Basic Worm Types

Tapeworms: Segmented, flat, pale/white, several inches or more long. Individual or small groups of segments may be seen in fecal matter, egg packets stuck to fur under tail.

Roundworms: Smooth, can be up to 5 inches long, but about 3 inches is most common. Often described as "spaghetti" or "noodles". Off-white to reddish/brown hue. May see in feces, around the undertail area, or in vomit.

Hookworms: Bumpy/ringed, curly, off-white reddish hue. About $\frac{1}{4}$ to $\frac{1}{2}$ inch long. Can be hard to see in fur and feces.

Whipworms: These worms are not visible outside of the cats body. The stool must be examined microscopically for eggs to determine infection. Rare in cats.

Please see these sites for more info and pictures: https://cat-world.com/worms-in-cat-poop/ https://www.wikihow.com/Identify-Worms-in-a-Cat

MEDICATION	TREATS	MIN AGE/WGT	COMMENTS
Pyrantel (Nemex®, Strongid®, Selamectin, Sarolaner)	Roundworms Hookworms	2 weeks	Tablets, Liquid, Paste. Available OTC. Can be given at 2 weeks of age, then every 2 weeks until 16 weeks old.
Praziquantel (Droncit®)	Tapeworms	4 weeks	Tablets, Injection. Available OTC. Always also check for/treat for fleas (the tapeworm vector).
Pyrantel + praziquantel (Drontal®)	Roundworms Hookworms Tapeworms	4 weeks	Tablets, Injection. Available OTC. Multiple treatment required for hookworms and roundworms.
Fenbendazole (Panacur®, Safe- Guard®)	Roundworms Hookworms Whipworms Some Tapeworms Giardia	Consult a licensed vet before using.	Powder, Liquid, Paste. Available OTC. Not FDA approved for use with "house cats", but commonly prescribed off-label.

Summary of Common De-wormers

Details of common anti-parasite medications for cats:

(courtesy University of Wisconsin – School of Veterinary Medicine)

Oral Medications:

- **Pyrantel** (Nemex®, Strongid®, others) effective against roundworms and hookworms. Inexpensive and easy to administer. For dogs and cats. Is safe to give to pregnant animals and to neonatal puppies and kittens. Requires repeat dosing. Should not be used in conjunction with piperazine.
- Fenbendazole (Panacur®) effective against roundworms, hookworms, whipworms, some tapeworms (*Taenia*) and Giardia. Must be given for at least 3 consecutive days in order to effectively treat whipworms, and 5 days for Giardia. Safe, but can be difficult to administer and relatively expensive. Available in granule or liquid formulations. Safe in pregnant animals. Labeled for use in dogs, but is effective and safe in cats.
- Febantel (Rintal®) effective against roundworms, hookworms, and whipworms. Formulated for use in horses, so doses for dogs and cats must be carefully calculated. May not be readily available.
- **Piperazine** (Pipa-Tabs®, Seargent's Worm-Away®, others) effective against roundworms, including Toxacara, Toxascaris and Baylisascaris. Not effective against hookworms (or any other parasites), which greatly limits its usefulness. For dogs and cats. Is safe to give to pregnant animals and to neonatal puppies and kittens. Requires repeat dose. Should not be used in conjunction with pyrantel.
- Praziquantel (Droncit®) effective against nearly all tapeworms (*Diplydium, Taenia, Echinococcus, Diphyllobothrium*, and at a higher dose, *Spirometra*). Relatively expensive, very safe. Can be given to pregnant animals. Should not be used in animals younger than 4 weeks. Single dose. For dogs and cats. Injectable form also available (see below). It is also important to control fleas when treating *Diplydium caninum* infections.
- **Epsiprantel (Cestex®)** effective against most tapeworms (*Diplydium caninum* and *Taenia*). Should not be used in pregnant animals or animals younger than 7 weeks. Single dose. For dogs and cats. It is also important to control fleas when treating *Diplydium caninum* infections.
- Pyrantel + praziquantel (Drontal®) effective against roundworms, hookworms, and tapeworms (*Diplydium, Taenia, Echinococcus, Diphyllobothrium*, and at a higher dose, *Spirometra*). Formulated for use in cats, but can also be used in dogs. Relatively expensive, very safe. Can be given to pregnant animals. Should not be used in animals younger than 4 weeks. Repeat dose required for treatment of roundworms or hookworms, single dose for tapeworms. It is also important to control fleas when treating *Diplydium caninum* infections.
- **Pyrantel + praziquantel + febental (Drontal Plus®)** effective against roundworms, hookworms, whipworms, and several tapeworms (*Diplydium, Taenia, Echinococcus, Diphyllobothrium*, and at a higher dose, *Spirometra*). There is also some evidence that this product may also be helpful in treating Giardia. Relatively expensive. Single dose for treatment of all worms except for whipworms. Formulated for use in dogs, but not cats. Should not be used in pregnant animals or puppies younger than 3 weeks or less than 2 pounds. It is also important to control fleas when treating *Diplydium caninum* infections.
- Ponazuril (Marquis Paste®) This product, made by Bayer, is labeled for use in horses, so it must be carefully diluted. Concentration of the paste is 15% [150mg/gram]. It can be mixed with water, VAL syrup, Lixotinic, and palatable other liquids. The drug is expensive (about \$200 per tube) but after dilution the cost per dose is only about 25-50 cents. Shelters have used it in very young animals (2 weeks of age, less than 1 lb), and report great success. Prophylactic treatment of all puppies and kittens is recommended for shelters in which Coccidia is common. A "recipe" for diluting Marquis to a 100 mg/mL dilution can be found here.
- Toltrazuril (Baycox) This is labeled for treating coccidia for poultry. Used as an alternative treatment for coccidiosis in dogs and cats, and the oocyte shedding stage of toxoplasmosis in cats. Not commercially available in the US, but can be imported.
- Metronidazole (Flagyl) This drug is an antibiotic that is also used to treat infections such as

Giardia, Trichomoniasis, and Amoebiasis. This medication is illegal in all food animals and has a narrow margin of safety.

- Sulfadimethoxine (Albon®) Albon is an antibiotic suspension that is used to treat a variety of conditions in small animals. Albon can be used to treat coccidia in dogs and cats.
- Amprolium (Corid®, Amprovine®) Amprolium is an anticoccidial drug effective that is used off label in dogs and cats for coccidiosis. Use longer than 14 days may cause thiamine deficiency.
- **Ronidazole** This is an antiprotozoal drug used off label in veterinary medicine to treat Tritrichomonas foetus infection in cats. It is labeled for treatment of histomoniasis and swine dysentery. This medication should not be handled by pregnant women. This drug must be compounded.

Injectable medications:

- Ivermectin (Ivomec®) This medication is formulated for cattle, but can be used in dogs and cats. Extreme caution should be used in dose calculation because overdoses can be fatal. Injectable product can be given subcutaneously, orally, or, for some external parasites, topically (for more information about external parasites see section below). This formulation of ivermectin provides a dose many times higher than that found in heartworm preventatives. Effective against roundworms and hookworms. Also effective against some external parasites (ear mites and sarcoptic mange mites). For more information, see section on external parasites. Ivermectin is not reliably effective against whipworms. Single dose effective for most parasites. Inexpensive. Can be used in dogs and cats. Should NOT be used in collie-type breeds, in dogs that may be infected with heartworm, in puppies less than 6 weeks old, or in kittens less than 4 weeks old.
- **Praziquantel (Droncit**®) effective against nearly all tapeworms (*Diplydium, Taenia, Echinococcus, Diphyllobothrium*, and at a higher dose, *Spirometra*). Relatively expensive, very safe. Can be given to pregnant animals. Labeled for use in dogs and cats at least 4 weeks of age. Single dose. Oral formulation also available (see above).

Links/Sources:

https://www.uwsheltermedicine.com/library/resources/kitten-deworming-protocol https://www.uwsheltermedicine.com/library/resources/intestinal-parasite-control-guidelines https://allaboutcats.com/pyrantel-for-cats https://allaboutcats.com/fenbendazole-for-cats https://pubmed.ncbi.nlm.nih.gov/10714528/

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