



Feline Vaccines: Infectious Agents

The following paragraphs describe the many infectious agents for which vaccines are currently available. *Core vaccines* are those considered essential for all cats by leading researchers and immunologists. *Non-core vaccines* are those recommended only if there is a high risk of exposure.

Core Vaccines

Feline Viral Rhinotracheitis: Also known as **Feline Herpes**, FVR can cause sneezing, nasal/eye discharge, fever, lethargy, inappetance, and ulcers of the mouth and cornea. Virus is shed in oral and respiratory discharges. Cats who carry the virus chronically can suffer flare-ups during times of stress.

Feline Calicivirus: FCV is shed in discharges from the eyes, nose, mouth, feces, and rarely urine. Symptoms include oral ulcers, inappetance, fever, lethargy, stiffness, joint pain, muscle aches, neurologic symptoms, and rarely seizures. FCV has been associated with persistent gingivitis in chronic carriers. FVR and FCV vaccines lessen disease but do not prevent infection, viral shedding, or the carrier state.

Feline Panleukopenia Virus: Also known as **Feline Distemper**, FPV is shed from all body discharges and secretions, and can live for up to a year at room temperature. Symptoms include fever, lethargy, inappetance, vomiting, and diarrhea. FPV is usually rapidly fatal in kittens.

Rabies: Rabies virus causes fatal disease in many mammals, including cats and humans. The virus enters through a bite wound from a rabid animal, or via exposure of mucous membranes (eyes, nose, mouth) to infected blood or body secretions. The virus then spreads to the nervous system (causing symptoms like anxiety, aggression, disorientation, incoordination, paralysis, seizures, hypersalivation, difficulty swallowing) and the salivary glands (enabling transmission to bite victims). Vaccination for dogs and cats is required by law. In Oregon, bats are the primary carriers of rabies virus.



Non-Core Vaccines

Bordetella: Bordetella bronchiseptica is a bacterium that colonizes the lining of the respiratory tract. Symptoms may include sneezing and nasal/eye discharge, but disease is rare except in kittens who may experience severe symptoms. Bordetella vaccine is reserved for those kittens at high risk exposure in situations like shelters and catteries. Intranasal vaccine carries a small risk of transient symptoms.

Feline Leukemia Virus: FeLV is the most common cause of severe illness and death in domestic cats. It can cause immune suppression, bone marrow suppression, cancer (lymphoma), and inflammation of various organs. Transmission is via bite wound or close prolonged contact. The virus is short-lived in the open and easily killed by household cleansers. Most cats over two years old have acquired immunity.



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Generally Not Recommended by Doctors at Cascade Summit Animal Hospital

Feline Immunodeficiency Virus: FIV causes immune suppression, and disease is primarily from secondary infections. FIV produces a situation similar to HIV, but is not transmissible to humans. Transmission is via bite wound. The current vaccine is not in widespread use for two important reasons. First, any cat given the FIV vaccine will always test positive for FIV on blood tests used to detect infection, which makes it hard to tell if a symptomatic cat is actually suffering from FIV. Second, there are several strains of FIV to which cats may be exposed, and questions remain as to the effectiveness of the vaccine.

Feline Infectious Peritonitis: FIP virus, a type of coronavirus, is shed in discharges and secretions. It is quite vulnerable in the open, and is easily killed by household cleansers. Two forms of FIP disease exist: "wet" FIP involves rapid fluid accumulation in the abdomen and/or chest while "dry" FIP causes more gradual illness whose signs vary depending on the organ involved. The incidence of FIP is low even though exposure to feline coronavirus is high in the cat population. This, combined with the questionable efficacy and short duration of immunity provided by the vaccine, leads veterinarians to reserve this vaccine for cats entering a population where disease is endemic.

Giardia: Giardia lamblia is a protozoan parasite that lives in freshwater streams, puddles, ponds and ditches contaminated by infected feces. If ingested, it can cause diarrhea, vomiting, and weight loss. Although many species including humans are affected by Giardia each year, transmission from cats and dogs to humans has not been proven. The vaccine does not prevent infection; it may reduce shedding of cysts and clinical signs, but the vast majority of cats respond to treatment.

Chlamydomphila felis: This bacterium is shed primarily in discharges from infected and inflamed eyes. Disease is usually mild and responds readily to antibiotic therapy. Protection from the vaccine is likely short-lived and incomplete. It is reserved for cats entering a population where disease is endemic.