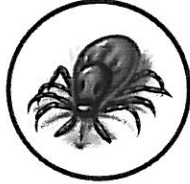


# Lyme disease • ehrlichiosis • heartworm disease

These dangerous diseases are infecting dogs throughout the U.S., including in our own neighborhood. Together, we can help your best friend avoid them and live a long, healthy life.

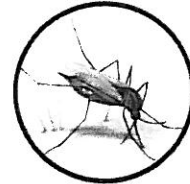
## Your guide to understanding canine parasitic diseases



**Lyme disease**



**Ehrlichiosis**



**Heartworm disease**

	<b>Lyme disease</b>	<b>Ehrlichiosis</b>	<b>Heartworm disease</b>
<b>Cause</b>	Deer tick ( <i>Ixodes</i> ) carries bacteria and bites dogs, spreading infection	Brown dog tick ( <i>Rhipicephalus</i> ) carries bacteria and bites dog, spreading infection	Mosquito transfers worm larvae from infected dog to your dog; larvae develop into worms that live in lungs and heart
<b>Most common signs of infection</b>	Silent infection <ul style="list-style-type: none"> <li>• Lameness</li> <li>• Fever</li> <li>• Swollen joints</li> <li>• Kidney failure</li> <li>• "Not himself"</li> <li>• Anorexia</li> </ul>	From mild to severe: <ul style="list-style-type: none"> <li>• Loss of appetite</li> <li>• Depression</li> <li>• Fever</li> <li>• Painful joints</li> <li>• Bloody nose</li> <li>• Pale gums</li> </ul>	No sign at first, then: <ul style="list-style-type: none"> <li>• Mild, persistent cough</li> <li>• Reluctance to move or exercise</li> <li>• Tiredness after moderate exercise</li> <li>• Reduced appetite</li> <li>• Weight loss</li> </ul>
<b>Disease progression</b> if left undetected or untreated	Damaged joints, fatal kidney disease (rare)	Permanent blindness, autoimmune diseases, bleeding complications, death	Heart failure, lung disease, sudden death
<b>Diagnosis</b>	<b>Simple blood test:</b> SNAP® 3Dx® Test (one test can detect all three infections in one blood sample) <b>Other tests:</b> Complete blood count, chemistry profile, urinalysis, other special tests depending on initial findings and symptoms		
<b>Treatment</b>	Antibiotics: doxycycline, tetracycline	Antibiotics: doxycycline, tetracycline, imidocarb	Adulticides (kills adult heartworms), melarsomine (Immiticide®) <small>Source: American Heartworm Society</small>
<b>Prognosis</b>	If caught and treated early, the outcome is usually very good for a full recovery from symptoms. Some of these infections cannot be cured completely. Early intervention usually provides the best prognosis.		
<b>Vaccine available?</b>	Yes	No	No
<b>Other prevention</b>	Daily tick inspection and removal, and the use of topicals and other veterinarian-dispensed products		Heartworm pills and topical preventatives (typically monthly)

**IMPORTANT:** No prevention is 100% effective. Test your dog every year.

Practice what's possible®

**IDEXX**  
LABORATORIES