

INFORMATION FROM CORNELL UNIVERSITY

Fleas and ticks can carry and transmit diseases, which is why **preventing infection** is important.

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Flea and tick prevention

How do dogs get fleas and ticks?

Dogs are infected by fleas after being in an environment where flea populations can flourish, such as outside in shaded leafy debris piles and underneath decks, as well as inside homes where they can live in carpet fibers and underneath furniture.

Dogs get ticks after being exposed to an area where ticks live, such as in tall grass or wooded areas, where ticks wait to attach to an animal.

What are flea and tick preventatives, and why are they important?

Fleas and ticks can carry and transmit diseases, which is why preventing infection is important. Preventatives are types of medication that can be safely and routinely given to deter fleas and ticks from biting your dog. They come in a variety of easy-use dosages and forms.

Fleas commonly cause tapeworm infections and skin infections (flea allergy dermatitis), whereas common tick-borne diseases include anaplasmosis, Lyme disease, ehrlichiosis, Rocky Mountain spotted fever and more. Both fleas and tick-borne diseases can be zoonotic (meaning they are able to spread infections to humans), so keeping them off pets is also important to maintaining the health of the humans living and interacting with them.

What kind of products are available?

There are many different options for products. The monthly cost per dose will vary by product and may also be a factor to consider when choosing which product works best to match your budget.

Collars such as Seresto will repel fleas and ticks, and even prevent ticks from attaching, but they must be applied tightly enough to have skin contact. Many topical options containing permethrin (e.g. K9 Advantix II, Vectra 3D) will repel and prevent tick attachment.

Topical products with fipronil (e.g. Frontline) do not repel or prevent tick attachment, which means you may still see ticks crawling on your pet. It will not kill ticks until after attachment for 24 hours.

Oral preventatives containing isoxazoline (e.g. Nexgard, Simparica, Credelio, Bravecto) also do not prevent tick attachment, but they have a relatively fast tick kill time. The tick kill time is important to note because of the diseases that can be spread if a tick remains attached and alive too long. For example, a tick must be attached at least 1-2 days before the bacteria causing Lyme disease can spread to a dog.

The chart below summarizes the most common products used to prevent fleas and ticks:

Product	Frequency	Prescription	Chewable	Topical	Collar	Prevents tick attachment
K9 Advantix II	1 month			X		X
Vectra 3D	1 month			X		X
Frontline	1 month			X		
Simparica, Nexgard, Credelio	1 month	X	X			
Bravecto	3 months	X	X	X		
Seresto	8 months				X	X

Does one product work better than another?

While much comes down to owner preference (collar vs. topical vs. chewable), products that quickly kill fleas and ticks, or prevent ticks from attaching, are preferable. Your veterinarian can help you pick the preventative that works best for you and your pet. Ultimately, the best product is one that is safe and effective, and can be given to your dog easily and regularly.

Do I need to use flea and tick prevention in the winter?

Yes, year-round prevention is the best practice. While it may depend on where you live, ticks can be active at 40 degrees Fahrenheit, which is not an unusual occurrence for many locations in the U.S. during the winter months.

Year-round prevention is also important because fleas can thrive indoors, where they remain protected from the cold, outdoor temperatures.

Can my dog swim or bathe with flea and tick prevention?

Yes, flea and tick preventatives are water-resistant. Most topical products should be left to dry for two days before bathing or swimming. Collars can be left on when swimming and bathing, but if they are submerged in water regularly it may decrease the duration of efficacy, and they may need to be replaced sooner.

Are flea and tick preventives safe?

Flea and tick preventatives are generally very well tolerated by pets, and they have a wide margin of safety. However, as with any medications, side effects are possible. You should watch for signs of anxiousness, itchiness, gastrointestinal upset (vomiting or diarrhea), redness and irritation to the skin.

But read labels carefully — many products that are safe for dogs are not appropriate for use in cats, such as K9 Advantix II.

Chewables containing isoxazoline have been associated with a rare occurrence of seizures. If your dog has a history of seizures or seizure disorders, consult your veterinarian before using preventives containing this medication.

Can my pregnant or lactating dog be given flea and tick preventatives?

Products containing fipronil (e.g. Frontline, Parastar, etc.) may be given to pregnant or nursing dogs. Consult your veterinarian before using any other collar or topical product on pregnant or nursing dogs. Oral preventatives have not been evaluated for safety in pregnant or nursing dogs.