



Vaccines

Why are vaccines so important for your new kitten?

When a kitten is born, its immune system is not yet mature. Fortunately, nature has a system of protection. The mother produces a certain kind of milk (colostrum) in the first few days after giving birth, which is rich in all the antibodies that the mother has to offer. After the first couple of days, regular milk is produced and the kitten's intestines undergo what is called closure, which means they are no longer able to take externally produced antibodies into their systems. These first two days are critical to determining what kind of immunity the kitten will receive until its own system can take over.

How long this maternal antibody lasts in a given kitten is totally individual. It can depend on the birth order of the kittens, how well they nursed, and a number of other factors. Maternal antibodies against different diseases wear off after different times. We DO know that by 14-20 weeks of age, maternal antibodies are gone.

Kittens receive a series of vaccines ending at a time when we know the kitten's own immune system should be able to respond. We could simply wait until the kitten is old enough to definitely respond, as we do with the rabies vaccination, but this could leave a large window of vulnerability if the maternal antibody wanes early. To give kittens the best chance of responding to vaccination, we vaccinate intermittently (usually every 2-4 weeks) during this period (usually starting at 6 weeks of age), in hope of gaining some early protection.

Diseases We Vaccinate Against

Distemper (Panleukopenia): also known as Feline Parvovirus; this is a highly contagious, potentially fatal disease, with kittens being the most affected. This disease attacks cells that are rapidly growing and dividing, such as those in the lymph nodes, bone marrow, intestines, and developing fetuses. The term panleukopenia refers to a decrease in the number of all the white blood cells in the body, which are essential for defense against infections and diseases. Spread through feces, bodily fluids, and through contaminated surfaces such as bedding, food/water bowls, litter boxes. Signs/symptoms can include: diarrhea, vomiting, fever, lethargy, loss of appetite, dehydration, and a painful abdomen. Cats are much more susceptible to secondary infections. Treatment involves supportive care and management of symptoms; there is no specific cure. Prognosis is based on the individual; age, immunity/vaccination status, how quickly they receive veterinary attention.

Rhinotracheitis: an infectious disease caused by feline herpesvirus type-1 (FHV-1). As with other herpes viruses, the virus is very species-specific and is only known to cause infections in domestic and wild cats. The virus can infect cats of all ages and is a major cause of upper respiratory infections. This is also the leading cause of conjunctivitis in cats. Cats are infected through direct contact; it is spread through the saliva, and discharges from the eyes and nose of infected cats. An infection can last 10-20 days. All cats that have been infected become carriers of the disease; the disease can become dormant and the cat is not infectious during this time. Stress and illness can cause a flare up, and then the cat is infectious again. Treatment consists of management of the symptoms - there is no cure to completely get rid of the disease. Most cats respond well to medical management and lead normal lives.

Calicivirus: Calicivirus causes the typical typical clinical signs of an upper respiratory infection involving the nose and throat such as sneezing, nasal congestion, conjunctivitis, and discharge from the nose or eyes. In addition, cats will develop ulcers on the tongue, hard palate, gums, lips, or nose; drooling may be observed, as these ulcers are often painful. It is often spread through the saliva, eye secretions and nasal secretions; a sneeze can send airborne particles several meters through the air. The virus can survive for 1 week in the environment. Infection lasts about 14-21 days. Half of all cats infected will become carriers - some cats will continue to shed the virus for months; a small percentage will stay in the carrier state for life. Treatment consists of the management of symptoms.

Feline Leukemia (FeLV): This virus suppresses the immune system, often causing anemia or lymphoma; cats will also be susceptible to bacterial/viral infections. Infected cats shed infectious particles in saliva, feces, urine, and milk (lactating cats). The most common transmission of FeLV occurs during grooming

or fighting. Symptoms include: pale gums, jaundice (yellow in the mouth/whites of the eyes), enlarged lymph nodes, bladder/skin/upper respiratory infections, weight loss, lethargy, diarrhea, difficulty breathing, and stomatitis. Diagnosis consists of a blood test that is performed by your veterinarian. FeLV is a type of virus called a retrovirus, meaning it can be incorporated into a cat's genome and may not be cleared over time. 85% of persistently infected cats will die within 3 years of a diagnosis. Regular veterinary check ups and good preventative health care can keep these cats feeling well and help protect them from secondary infections. Cats with FeLV should be kept indoors.

Rabies: a disease that affects the nervous system and is most commonly spread by the bites (saliva) of infected skunks, bats, raccoons, foxes, and coyotes. Once bitten, the virus will attach to the muscle of the pet and slowly try to gain access to the brain. Incubation can take up to one year, but usually in dogs the period is 21-80 days, and then symptoms begin to show. In all animals, initial signs of rabies may include fearfulness, restlessness, increased or decreased appetite, vomiting, diarrhea, a slight fever, enlargement of the pupils, hypersensitivity to light and sound and excessive salivation. Once symptoms are present, there is no treatment - this is a fatal disease and can only be prevented, not cured.