

THE CONSEQUENCES OF RISING TEMPERATURES

Diseases



Diseases

MANY SPECIES OF PARASITES CAN ONLY TRAVEL A FEW METRES ON THEIR OWN. BUT NOW THEY ARE SPREADING DISEASES RIGHT ACROSS EUROPE, AIDED BY RISING TEMPERATURES. WANT TO KNOW HOW THIS IS POSSIBLE?

As owners, we are constantly striving to **keep our pets healthy and protect them from their biggest disease risks.** However, rising temperatures are creating a new threat in the form of blood-sucking parasites and their diseases.

Many species of parasite can only travel tiny distances. Mosquitoes can fly no more than a few miles. Ticks can't fly at all. Fleas can jump up to 100 times their own height, but that's still only a couple of feet. **However, each of these types of parasites can be transported hundreds of miles, either in human travels or on the backs of animals.** In fact, we're seeing that **several different species are spreading across Europe.**

The bad news, for our pets, is that these parasites can serve as carriers for many different diseases. When they bite or sting their target, they can pass on a variety of diseases. These organisms can be viruses, bacteria and even other parasites, and they **continue living inside the new host, which could be either a pet or a person.**



BUG FACTS!

There are over 800 different species of tick in the world

and many of them carry diseases.

Alongside local mosquitoes, **5 invasive species** that originated in tropical regions have become established in Europe. Some of these carry heartworm, a disease which, sadly, **can be fatal for cats and dogs.**

(Medlock et al. 2012).*

Fleas might seem like nothing more than an annoying pest - but in fact, as well as being very itchy, **they can make our pets sick fever, anaemia and vomiting.** *(Semenza & Suk, 2018)**.*

*Medlock, J. M., Hansford, K. M., Schaffner, F., Versteirt, V., Hendrickx, G., Zeller, H., & Van Bortel, W. (2012). A review of the invasive mosquitoes in Europe: ecology, public health risks, and control options. *Vector Borne and Zoonotic Diseases* (Larchmont, N.Y.), 12(6), 435-447. <https://doi.org/10.1089/vbz.2011.0814>

**Semenza, J. C., & Suk, J. E. (2018). Vector-borne diseases and climate change: a European perspective. *FEMS Microbiology Letters*, 365(2), fnx244. <https://doi.org/10.1093/femsle/fnx244>

WHAT ARE THE MAIN DISEASES SPREAD BY PARASITES?

Parasites can spread hundreds of different diseases to our pets. **Here are some of the most common and serious examples:**

Disease

Symptom

Babesiosis	Weakness, anaemia, loss of appetite
Heartworm Disease	Vomiting, diarrhoea, breathing difficulties, heart failure
Flea Tapeworm (Dipylidium caninum)	Weight loss, lethargy, vomiting
leishmaniosis	Lethargy, vomiting, diarrhoea, nose bleeding, eye problems, skin ulcers, lameness
Anaplasmosis	Lethargy, anorexia, lameness, fever
Cat Scratch Fever (Bartonellosis)	Swelling of lymph nodes, fever
Lyme disease (Borreliosis)	Fever, lameness, painful joints, lethargy





A MENACE TO PETS!

Up to 31% of dogs with babesiosis may need hospitalization.

(Köster et al., 2015)*.

Dogs with leishmaniosis will carry the *Leishmania* parasite throughout their lives, even with treatment. **Infected dogs, with or without symptoms, pose a risk as they can transmit *Leishmania* to other dogs and humans via sandflies.**

Pet owners rightly enjoy outdoor activities with their pets but this can increase the risk of tick encounters for both the pet and humans. As a result of entering tick habitats, **research suggests that pet owners may be at an increased risk of developing tick-borne disease.****

*Köster, L. S., Lobetti, R. G., & Kelly, P. (2015). Canine babesiosis: a perspective on clinical complications, biomarkers, and treatment. *Veterinary medicine (Auckland, N.Z.)*, 6, 119-128. <https://doi.org/10.2147/VMRR.S60431>

**Jones EH, et al, *Zoonoses Public Health*. 2018; 65: 74-79. The paper is attached (from the US).

HOW DO RISING TEMPERATURES AFFECT THESE DISEASES?

Many kinds of parasite - ticks, fleas and mosquitoes cannot generate heat by themselves and so they need mild-to-warm temperatures to thrive. **The more suitable the temperature, the greater their ability to remain active and transmit diseases.**

As we noted above, parasites can travel huge distances by hitching rides from animals and people. Previously, however, they would often be unable to stay active in their new surroundings because the weather was too cold.

Now, as the 'colder' months gradually heat up, parasites can remain active (and so pass on diseases) in a greater range of territories. At the same time, they can extend beyond their peak periods and remain active for longer.

The longer they remain active, the more time they have to transmit diseases. Fleas can live and survive year-round in the home.



How to protect your pet

TO GIVE YOUR PET THE BEST POSSIBLE CHANCE OF AVOIDING THESE DISEASES, YOU SHOULD TAKE A NUMBER OF KEY STEPS.

1. GO TO YOUR VET

This is the most crucial step of all. **Your vet can advise you on the signs of disease and create a tailored protection plan for your pet that considers their age, breed and location.** To make your visit as useful as possible, we recommend you download and **complete our parasite risk assessment form**, and take it to your appointment.

2. RECOGNISE THE SIGNS AND SYMPTOMS

To protect your pet, it's important to know where they're most likely to run into parasites. For example, ticks love dense woodland, which provides plenty of dense vegetation for them to lie in wait and grab passing targets. **So check for ticks after every walk through these areas.**

The consequences of parasite-transmitted diseases vary significantly from one to the next, but there are some **key warning signs to look out for.** These include:

REDUCED MOBILITY

REDUCED APPETITE

LESS DESIRE FOR EXERCISE

DULL COAT

VOMITING

DIARRHOEA

3. SECURE EFFECTIVE, YEAR-ROUND PARASITE PROTECTION FOR YOUR PET

It's crucial to invest in parasite protection that is effective against ticks, fleas and other parasitic species. **Prevention is always better than treatment.**

4. THINK ABOUT TRAVEL RISKS

Each country carries its own parasite populations and so you need to adapt your prevention to where you are travelling to/back from. **Do you research beforehand to find out the vaccinations your pet needs and the parasite hotspots you need to avoid in your destination country.** Again, your vet will advise you here.

Key Learning from this guide

Parasites are spreading, and that means diseases are too. To keep our pets safe, we need to constantly monitor the signs of infection and protect year-round against ticks, fleas and other parasites **don't get a chance to transmit their diseases.**

TAKE THE NEXT STEPS

TAKE YOUR PET FOR A CHECK-UP.

At MyPet.com, we can connect you with **vets for will be able to search for parasites and give your furry companion a full examination**, to ensure they're fighting fit.

FURTHER READINGS

Behaviour

How Does Changing Weather Affect Your Pet?

Parasites

How Do External Parasites Threaten Our Pet's Health?

One Health

What Are The Diseases That Threaten Both Owners And Their Pets?