

## Salmon Poisoning and Your Dog

By Dr Koppa

What!!! Can my dog get sick from just eating salmon? Well, not exactly. It's not the fish itself that's the problem. The problem is that some salmon, indeed any fish that is considered anadromous (fish that swim from salt water to fresh water streams to breed), can be infected with a fluke called *Nanophyetus salmincola*. But this little guy is not the real problem, he's relatively harmless.

The danger is when the fluke is infected with a rickettsial organism called *Neorickettsia helminthoeca*. This is the little critter that actually causes the disease of "Salmon Poisoning". You've heard of bacteria and viruses, well, rickettsial organisms are in their own group or "genus" of microbes. They are sort of between bacteria and viruses. Other diseases that are caused by different rickettsial microbes that you may have heard of include Rocky Mountain Spotted Fever, Ehrlichia, Cat Scratch Fever and Lyme Disease.

In Washington State, Salmon Poisoning occurs mostly west of the Cascades. Canids such as dogs, wolves, coyotes and foxes are the only species susceptible to Salmon Poisoning. That's why cats, raccoons and bears eat raw fish regularly without getting Salmon Poisoning disease.

Usually the clinical signs of Salmon Poisoning appear within six days of eating an infected fish. The common signs to see in your dog would be: vomiting, lack of appetite, fever, diarrhea, weakness, swollen lymph nodes and dehydration. If these dogs are not treated, ninety percent of them will die within fourteen days of eating the infected fish. Thankfully, Salmon Poisoning is very treatable, if it's caught in time. So, it's very important to tell your veterinarian if you think your dog ate raw fish. If you have a dog that wanders the neighborhood and/or raids trash cans and you can't be sure of what it's eaten, consider the possibility of Salmon Poisoning.

Salmon Poisoning is diagnosed with a fecal sample to look for the flukes eggs. It also can be detected by a fine needle aspirate of one of the swollen lymph nodes. This entails your veterinarian taking a needle sample of a lymph node to look for the rickettsial organism under a microscope.

Treatment is fairly straight forward and simple. Your dog will receive an antibiotic to kill the rickettsial organism, and a dewormer will be given to kill the fluke. If the dog is dehydrated, intravenous fluids are given. Once treatment has started, most dogs will show a great deal of improvement within two days.

So, next time you bring home a beautiful catch, please don't share it with your dog, at least until it's cooked!