

CANINE DISTEMPER IN BRITISH COLUMBIA WILDLIFE HEALTH FACT SHEET

Canine distemper is a disease of canids, or dog-like animals such as dogs, coyotes, foxes and wolves, of mustelids, such as mink, marten, otter, weasel, fisher and wolverine and of raccoons. It does not infect other species and is not a danger to humans. All ages of these species may be affected, but young and older animals appear to be most susceptible.

The virus is transmitted between animals through the air by breathing the virus within aerosol drops or other discharges excreted from infected animals, i.e. from coughing. Infected dogs may shed the virus for months but the virus cannot survive in the environment for very long.

Canine distemper initially causes lung infection. The virus can spread throughout the body to affect other organs such as the intestinal tract, kidneys and central nervous system. Symptoms of the disease include signs of respiratory infection, such as mucous discharge of the nose, as well as of the eyes. Dogs are usually depressed and may have diarrhea. If the disease is persistent, animals may develop thickening of the pads of the feet or nose. In those that appear to recover from the first stages of the disease, neurological signs such as muscle twitching, weakness, paralysis or seizures may be seen in various degrees of severity. Other nervous system signs such as incoordination, circling or head pressing have been observed in dogs without being accompanied by other symptoms. Many other infectious or toxic diseases can be confused with canine distemper, but the above symptoms can guide to a positive diagnosis. Animals that survive the disease are likely immune for the rest of their life.

Treatment includes support with intravenous fluids, good nursing care, antibiotics to prevent secondary infections and anticonvulsants or sedatives, if required, in domestic dogs. Affected dogs should be isolated to prevent infection of other dogs. Prevention of the disease by vaccination of dogs as puppies has reduced the occurrence of canine distemper in the dog population, however outbreaks are reported in areas of British Columbia where vaccination is not commonplace or groups of susceptible dogs exist.

Outbreaks or suspected outbreaks have been reported in wild carnivores in BC, especially raccoons and coyotes near urban centres. It is believed that these outbreaks are associated with outbreaks in domestic dogs. Reports in wild animals usually involve a single or several dead animals or a live animal with symptoms related to the nervous system. In many cases confirmation of the disease is not possible because appropriate samples are not available. Wolves, foxes or coyotes, raccoons or mustelids found dead, in poor dehydrated condition with fecal material on their hindquarters may have been affected by canine distemper. Carcasses should be isolated from other canids and incinerated or buried deeply.

Live wild animals affected by canine distemper may be found depressed with difficulty breathing and nose or eye discharges. They may show little fear of humans, walk in circles, stagger or have convulsions. Because of the presence of nervous system signs and the similarity of these with some of the signs of rabies, these animals should be treated with caution and samples collected for submission to a diagnostic laboratory. Fortunately, the only resident hosts of rabies in British Columbia are insectivorous bats and transmission of rabies into any of the above wildlife species has never been recorded to date in this province, however, caution and submission of cases matching these nervous system signs to a diagnostic laboratory is always advised.