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# **Biological System of Cats and its Clinical management**

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### Introduction

Dog and cats are considered as companion animals. Companion animals are providing health benefits to the human beings especially to older people. However, these companion animals can as well transmit diseases to humans who have close contact with them. Some diseases like rabies, Leptospira, ringworm, etc. are highly contagious and may infect to the human also so the care and management of the companion animals are very important to keep healthy our pets and protect also to human beings. "Prevention is better than cure" therefore first and foremost duty of every pet owner to complete all the vaccination schedule as per recommendation in early life of pet. Ectoparasite and endoparasites burden should be corrected before vaccination. Appropriate vitamins minerals and healthy foods are to be provided to the pets make them healthy. Regular cleaning of cat houses and premises should be done with disinfectants. Regular and timely deworming, vaccination and proper hygiene make our pets healthy.

## **Common Endo parasitic Infestations of Cat**

**Internal parasites:** Common endoparasites of cats are intestinal parasites such as roundworms, hookworms, whipworms and tapeworms. Cats are atypical host for heartworms and it spread by infected mosquitoes. Outdoor cats are at greater risk because of increased exposure to mosquitoes. Despite its name, heartworm mainly causes lung disease in cats and cause life threatening in kittens and older cats. It causes breathing difficulties and persistent cough and it is called "heartworm-associated respiratory disease" (HARD).



To control the endoparasitic infestations periodic antihelmintic treatment (deworming) is to be rendered. Cat house should be kept to dry and clean and hygienic environment has to be provided.

External parasites: Includes ticks, mites, lice, flies, and fleas.

**Protection of cat from ticks:** Ticks in the cat are very common in area like under the front legs, between back legs, toes around eyelids, tails and ears. To further reduce the chances that a tick bite will make cat sick check the cat for ticks every day.

#### Common disorders of Cat and its clinical management

Feline leukopenia/Feline Distemper: This is highly contagious disease of cats. The disease is caused by DNA virus. The disease is characterized by fever, anorexia, depression, dehydration and high fatality rate. There is a frequent vomition and diarrhea result into severe dehydration. Animal may stop eating and prefer to remain in sitting position with head resting in between the stretched forelimb.

There is no specific treatment against the disease. Affected animals should be isolated and treated. Course of broad-spectrum antibiotics may be used to prevent the secondary bacterial infections.

**Rabies:** Rabies is an acute viral infection of the nervous system that affects mainly carnivores including cats. No cat-to-cat transmission has been recorded. The most common way for a cat to become infected is through a bite from an infected animal where the virus is transmitted by saliva. The rabies in cat is usually more furious in form than dog. The first signs are changes in behavior like irritability, nervousness and hyper excitability. Loss of appetite, seizers, drooling, foaming at the mouth, and difficulty in swallowing.

There is no treatment for rabies in cats, and humane euthanasia is recommended if the disease is strongly suspected. Rabies vaccine can prevent rabies infection. Additionally, immediate disinfection of bite wounds may help in decrease in infection.

Take the cat to keep healthy and prevent from the infectious diseases care must be taken in supervision of veterinarians and management practices like clean up urine poop or vomit in the house and disinfect the area.

Prevention and control strategies are opted to prevent infection, to protect cats, personnel (owners, handlers, trainers, staff) and the community.

• Early identification and isolation of potentially infectious cats from other pets in the group.



- Using effective cleaning and disinfection practices for all indoor and outdoor pet areas and prompt removal of feces and debris, cleaning with detergent and water and correct use of disinfectants.
- Practicing hand hygiene (washing hand with alcohol-based sanitizer, soap and water) by all people after handling the pets. Proper cleaning and disinfection results in a cleaner, healthier environment and helps to prevent the spread of disease to both animals and people.
- Effective tropical or oral flea and tick prevention products should be used prior to and during all events based on season, weather, geography to reduce the risk of canine disease transmission.
- To ensure all cats receive the appropriate core vaccination and parasites preventives at the frequency recommended for pets.

**Deworming schedule for Felines:** Worms is one of the most common ailments of kitten, among them hookworms, roundworms, whipworms and tapeworms are most common. Most worm infestations cause symptoms like diarrhea, weight loss or poor growth, dry hair, poor appearance and vomiting.

**Kittens:** Every 2 weeks until 3 months of age, starting at 3 weeks of age. Once a month from 3 to 6 month of age. After 6 months, follow adult recommendation.

Adult Cats: For all cats- twice a year for life, for Inside cats-once a year and for outside cats-up to three times a year.

New animals: Deworm immediately and repeat it after two weeks.

**Vaccination:** vaccination can help to protect the cat from dangerous diseases like feline leukemia, rabies, feline distemper and help them live a longer healthier life. Diseases like rabies are transmissible to both humans and other animals through a bite from rabid animals. So vaccination is necessary to prevent the transmission of diseases zoonotic diseases also.

**Feline Vaccination Schedule**: Core vaccines protect against Feline Parvovirus (FPV), Feline herpesvirus-1 (FHV-1), Feline calicivirus (FCV) and rabies virus. Non-core vaccines (optional) protect against Feline leukaemia (FeLV) and *Chlamydia felis*.



S1.	Disease	Primary vaccination	Booster	Subsequent
No.				dose
1.	Feline viral rhinotracheitis	At 6-8 weeks then every 3-4	1 year after	Every 3 year
		weeks until 16 weeks old	primary series	
2.	Calcivirus	At 6-8 weeks then every 3-4	1 year after	Every 3 year
		weeks until 16 weeks old	primary series	
3.		At 6-8 weeks then every 3-4	1 year after	Every 3 year
	Panleukopenia	weeks until 16 weeks old	primary series	
4.	Rabies (killed virus)	At 4 months	1 year after	Every 3 year
			first dose	
5.	Feline leukemia virus	At 3-4 weeks apart, at 12 weeks	-	Yearly
		or older		

## References

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