



COLUMNARIS Q & A

What is Columnaris?

Columnaris is a disease of freshwater fish caused by the bacterium *Flavobacterium columnaris*.

Can people get Columnaris from fish infected with Columnaris?

No. Humans are not at risk for columnaris

How do fish get Columnaris?

This type of bacteria lives in water and mud and is found on the bodies of fish and in the gill area. Bacteria may enter the fish through the gills or broken skin. Columnaris is found worldwide. Epidemics occur when fish are under some type of stress, such as a low level of oxygen in the water, spawning, excessive handling, crowding or unfavorable temperatures.

Under poor conditions massive losses can occur one or two days following the emergence of the bacterial infection. Epidemics rarely occur when water temperatures are less than 55°F. The infection can spread rapidly when temperatures are higher than 64°F. The ideal temperature for the growth of *F. columnaris* is 68 to 77°F, although it can grow at temperatures ranging from 39 to 91°F.

What fish are susceptible?

Freshwater fish of all ages and various species can get Columnaris. Warm water fish are susceptible to the infection when water temperatures are greater than 64 to 68°F. Coldwater fish are susceptible when water temperatures are above 59°F.

Some fish show the following signs:

Sores on the gills and body that are white to brown, greyish-white or orange-yellow. Sores or ulcers on the fins, head and body that eventually increase in size and may expose the underlying muscle.

White area of affected tissue encircling the body (often called "saddleback"). Ulcers on the mouth and jaw in the most severe cases. Some infected fish show no signs but have the bacteria in the kidneys.

What is the mortality rate of Columnaris?

Mortality rates can be extremely high, with 60 to 90% mortality common. Columnaris is transmitted horizontally from fish to fish.

Can outbreaks be prevented?

Outbreaks of Columnaris in the wild are almost impossible to prevent or treat.

How common is Columnaris?

Columnaris is extremely common in freshwater fish and considered to be ubiquitous, and found everywhere.