

ALEUTIAN MINK DISEASE (ADV) A Hidden Danger to Your Ferret

What is Aleutian Mink Disease Virus?

Aleutian Mink Disease Virus, or ADV, is a parvo virus that infects mink, ferrets, raccoons, skunks, and possibly other Mustilidae. Currently, there is no evidence that it can infect other mammals outside the Mustilidae family.

Because it is a parvovirus, it is very hardy and can live outside the body of a host for a long time. To kill the virus, you must use a parvocide or a 10% bleach solution. Because it is a virus, ADV can mutate. Currently it is known that there are at least five strains of ADV that can infect mink. It is believed that there are also multiple strains of ADV that can affect ferrets. Like different strains of the flu in humans, some strains of ADV may be more contagious and more deadly.

Why is ADV a danger to my ferret?

The greatest danger of ADV is that an animal can have the disease and be spreading it without showing any symptoms. Also there has not been a lot of research done on how the disease acts in ferrets. Therefore, at this time, it is unknown what the incubation period is (how long after exposure before symptoms develop) or what the shedding period is (when the infected animal can spread the disease). ADV can be either active (symptoms are apparent) or non-active (the animal tests positive for ADV, but appears clinically healthy).

How is ADV spread?

ADV is passed via saliva, feces, urine, and in the placenta. Some studies in Europe have indicated that the virus may also be airborne. The most likely means of spread of the disease is by contact with contaminated surfaces. One study of ADV in mink had mink that tested positive for ADV housed in cages near the cages of mink that tested negative for ADV. The virus was not transmitted to the mink that had tested negative. In another study in the US, three ferrets that tested positive for ADV were housed in a cage with a ferret that tested negative. After four months, the one ferret still tested negative.

What are the symptoms of ADV?

In ferrets, the symptoms of ADV can mimic many other ailments. Symptoms can include a chronic progressive wasting, progressive hind end paralysis, muscle wasting, tremors, urinary incontinence, lethargy, pallor, enlarged spleen, tarry feces, and death. Active ADV causes massive disfunction of the immune system, with the accumulation of plasma cells in the various organs, and the presence of massive amounts of antibodies in the bloodstream, which cause vascular degeneration and inhibit clotting. Over time these changes will become more serious, and usually begin to affection the function of the liver and kidneys. Most ferrets with active ADV die of liver or kidney failure at the end of the disease.

How do I know if my ferret has ADV?

Currently there are two ways to test for the presence of antibodies to ADV. Both methods are fast, easy and relatively inexpensive. The most widely used test is the Counterimmunoelectrophoresis, or CEP test.. A blood test by United Vaccines, Inc. in Madison, WI. which requires a small blood sample that can actually be obtained and sent in by the ferret owner. The other is the ELSIA test which requires a small amount of saliva. This test is offered by Avecon Diagnostics, Inc. and can also be obtained and sent in by the ferret owner.

It should be noted that none of these tests can predict whether or not your ferret will actually become sick with ADV or if it will even spread the disease. The tests only show the presence of antibodies to ADV. Antibodies are what the immune system builds to fight a virus, so a positive test only shows exposure to the disease. In fact, studies have shown that only a small percentage of ferrets that have tested positive for ADV will actually become clinically sick from the disease.

How can I avoid exposing my ferrets to ADV?

ADV is not a new disease. It has been around for over 50 years. In the past, there have been sporadic increases in the active cases reported which are usually followed by several years of ferret owners taking extra precautions to avoid spread of the disease. Recently, there has again been an increase of active ADV cases, and so it is wise for ferret owners to be more careful.

To help avoid exposure of your animals, you mostly need to use common sense. Do not turn your ferrets loose around the other ferrets you do not know are negative for ADV. Do not allow strangers to handle your ferrets and do not handle stranger's ferrets. At your vet's office, keep your ferrets in their carrier except in the examination room. When attending ferret shows or frolics with your ferrets, make sure the organizers are following sensible sanitation procedures. When getting a new ferret, find out if it has been tested for ADV. Since it may take several months for the antibodies to show up in kits, when getting a kit find out if the parents have been tested and are negative. Breeders should test all their breeding stock before the beginning of the breeding season. If you get a new ferret and are not able to determine ahead of time if it has come from an ADV free environment, keep it separate from your other ferrets until you can have it tested. By taking a few precautions, you can eliminate problems down the road.

Why is more research needed, and what can I do to help?

The test for ADV that are currently available were developed primarily for use in ranch mink. The owners of ranch mink usually only have a financial interest in the animals. Any animals that test positive for ADV can be euthanized and pelted. The resulting pelts may not be as high a quality as they would be had the animal matured, but there is still a financial gain.

With pet ferrets, this is not an acceptable solution. Our ferrets are companion animals, and most of us would not have them put down simply because they might develop a disease.; Additional research is needed to try to develop a better test that will predict whether or not the animal will actually get sick. Research is also needed so we can learn when the infected ferret is actually spreading the disease.

Currently there is no treatment, vaccine, or cure known for ADV. The hope is that with additional research some or all of these might be found.

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WEBSITES

HOFA www.HOFA-Rescue.org

AFA's www.FERRET.org

White Russian's Site www.geocities.com/russian'smom/index

Wolfy's Site www.geocities.com/Wolfysluy