

The Value of Vector-borne Disease Screening

Screen annually
to understand the
risk of disease



Letting hidden disease go undiagnosed can harm your patients.

How many pets at your practice aren't tested annually for a full range of vector-borne diseases? 25%? More? Regardless of the actual number, the answer is too many. Vector-borne diseases are known for being silent and difficult to diagnose in the early disease stages when based on signs alone. By performing vector-borne disease testing at each annual wellness visit, more diseases can be detected—and treated—before significant problems develop. Screening annually, with an accurate, reliable test can help you stay on top of vector borne diseases and know what your patients are up against.

As part of the One Health Initiative, you want to do your part in monitoring pets for vector-borne diseases that can also affect people.

With the ability to screen for heartworm and tick-transmitted pathogens in a single blood sample, comprehensive vector-borne disease testing helps track the spread and development of the most common pathogens, including these:

Heartworm disease

+ *Dirofilaria immitis*

Ehrlichiosis

+ *Ehrlichia canis*

+ *Ehrlichia ewingii*

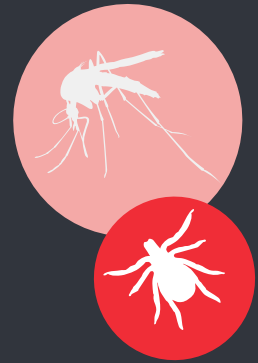
Anaplasmosis

+ *Anaplasma phagocytophilum*

+ *Anaplasma platys*

Lyme disease

+ *Borrelia burgdorferi*



Convincing your clients that their seemingly healthy pet needs testing can be challenging, as can knowing what to do with a positive result. This guide will provide tips to help you respond confidently to pet owner objections, and it will also offer advice about the next steps to take when you receive an unexpected result.

According to the Companion Animal Parasite Council (CAPC), more than 1 million dogs tested positive during vector-borne disease screening in 2020.¹ These pets were fortunate to receive a diagnosis and be given an opportunity to receive treatment. Many more infected pets likely went undiagnosed, with potentially fatal consequences.



5 reasons every patient should be tested for vector-borne diseases.

When recommending annual vector-borne disease screening for every patient, you're likely to receive some pushback from your clients. Many clients don't see the benefit of performing annual diagnostic testing to obtain baseline values, much less an additional test to detect vector-borne illnesses in their apparently healthy pet. However, here are 5 reasons every patient should be screened for vector-borne diseases.

1: Discuss the efficacy of parasite prevention protocols.

Ideally, parasite preventives effectively minimize vector-borne disease transmission, but lapses in dosing, intentionally or inadvertently, could cause gaps in protection. Annual testing helps spot these chinks in a pet's armor against disease and provides valuable information about how your parasite preventive options are performing.

2: Treatment is much easier in earlier disease stages.

If you've ever had to battle recurring Lyme disease flare-ups in a patient, you understand how difficult it is to play catch-up once disease has progressed. You might have even referred a pet to a specialty hospital for caval syndrome treatment, knowing such advanced heartworm disease carries a poor prognosis. However, with annual vector-borne disease screening, you will be able to understand risk of disease and provide the simplest treatment if need be, most economical care plan, and overall best outcome.



Dogs with a positive Lyme disease antibody test have a **43%** increased risk of developing CKD, and dogs with a positive Ehrlichia antibody test have a **112%** increased risk of developing CKD.^{2,3}

3: Exposure to tick-borne diseases increases a pet's risk of developing chronic kidney disease (CKD).

Although the causal relationship between CKD development and tick-borne diseases is not completely understood, the link between the two should not be ignored.



4: Annual testing monitors parasite activity and prevalence ranges.

Unfortunately, there is too little data on parasite activity, since many veterinary practices don't report positive results and not all pets are tested. Testing every patient annually for vector-borne diseases can help you understand what parasites may appear in your area.

5: Vector-borne disease screening reinforces the necessity for year-round parasite prevention.

By understanding which vector-borne disease agents are prevalent in your area through annual testing, you can better communicate with and demonstrate to your clients the importance of year-round parasite prevention.



My asymptomatic patient tested positive. Now what?

Managing asymptomatic patients who test positive during vector-borne disease screening can be challenging. What do you do next? How do you explain this to your client?

First, ensure you are using the most accurate test available for vector-borne disease screening. Not all positive test results are created equal, and some tests may produce an unacceptably high number of false positives. Prioritize accuracy through sensitivity and specificity when choosing your test.

Next, determine if the positive result is an active infection for this patient. It's not uncommon for patients to test positive for tick-borne infections after antimicrobial therapy. Antibodies may remain in a pet's blood for some time after the initial infection, making it difficult to determine when treatment is necessary and how to explain a positive test result to a concerned pet owner.

The IDEXX 4Dx® Plus Test now offers clinical decision support, which will help you make fast and effective clinical decisions and to determine the most appropriate next steps.*



5 common pet owner objections, and how to respond.

Many pet owners fail to see the value of vector-borne disease screening and routinely refuse annual testing for their pet. Using the scenarios and initial talking points provided below, develop your own responses to these common pet owner objections to performing vector-borne disease screening.

1: "My pet isn't acting sick, so they can't possibly have a vector-borne disease."

Explain that many vector-borne diseases go unnoticed until they cause significant harm, at which point treatment is more difficult and costly as well as harder on the pet.

2: "I'm already spending enough money on vaccinations, and I don't want to pay for extra testing."

Vaccines don't currently exist for all of the diseases covered by a comprehensive screen and annual wellness care is about more than vaccines. It should include comprehensive diagnostic testing to screen for disease and establish a pet's baseline values. These tests should be considered an essential part of every pet's routine preventive care.

3: "My pet only goes outside to go to the bathroom."

Fenced-in yards fail to keep mosquitoes and ticks away from pets, and these parasites can sneak in through open doors and torn window screens or hitch a ride on your clothes. Although pets who spend more time outdoors are at higher risk of contracting a vector-borne disease, no pet is completely safe. Since many of these diseases are transmissible to humans, it's important to understand the risks in your area to best protect all of your family members.



4: "My previous pets never had parasite prevention, and they were fine."

Parasites are becoming more active and their territories have expanded, which may increase your pets' risk for vector-borne disease.¹⁻³ Preventive care and routine screening are our best defenses for your pet's longevity.

5: "I haven't seen any ticks on my pet, and their test was negative last year."

Tick nymphs and larvae are tiny, and mosquitos often don't hang around long enough to be noticed. This means they can easily be missed by pet owners, and pets can be unknowingly infected. Additionally, some vector-borne diseases can take weeks to cause a positive test result, and last year's test may have been performed before antibodies developed.



Clinical decision support helps you save time with next-step considerations and clinical references to help guide the process.

IDEXX VetConnect PLUS Clinical Decision Support

Expand all | Collapse all

Anaplasma and Ehrlichia Antibody Negative
Does this dog have one or more clinical signs consistent with vector-borne disease?

Yes
 No

Clinical signs

Test	Result
Heartworm Antigen	Negative
Ehrlichia canis/ewingii	Positive
Lyme (Borrelia burgdorferi)	Negative

IDEXX VetConnect PLUS Clinical Decision Support

Expand all | Collapse all

Anaplasmosis Interpretation

Test	Result
RBC	6.8
Hemoglobin	11.5
MCV	65.2
MCHC	36.8

IDEXX VetConnect PLUS

Pet Owner Communication Aids:

Clinical references
Pet owner communication tools

Parasites: How to help protect your dog and family

PetHealthNetwork

Test	Result
RBC	6.8
Hemoglobin	11.5
MCV	65.2
MCHC	36.8

Diagnose and manage vector-borne diseases quickly and confidently.

Get the accuracy you need and the support you want with the IDEXX 4Dx[®] Plus Test, which screens for the 6 most common vector-borne disease pathogens:⁴⁻⁹

- + *Dirofilaria immitis*
- + *Ehrlichia canis*
- + *Ehrlichia ewingii*
- + *Anaplasma phagocytophilum*
- + *Anaplasma platys*
- + *Borrelia burgdorferi*

Save time on retesting and researching next steps with the IDEXX 4Dx[®] Plus Test with clinical decision support to help you confidently diagnose and manage vector-borne diseases.

You can perform a convenient in-house SNAP[®] test and receive results in minutes, or you can order vector-borne disease testing through our reference laboratory.

With the increasing prevalence and growing geographic distribution of vector-borne diseases,¹⁻³ your patients can't afford to miss a test.

[Learn more about the IDEXX 4Dx Plus Test](#)

References

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