

Parasite Control in Pets

Frequently Asked Questions



Parasites like fleas, ticks, mites and worms are a lifelong risk for pets. They cause pain, discomfort, and illness that can be life-threatening for a pet if left untreated. In addition, some pet parasites and the diseases they carry can spread to people, putting our health and well-being in jeopardy.

Parasite control is one of the cornerstones of veterinary care and necessary for all pets. Tools like diagnostic testing and parasiticide use offer layered protection that can effectively prevent infestations and offer early treatment for those that occur. This safeguards our animals and protects the surrounding household against any illness these parasites could also share with people.

However, the risk of parasites is changing. Phenomenon such as climate change are allowing parasites to thrive in new areas, so protection is more important than ever.

This FAQ can help people understand the evolving risk of parasites, how they can be controlled, and the measures in place to manage tools like parasiticides.

Questions



Basics of Pet Parasites

- What are parasites and how do they affect pets?
- Are parasites common in pets?
- Why does protecting pets against parasites also protect people?
- Is the threat of parasites and vector-borne disease growing or changing?

How are Parasites Controlled?

- How can pet owners protect their animal against parasites?
- Are year-round treatment strategies necessary for parasites?
- Can parasites be controlled without parasiticides or diagnostics?

Environmental Protection

- How are parasiticides regulated and monitored to avoid any environmental risk?
- What measures are put in place to help avoid a risk of parasiticides entering the environment?



What are Pet Parasites?

What are parasites and how do they affect pets?

Parasites are organisms like fleas, ticks, mites and worms that feed off pets, causing discomfort, pain, and disease. Parasites can live inside or on our pets, put nearby people at risk, and are a threat in nearly every area of the world.

Parasites survive by attacking animals for nourishment. They live in or on the body, benefiting from food and protection, while the animal suffers. Common parasites like ticks and fleas live on an animal's skin or hidden in their fur, while internal parasites like worms live inside the body.

For internal parasites, which can lead to malnutrition and other diseases. For external parasites, common symptoms include skin irritation, bites, insects burrowed into the of hair or appetite. Animals will often itch in areas where external parasites are present, which may worsen skin issues leading to sores and other wounds.

Furthermore, parasites like ticks often serve as 'vectors' of disease. This means they can carry a disease and transmit it to the animal through a bite. Certain parasites can also spread illness from pets to people, which puts pet owners at risk.

Parasites are present almost everywhere in the world. Treatment of infestation is possible; however, it is generally agreed that prevention is the safest, most effective protection.

Are parasites common in pets?

Research shows that parasites are a risk to nearly all pets. Not taking steps to control them means a pet may suffer a dangerous infection or infestation.

For instance, groups like the Companion Animal Parasite Council (CAPC) in the US and the European Scientific Counsel for Companion Animal Parasites (ESCCAP) in the EU track the movement of parasites and the infections they can cause. ESSCAP's maps show a risk of parasites in every EU nation, while the CAPC receives millions of positive parasite diagnoses each year.^{1,2}

This work is supported by academic research as well. For instance, a recent study of U.S. dog parks found that in 85% of the locations visited, at least one dog tested positive for intestinal parasites.³ Furthermore, since parasites thrive by finding new 'host animals', one infected pet puts others and, for certain parasites, people at risk.



A study found that in 85% of U.S. dog parks visited, at least one dog tested positive for intestinal parasites.



Why does protecting pets against parasites also protect people?

Many parasites that infest or cause disease in animals also harm people. In fact, one out of every four zoonotic illnesses can be linked to parasites that affect our pets.⁴ It is why parasite prevention in animals provides protection for the people around them.

As a recent peer-reviewed study found -- “some of the most important zoonotic infectious diseases are associated with parasites transmitted from companion animals to man.”⁵

External parasites like fleas can cause bites and irritation in humans, while ticks can spread ‘vector-borne diseases’ from animals to people. Internal parasites like roundworms or tapeworms can also infect people through accidental or improper handling of animal waste. In ‘at-risk’ populations such as the elderly, children, or immunocompromised, an infection with disease like Toxocariasis, which is caused by parasites, can be dangerous and potentially life-threatening.

Parasite detection and prevention in animals is therefore important to protecting the surrounding family, community and wider public from these potential ‘zoonotic’ transfers. When properly implemented, a parasite prevention strategy reduces the risk of parasites and vector-borne disease for that animal, which provides a ‘halo’ of protection for the people around it.

“
One out of every four zoonotic illnesses...can be linked to parasites that affect our pets.
”

Is the threat of parasites growing or changing?

Yes. Climate change enables parasites and vector-borne disease to thrive in areas that may not have previously been hospitable.⁶ More people traveling with pets may also contribute to the spread of certain parasites into new regions.

Leishmaniasis is a dangerous, parasitic disease. When an animal is infected, it can suffer from muscle pain, joint pain, kidney failure and even death. As a ‘zoonotic’ infection, it can also spread from an animal to people and cause severe illness.

Leishmaniasis is also one of several parasitic diseases that researchers are seeing move further north as climate change makes regions more hospitable. In Europe, Leishmaniasis was once found only in Mediterranean countries, however researchers see it as far north as Germany and predict “the climate in Central Europe is projected to become increasingly more suitable.”⁷

Furthermore, traveling is helping parasites settle into new areas. Studies within the UK have found that canine travel from places like Cyprus, Spain and France is directly connected to the emergence of new tick species.⁸

This is why surveillance and control are important to prevention. With parasite populations evolving, widespread diagnostic testing provides veterinarians with up-to-date prevalence data. Robust parasiticide controls also strengthen animal defenses against emergence of new parasites in their region.

Basics of Parasite Control

How can pet owners protect their animal against parasites?

Experts agree that the best protection against parasites is prevention, and the cornerstones are diagnostics and parasiticides.⁹ These tools can detect, track, prevent, and treat the parasites that put animals at risk. Every animal owner should work with their veterinarian to develop a strategy that best leverages these tools.

Diagnostics can accurately detect internal parasite infections and vector-borne diseases. For acute infections like coccidiosis or babesiosis where symptoms are clear, diagnostics can quickly confirm an infection and help a veterinarian select the right treatment.

For an infection like heartworm or leishmaniosis, once signs of disease are visible the infection is often life-threatening.¹⁰ Regular diagnostics help catch these infections early when they can be more effectively treated and block the further spread of disease, including to people.

Diagnostics also provide an important tool for parasite tracking. By aggregating testing results across millions of animals, researchers monitor parasite populations and help those in at-risk areas implement robust prevention strategies.¹¹

Parasiticides work alongside regular diagnostic testing to effectively prevent and treat parasites that can infect an animal. These medicines come in a wide variety of options including pills, spot-ons, collars, etc. and rely on varying ‘modes of action.’ Some may

**“
Parasiticides work alongside regular diagnostic testing to effectively prevent and treat parasites that can infect an animal.
”**

provide protection directly on the skin of the animal, stopping external parasites from taking hold in the fur and biting. Others may provide protection through the blood of the animal, so that the ingested blood kills the parasites before it produces eggs.

Together, parasiticides and diagnostics offer a complementary, dual layer of parasite control. Consulting with a veterinarian can help owners ensure their animal has the right mix of coverage.

Are year-round treatment strategies necessary for parasites?

Although the specific tools may differ, all pets can benefit from a comprehensive parasite prevention strategy. Approaches that avoid infections in the first place ensure the animal and surrounding people are best protected against parasites and vector-borne disease.

Owners should work with their veterinarian or other professional to determine a tailored approach, but it is important to recognize that parasites are ever present and no animal, even those living inside, are ‘risk free.’ Prevention should be a continuous, life-long

consideration for all pets. An assessment by a veterinarian can consider factors such as lifestyle, the local area, travel habits, and parasites prevalence. For instance, in a region where heartworm is present, continual diagnostic monitoring and parasiticide

treatment is essential to avoid a potentially fatal infection.¹²

In circumstances where an animal does not receive continual treatment, it is important that veterinarians help owners understand the risks this may present, particularly if treatments are missed or not done in a timely manner.

For instance, the European Scientific Counsel for Companion Animal Parasites cautions pet owners that if prevention products are not used for fleas and an infestation sets in, it will take “at least three months to eliminate.”¹³

The U.S. Food and Drug administration also warns pet owners that treatment for heartworm disease “is not easy on the dog...can be potentially toxic...and can cause serious complications.”¹⁴ It’s why they urge owners to undertake year-round prevention and the American Heartworm Society advocates for owners to ‘Think 12’ -- meaning 12 months of heartworm prevention and a diagnostic test every 12 months.¹⁵

Useful resources are available to veterinarians and pet owners describing the factors to be considered when planning parasite treatment and prevention such as:

- [Companion Animal Parasite Council](#) for the United States,
- [ESCCAP](#) for European countries and
- [Tropical Council for Companion Animal Parasites \(TroCCAP\) | TroCCAP](#) for “the tropics” including Asian, African and South American geographies.

“

In a region where heartworm is present, continual diagnostic monitoring and parasiticide treatment is essential to avoid a potentially fatal infection.

”

Can parasites be controlled without parasiticides or diagnostics?

Parasite control built on robust diagnostic testing and consistent parasiticide use is a scientifically proven strategy that drastically minimizes the risk of infection.

Across the U.S., Europe, South America and more, there are ‘Companion Animal Parasite Councils’, which are led by veterinary experts in pet parasites. These Councils offer detailed guidelines that veterinarians may rely upon to control, detect and treat the parasites in their region and all guidelines leverage diagnostics and parasiticides as the core of parasite control.¹⁶ These expert groups recognize and promote these approaches because they are proven tools that protect pets.

For instance, the Companion Animal Parasite Council (CAPC) in the United States recommends annual diagnostic testing for heartworm and tick-transmitted pathogens. CAPC also endorses a strategy of “every pet, all year long”, which means “year-round broad-spectrum parasite control with efficacy against heartworm, intestinal parasites, fleas and ticks.”¹⁷ For more information on proper parasite control, visit the companion animal council for your region.

Environmental Protection

How are parasiticides regulated and monitored to avoid any environmental risk?

Parasiticides undergo a rigorous review and approval process by national regulatory agencies. Any authorized medicine has been fully assessed by these experts, including any potential risks to the environment, before it is allowed to be put on the market.

Before any veterinary medicine can reach the market, manufacturers must demonstrate it is safe for the animal, the person administering it and the environment. A core part of this process is the 'environmental risk assessment' (ERA), which evaluates if there are any potential impacts on the wider environment including 'beneficial organisms' such as earthworms.

All parasiticides must pass this environmental risk assessment before it can receive a 'regulatory approval' and be sold to pet owners. It is a robust process that sets a high bar that developers must meet to bring a product to market.

Furthermore, once a product is on the market it is monitored through 'pharmacovigilance' systems, which track and investigate any reports of any issues. Companies monitor their products from the first sale until it is retired from the market to help ensure they remain safe and effective. It is a legal requirement in major markets and all companies comply.

More information on how environmental considerations play a role in development, authorization, manufacturing, use and disposal of medicines can be found in the HealthforAnimals publication – [Animal Medicines and the Environment: Principles and Practices](#).

What measures are put in place to help avoid a risk of parasiticides entering the environment?

Products are designed with environmental safety as a foremost consideration, which is why environmental risk assessments are performed by developers on all parasiticides and evaluated by regulators. Furthermore, users receive clear instructions through product labels that explain how to apply a parasiticide and precautions, if any, to avoid entry into the environment.

Products are designed with environmental safety as a foremost consideration, which is reflected in everything from development to approval to the instructions on the product label.

Products used on the skin are designed to remain on a pet for long-lasting protection and this will be verified by data provided to regulators. Owners are also provided instructions such as not allowing an animal to swim shortly after application. Small amounts may be washed-off if these instructions are not followed, however the level will be low as products are designed to remain effective even in these conditions.

For internal products such as oral parasiticides – pets may excrete trace amounts in their waste. The exact amount varies by product, but it is generally quite low and environmental impacts are unlikely. Furthermore, disposing of a pet's waste avoids this altogether.

Following product instructions are the best way to not only ensure pets receive effective protection against parasites, but to ensure no undue risk is created for the environment.

For more information on pets and parasites visit HealthforAnimals.org or the companion animal parasite council for your region:

USA

**Companion Animal
Parasite Council**



Europe

**European Scientific
Council Companion
Animal Parasites
(ESCCAP)**



**Asian, Africa and
South America**

**Tropical Council
for Companion
Animal Parasites
(TroCCAP)**



References

- 1 ESCCAP Guideline Maps: <https://www.esccap.org/guidelines-maps/>
- 2 CACP Prevalence Maps: <https://capcvet.org/maps>
- 3 <https://pubmed.ncbi.nlm.nih.gov/32487211/>
- 4 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7563794/>
- 5 <https://www.sciencedirect.com/science/article/pii/S002199751500314X?via%3Dihub>
- 6 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6378404/>
- 7 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9334478/>
- 8 <https://pubmed.ncbi.nlm.nih.gov/29217768/>
- 9 <https://www.aaha.org/aaha-guidelines/life-stage-canine-2019/parasite-control/>
- 10 European Scientific Council Companion Animal Parasites, World Control Guidelines: https://www.esccap.org/uploads/docs/uoyqf2a_0461_ESCCAP_MG1__English_20210518.pdf
- 11 This work is done in the USA by the Companion Animal Parasite Council: <https://capcvet.org/> and in Europe by the European Scientific Council for Companion Animal Parasites (ESCCAP): <https://www.esccap.org/>
- 12 <https://www.aaha.org/aaha-guidelines/life-stage-canine-2019/parasite-control/>
- 13 https://www.esccap.org/uploads/docs/t58tbu33_0687_ESCCAP_General_Recommendations_update_v5.pdf
- 14 <https://www.fda.gov/animal-veterinary/animal-health-literacy/keep-worms-out-your-pets-heart-facts-about-heartworm-disease>
- 15 https://d3ft8sckhnqim2.cloudfront.net/images/Think_12_PDFs/Think12Dog_Dos_and_Donts101316.pdf?1476362471
- 16 US: <https://capcvet.org/guidelines/general-guidelines/> EU: <https://www.esccap.org/guidelines/> Tropics: <https://www.troccap.com/canine-guidelines/>
- 17 <https://capcvet.org/guidelines/general-guidelines/>