

Hookworm Disease



GUIDE

Overview

- Although incidence of hookworm varies based on climate, pets are at risk for hookworm disease **in all 50 states**. Areas with high concentrations of dogs such as **dog parks** may increase the risk of pets contracting this disease.
- **Hookworms live in contaminated soil** and infect dogs and cats through penetration of the skin or ingestion of the larvae or an infected paratenic host. They can also be transmitted through nursing in puppies and kittens. Hookworms cause bleeding in the intestinal tract and are a serious disease that can cause debilitation or death, especially in younger animals.
- Hookworm larvae migrate through tissues of the host until they become adults in the intestine of dogs and cats. Migration of hookworm larvae can affect various organs and is also potentially a problem in people, causing skin lesions called cutaneous larval migrans.
- **In dogs**, signs of infection may include dark, tarry diarrhea, anemia, loss of appetite, weight loss and skin lesions. Puppies infected with hookworms are at greater risk due to blood loss if not treated quickly.
- **In cats**, signs of infection may include diarrhea or anemia. Respiratory disease and pneumonia may occur as larvae migrate through the lungs. Skin issues may occasionally be noted due to penetration of the hookworm larvae. In kittens, hookworms can be fatal due to blood loss if not treated quickly.
- Dogs and cats should be protected against hookworms with a year-round administration of broad-spectrum parasite control product.



Timely removal of feces from the environment will also protect pets and people from infection.



HOOKWORMS INFECT PEOPLE, TOO

Canine Hookworm is a parasite with the **potential to infect humans**. Infection in people from dog and cat hookworms is generally displayed as itching at the infection site and sometimes appears as cutaneous larval migrans—a winding, threadlike, raised reddish brown rash with occasional bumps and blisters.



Actual case from child who visited beaches

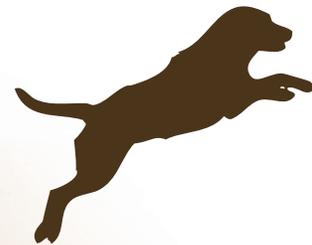
Close to Your Home

- It's very likely that hookworms are in your neighborhood. A recent study shows hookworm yearly prevalence has increased **47% from 2012 to 2018**¹, with CAPC maps reporting **212,863 positive cases of canine hookworm infection nationwide in 2018**.²
- Any outdoor areas that dogs and cats have access to can potentially become reservoirs of hookworm larvae. Sandboxes, gardens, dog parks, rest areas and beaches are examples of common areas of contamination. Pets can become infected by hookworm larvae penetrating the skin, but also by routine cleaning or licking dirty paws, chewing on contaminated toys, or even eating infected prey such as cockroaches or mice.
- A 2018 study of GI parasite transmission in dog parks in the southeast US revealed **27% of samples collected contained GI parasites** (whipworms, hookworms, and roundworms). 17% were hookworm positive.³ **That is an example of why broad-spectrum year-round protection against intestinal parasites is vital.**
- Dog parks are quickly becoming a standard feature in many communities. A recent study by the Trust for Public Land reported **744 off-leash dog parks** in the top 100 cities in the US in 2018. This is a **40% increase since 2009**.⁴



There has been a

47%
increase



in the number of hookworm cases

One species of hookworm can produce about

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Hookworms

Why monthly prevention and regular testing matters

- Most hookworms prefer warmer environments and are most prevalent during the summer months (July-August). Other intestinal parasites such as roundworms are present year-round, therefore **broad-spectrum, year-round protection** should be practiced.
- Hookworms produce a massive number of eggs on a daily basis. Therefore, the risk of environmental contamination is high. One species of hookworm can produce about **20,000 microscopic eggs** per day!
- Blood loss due to hookworm infection, especially in puppies and kittens, can kill or seriously harm them. That's why regular fecal testing by your veterinarian is very important.

Environmental Control

- Avoiding environmental contamination is extremely important to prevent exposure. Cleaning up feces after your pet is an important part of preventing the spread of hookworms.
- Hookworms that infect dogs and cats can also infect people, usually through the skin. Avoid walking barefoot in areas where contamination is possible and wear gloves and shoes when gardening. Children's sandboxes should also be covered when not in use.
- Adhere to leash laws to prevent dogs from areas where dog feces is not cleaned up.



Every pet tested and protected





HUMANS



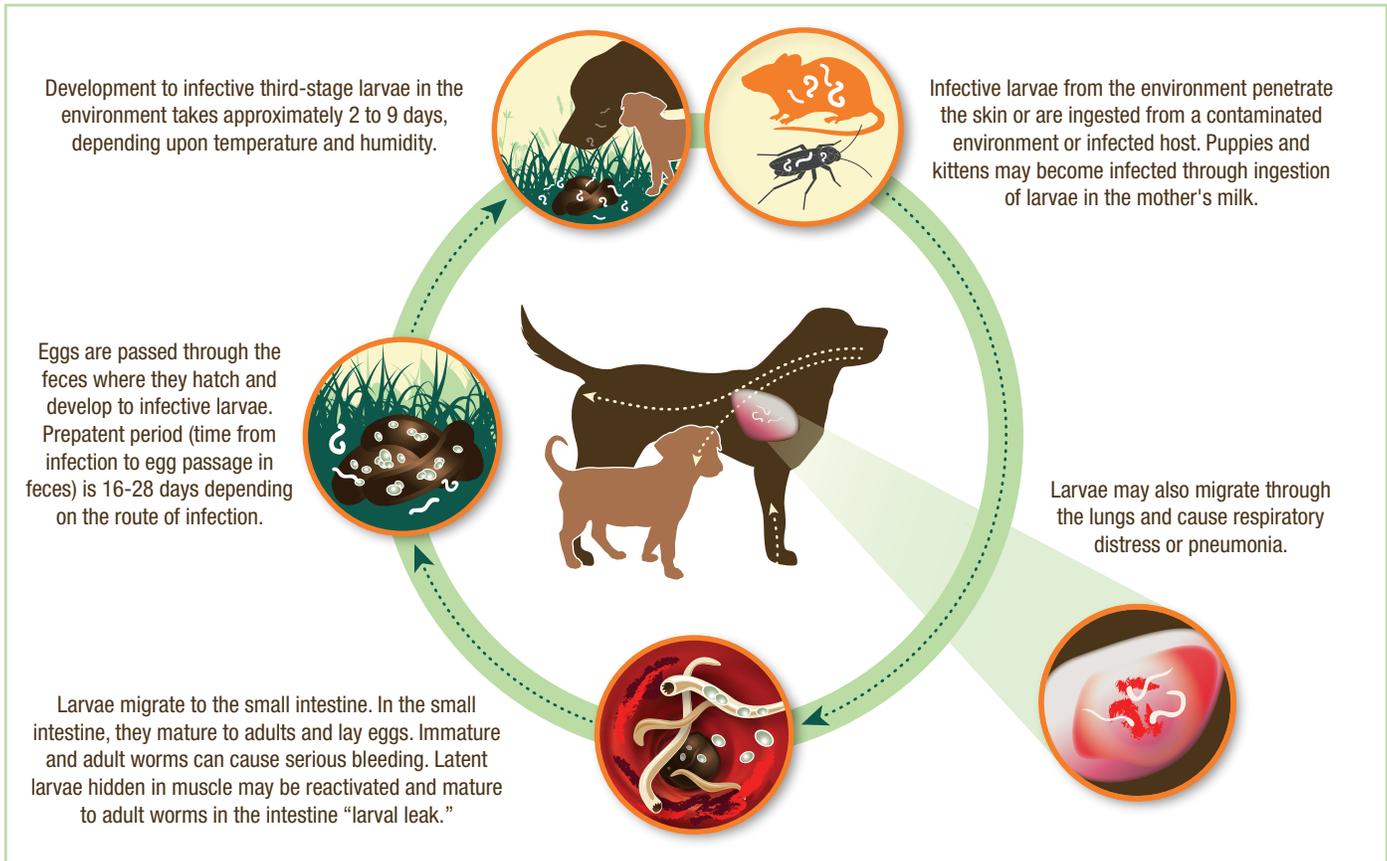
DOGS



CATS

AFFECTS >

Hookworm Lifecycle



All pets tested and protected

- CAPC recommends that puppies and kittens be tested at least four times in the first year of life for intestinal parasites, including hookworms, and at least two times per year in adults, even if they are on year-round preventives.
- Administer monthly broad-spectrum parasite control with efficacy against hookworms year-round. Your veterinarian can recommend an effective preventive that's right for your pet.
- To help pet parents and veterinarians identify the risk for hookworm and other parasite infections in your geographic area, CAPC Parasite Prevalence maps (<https://capcvet.org>) can provide hookworm parasite prevalence for the U.S. at the county level.

References

1. Drake, J., Carey, T. Seasonality and changing prevalence of common canine gastrointestinal nematodes in the USA. *Parasites Vectors* 12, 430 (2019) doi:10.1186/s13071-019-3701-7
2. <https://capcvet.org/maps#2018/all/hookworm/dog/united-states/>
3. Savadelis, Molly & Evans, Chris & Mabry, Kristen & LeFavi, Leanne & Klink, Bruce & von Simson, Cristiano & Moorhead, Andrew. (2019). Canine gastrointestinal nematode transmission potential in municipal dog parks in the southeast United States. *Veterinary Parasitology: Regional Studies and Reports*. 18. 100324. 10.1016/j.vprsr.2019.100324.
4. 2018 City Park Facts Report by the Trust for Public Land. <https://www.tpl.org/2018-city-park-facts-dog-parks>

Visit us at PetsAndParasites.org to learn more.

