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Medical Articles

Preventative Care for Dogs and Cats

Vaccinations
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Vaccinations (*the following is a summary from www.avma.org/animal_health/brochures vaccination/vaccination_brochure.asp)*

Vaccines are designed to trigger protective immune responses to help your pets prepare them to fight future infections. They can lessen the severity of the disease and certain vaccines can prevent infection completely. Experts agree that widespread use of vaccines within the last century has prevented death and disease in millions of animals. Even though some diseases have now become uncommon, vaccination is still highly recommended because these serious diseases continue to be present in the environment. It is also important to remember that some vaccinations cover zoonotic diseases, which are diseases that can be spread from animals to people, for example, rabies. Very young puppies and kittens are highly susceptible to infection because their immune systems are not fully mature. In many instances, the first dose of vaccine serves to prime the pet's immune system against the virus or bacteria while subsequent doses help to further stimulate the immune system to produce the antibodies needed to protect the pet.

Most pets respond well to vaccines although a small percentage do have an adverse reaction to the treatment. The most common adverse responses are mild and short-term, including fever, sluggishness and reduced appetite. Pets may also experience temporary pain or subtle swelling at the vaccination site. Rarely, more serious adverse reactions can occur. Allergic reactions can appear within minutes or hours and may include vomiting or diarrhea, whole body itching, swelling of the face or legs, difficulty breathing or collapse. Contact your veterinarian immediately if any of these symptoms are seen. In "very" rare instances, death could occur from the allergic reaction. There are other uncommon but serious adverse reactions, including injection site tumors(sarcomas) in cats, which can develop weeks or months after a vaccination. The best advise is to always tell your veterinarian about any abnormalities that you notice.

"Core" vaccines protect from diseases most common in a particular area. "Non-Core" vaccines are reserved for individual pets with unique needs. Your veterinarian will consider your pet's risk of exposure to a variety of preventable diseases in order to customize a vaccination program for you pet. Factors such as exposure to other pet's of unknown vaccination history and travel will alter this vaccination program. Young puppies are usually given their first set of vaccinations at six to eight weeks of age.

Additional vaccinations are given every three to four weeks until the puppy is 16 weeks old. Recent evidence shows that Parvovirus vaccination should be continued even longer, especially with certain breeds of dogs. For that reason, we, at Willowbrook Veterinary Clinic, give a final Parvovirus vaccination at 20 weeks.

Heartworm Prevention and Testing*(the following is a summary from www.heartwormsociety.org/pet-owner-resources/heartworm.html)*

Heartworm disease is a serious and potentially fatal condition spread by mosquitoes and caused by parasitic worms living in the arteries of the lungs and occasionally in the right side of the heart of dogs, cats and other species of mammals, including wolves, foxes, ferrets, sea lions and (in rare instances) humans.

Clinical signs of heartworm disease may not be recognized in the early stages, as the number of heartworms in an animal tends to accumulate gradually over a period of months and sometimes years and after repeated mosquito bites. Recently infected dogs may exhibit no signs of the disease, while heavily infected dogs may eventually show clinical signs, including a mild, persistent cough, reluctance to move or exercise, fatigue after only moderate exercise, reduced appetite and weight loss. Cats may exhibit clinical signs that are very non-specific, mimicking many other feline diseases. Chronic signs include vomiting, gagging, difficulty or rapid breathing, lethargy and weight loss.

Heartworm infection in apparently healthy animals is usually detected with blood tests for a heartworm substance called an "antigen" or for microfilaria, although neither test is consistently positive until about seven months after infection has occurred.

Heartworm disease is preventable and heartworm prevention is safe, easy and inexpensive. While treatment for heartworm disease in dogs is possible, it is a complicated and expensive process, taking weeks for infected animals to recover. There is no effective treatment for heartworm disease in cats, so it is imperative that disease prevention measures be taken for cats. There are a variety of options for preventing heartworm infection in both dogs and cats, including monthly tablets and chewables and monthly topicals. All of these methods are extremely effective, and when administered properly on a timely schedule, heartworm infection can be completely prevented. These medications interrupt heartworm development before adult worms reach the lungs and cause disease.

Gastrointestinal Parasites

Hookworms are small, thin parasites that fasten to the wall of the small intestine. In dogs, they are voracious bloodsuckers, while in cats, they are not. Infection occurs by four routes:

1. Ingestion of contaminated soil(most common method),
2. Skin penetration by the hookworm larvae,
3. Passage of the hookworm larvae through the mother's milk,
4. Infection of the puppy while in the mother's uterus.

Puppies with a heavy infestation can show severe signs which include bloody diarrhea, weight loss, weakness and dehydration while a mild infestation can show symptoms of weak and anemia. In mature dogs, diarrhea and weight loss are the most common symptoms.

Roundworms measure 2-6 inches in length and look like very thin pieces of spaghetti. Puppies infected with roundworms are often described as pot-bellied, bloated, or anemic and have diarrhea, weight loss and occasional vomiting. Coughing can occur during the lifecycle where the larvae are in the throat of the infected dog. The puppies are usually lethargic and grow more slowly. Infection occurs by:

1. Infection of puppy while nursing,
2. Infection of the puppy while in the mother's uterus,
3. Ingestion of material contaminated by feces with roundworms,
4. Ingesting small rodents infected with roundworms.

Whipworms are small thread-like parasites that embed deep in the lining of the colon and cecum. It is a major cause of diarrhea in the dog. Clinical signs depend on the severity of infection and can range from mild diarrhea to severe rectal bleeding. In most cases, a mucoid-like diarrhea is observed. Whipworm infestation is very difficult to eliminate from infected soil. Dogs with access to these areas often become reinfected. At Willowbrook Veterinary Clinic, your pet will be placed on Interceptor heartworm preventative which has an anti-parasitic directed toward whipworms included.

Tapeworms are transmitted by fleas for by ingesting an infected animals such as rabbits or rodents. The adult tapeworm consists of a head and a very long body which is made up of many segments. These segments break off, are passed in the feces and are often seen attached to the fur around the pet's anus, in the pet's bedding or on the feces. These segments are about the size of a grain of rice. Flea prevention is an excellent method of controlling infestation. Preventing contact with rodents can also prevent infestation.

Detection is accomplished by a yearly fecal examination. We also recommend that any pets with gastrointestinal issues bring a fecal sample to the examination to rule out GI parasites.

Public Health-Transmission to Humans

Humans can become infected with roundworms through ingestion of parasite eggs in the environment. The larvae can migrate anywhere in the body and symptoms seen in humans are determined by the tissues or organs affected. Organs commonly affected are the eye, brain, liver, and lung. Dogs, cats, and raccoons are recognized as a cause of human disease.

Humans can become infected with hookworms through ingestion of larvae or through direct penetration of the skin. These parasites can migrate to the skin and are progressively, intensely itchy linear lesions. They can also migrate to the intestines and induce an enteritis.

If infection with either of these parasites are suspected, a physician should be consulted immediately.

The information on this page was compiled from multiple sources.