

Aeromonas hydrophila & sobria

What is Aeromonas hydrophila & sobria?

Aeromonas hydrophila and sobria are very common species of bacteria found in fresh, brackish and coastal water that can infect a wide range of fish species. The bacteria usually infects fish along with other bacteria such as A. salmonicida, particularly in lesions or ulcers. Infections usually occur in spring and summer when temperatures are rising. They are naturally found in the intestine of healthy fish.



Motile Aeromonas lesion.

What does Aeromonas hydrophila & sobria do?



Fin rot on a roach.

Aeromonas hydrophila and sobria infections cause visible damage to the outside of the fish and severe internal infections. Externally they can cause tail and fin rot, large ulcers and skin lesions. Internal systemic (whole body) infections, can cause severe symptoms, including dropsy and organ damage. Other symptoms can include bleeding in the gills, the anal vent and the base of fins.

A. hydrophila and sobria are usually considered secondary or opportunistic bacteria. This is because affected fish are usually stressed, have a weakened immune system or have open lesions that the bacteria can take advantage of. Frequently, A. hydrophila and A. sobria bacteria infect fish that are already infected by another (primary) bacteria species. The presence of systemic infection is usually a sign of a severe bacterial infection, which leads to the death of the fish.

Minimising the threat of Aeromonas hydrophila & sobria – what can I do?

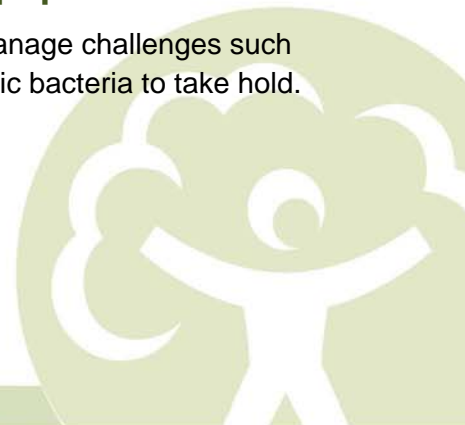


Carp with dropsy.

These bacteria are always present in fisheries. Antibiotic treatments in the water or in feed are impractical and may be harmful. However, the risk of an outbreak can be managed by:

Reducing stress within the fish population

Stress decreases the ability of the fish to manage challenges such as infection or wounds, allowing opportunistic bacteria to take hold.



Taking care when introducing new fish

Care should always be taken to limit stress to fish during stocking. Particular care is needed during rising temperatures. This period can be stressful to the fish and favours rapid bacterial reproduction.

Regular monitoring of water quality

Outbreaks are usually linked with a sudden change or a gradual decline in the aquatic environment causing stress to the fish. Regular monitoring helps to detect the early signs of problems.

Varied habitat

Habitat variation can help reduce competition between fish for food and space as well provide areas of cover where the fish can hide if they are threatened and recover from handling following capture by anglers, reducing their stress levels. Good varied habitat within a fishery can also improve water quality.

The best way of avoiding an outbreak is to manage stress through good fisheries management and so reducing the risk of infection. For more information about managing water quality, fishery habitat and stock density, see the relevant fact sheets in this series.

This fact sheet has been produced by:

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