shaped, facultative anaerobic, non-spore forming bacteria that are autochthonous and widely distributed in aquatic environments. The genus is made up of psychrophiles and mesophiles from soil and aquatic environments and causes different kinds of diseases to many warm and cold-blooded animals. *Aeromonas* is divided into three biochemically differentiated groups (*Aeromonas hydrophila*, *Aeromonas caviae*, and *Aeromonas sobria*).

How can Aeromonas be diagnosed?

Diagnosing *Aeromonas* in humans is difficult because you can only get it from fish that have the disease. Healthy individuals that are exposed to this disease are not very likely to get the disease. The major symptom of *Aeromonas* in humans is diarrhea. The primary way a human can be infected with the disease is my cuts or open wounds that are interacting with the infected fish.

How can Aeromonas be treated?

For fish, proper sanitation is the best defense. Make sure their water source is clean and that they have proper nutrition. If transporting fish make sure the transportation is clean as well. For humans, the only treatment currently known is antibiotics, but do to antibiotic resistances, no optimal cure has been defined.

Long-term effects of Aeromonas?

The only long-term effects to fish are that if they are not kept in cleaned areas, the results are most likely fatal to the fish. For humans, the potential long-term effects would be if the infected person already had a compromised immune system since they are the ones most likely to be infected with the disease.

How can humans get Aeromonas?

Interacting with infected fish while with an open cut or wound. (See How can *Aeromonas* be diagnosed).

Prevention?

Minimize the stress factors for fish. Keep proper stock levels, nutrition, transportation, and water quality. For humans, maintain personal hygiene, bandage any cut or wound no matter how small and wear gloves. If working with fish known to be infected, follow up with your doctor to be tested for infection.