ABC's of Parasite Control

Intestinal worms (roundworms and hookworms in dogs and cats in addition to whipworms in dogs), heartworms, fleas and ticks are the more common parasites that dogs and cats should be protected from and/or treated for over the course of their lifetime. How often and with what products can this be achieved? The following discussion will provide some guidance to help you develop a plan.

Intestinal Worms

According to the Companion Animal Parasite Council (CAPC), the recommendation for intestinal parasites control in puppies and kittens is to "administer anthelmintics starting at 2 weeks of age, repeating every 2 weeks until 2 months of age, monthly until 6 months of age, and quarterly thereafter".

https://www.capcvet.org/capc-recommendations/capc-general-guidelines

The most common anthelmintic (dewormer) administered from 2 weeks to 2 months of age for puppies and kittens is pyrantel pamoate. There are many brands of product available with this active ingredient. The lower concentration products are available over the counter at farm supply stores and some department stores. Higher concentration products (usually 50mg/ml) can be obtained through your veterinarian. This active ingredient is also found in some of the monthly parasite control products discussed later.

By starting your dogs and cats on a monthly heartworm preventive that contains a dewormer, you can cover them for both groups of parasites with one monthly dose. A more detailed discussion of heartworms as well as lists of products available is discussed later. You can read more about each of the intestinal worms discussed above at the following links:

https://www.capcvet.org/capc-recommendations/ascarid-roundworm/

https://www.capcvet.org/capc-recommendations/hookworms/

https://www.capcvet.org/capc-recommendations/whipworms

Fleas and Ticks

Fleas cause a broad spectrum of health issues in dogs and cats from Flea Allergy Dermatitis (Skin Disease) to life threatening anemia and even the plague. As such, it is best to prevent infestation by treating with a flea control product on an ongoing basis. The frequency of treatment depends on the product used. If you are treating an infestation that is already present, you need to treat the environment (house and yard to include the pet's bedding etc) as well as all animals in the household. Expect to treat for several months before breaking the life cycle and gaining control of the infestation.

The more common effective flea prevention and control products include:

Afoxolaner (Nexgard): dogs (monthly oral) Dinotefuran (Vectra): dogs and cats (monthly topical spot-on) Fipronil: dogs and cats (monthly topical spot-on or spray) Fluralaner (Bravecto): (dogs every 3 months oral) Imidacloprid (Advantage and generic topicals/ Seresto Collar): dogs and cats (monthly topical or 8- month collar) Indoxacarb (Activyl): dogs and cats (monthly topical spot-on) Nitenpyram (Capstar): dogs and cats (daily or as-needed oral) Selamectin (Revolution/Paradyne): dogs and cats (monthly topical spot-on) Spinosad (Comfortis): dogs and cats (monthly oral)

Synthetic pyrethrins: dogs (various formulations including cyphenothrin, deltamethrin, flumethrin, and permethrin); some formulations are registered for use on cats (e.g. flumethrin) while others may be toxic to cats.

https://www.capcvet.org/capc-recommendations/fleas/

Recommendations for tick control are similar to flea control. Ticks transmit numerous disease organisms to include the organisms that cause Rocky Spotted Mountain Fever, Lyme Disease and Cytauxzoonosis to name just a few. Ticks can also cause Tick Paralysis and allergic hypersensitivity reactions. Products available for tick control are fewer than for the other parasites included in this discussion. According to the CAPC, afoxolaner (Nexgard), amitraz (Preventic Collar, Certifect), fipronil (Frontline and multiple generic products), fluralaner (Bravecto), and the pyrethroids (multiple products) are approved for use in dogs.

Only etofenprox (BioSpot), fipronil (Frontline and multiple generics), and flumethrin (Seresto Collar) are approved for use on cats.

https://www.capcvet.org/capc-recommendations/ticks/

Heartworms

Heartworms are transmitted to dogs and cats by mosquitos. It is relatively easy to prevent by administering a monthly preventive. This should be started at 8 weeks of age and continue for the life of the animal. Many of the products available also keep intestinal worms under control. There are oral as well as topical products available as listed below.

While heartworms have the potential to be treated for dogs, it is quite expensive (often running around \$1000+) and not without periods of significant discomfort and risk to the patient. There is no treatment currently available to treat cats for heartworm disease. You can read more about heartworm disease in both of these species at https://www.heartwormsociety.org/

Heartworm preventives for cats include: HEARTGARD[®] Chewables for Cats (ivermectin)(Merial) Advantage Multi[®] Topical Solution for Cats (imidacloprid/moxidectin) (Bayer Animal Health)* Interceptor[®] Flavor Tabs[®] for Dogs & Cats (milbemycin oxime)(Elanco) Paradyne[®] (selamectin) (Zoetis) Revolution[®] (selamectin)(Zoetis) https://www.capcvet.org/capc-recommendations/feline-heartworm/

Heartworm preventives for dogs include:

Advantage Multi® Topical Solution for Dogs (imidacloprid/moxidectin) (Bayer Animal Health) HEARTGARD[®] Chewables for Dogs (ivermectin) (Merial) HEARTGARD® Tablets for Dogs (ivermectin) (Merial) HEARTGARD[®] Plus Chewables for Dogs (ivermectin/pyrantel) (Merial) HeartShield[™] Plus Flavored Chewables (ivermectin/pyrantel) (TruRx) Interceptor[®] Flavor Tabs[®] for Dogs & Cats (milbemycin oxime) (Elanco) Interceptor[®] Plus Flavor Tabs[®] for Dogs (milbemycin oxime/praziguantel) (Elanco) Iverhart Max[®] Chewable Tablets (ivermectin/pyrantel pamoate/praziquantel) (Virbac) Iverhart Plus[®] Flavored Chewables (ivermectin/pyrantel) (Virbac) Paradyne[®] (selamectin) (Zoetis) PetTrust[™] Plus Chewable Tablets (ivermectin/pyrantel) (Sergeant's) ProHeart[®] 6 (moxidectin) (Zoetis) Revolution[®] (selamectin) (Zoetis) Sentinel[®] Flavor Tabs[®] (milbemycin oxime/lufenuron) (Virbac) Sentinel® Spectrum® Chewables (milbemycin oxime/lufenuron/praziguantel) (Virbac) Trifexis[®] Chewable Tabs (spinosad/milbemycin) (Elanco)

https://www.capcvet.org/capc-recommendations/canine-heartworm/

So, which product(s) for your pet? A few points to consider ...

No single product covers all of the parasites discussed. But there are several products that cover all but ticks.

For cats, Revolution and Advantage Multi are topical products that cover everything but ticks. Both of these products are also labeled to treat ear mites, so using one of these products provide a very broad spectrum of activity. To add protection against ticks, one of the fipronil containing products could be added during tick season. I would recommend applying fipronil two weeks after the regular monthly dosing of the Revolution or Advantage Multi

For dogs, your first decision would be to decide if you prefer a topical or oral product. If oral products are preferred, monthly Interceptor Plus for heartworm prevention and intestinal worm control with monthly Nexgard or every three month Bravecto chewable tabs for flea and tick control would be a good option. As with cats, topical Revolution or Advantage Multi would cover all but ticks, which could be accomplished with one of the fipronil containing products.

As a side note: Tape worms were not discussed above, but it is worth mentioning that tapeworms are transmitted to dogs and cats when they ingest an infected flea or rodent. You most commonly notice tapeworm infections when you see small white (rice-like) segments of worm around the anus or on the stool. Preventing fleas is a big step to managing this parasite. Most of the dewormers used to treat roundworms and hookworms do not work against tapeworms. The beauty of oral Interceptor Plus is that it does treat tapeworms. If you happen to notice tapeworm segments on your dog or cat, talk to your vet about treatment/management options.