

TICK-BORNE DISEASE



DISEASES AND THEIR ASSOCIATED PATHOGENS FOUND ON GUAM:

- Anaplasmosis; *Anaplasma platys*, *A. phagocytophilum*, *A. marginale*
- Babesiosis: *Babesia canis vogeli*, *B. bovis*, *B. bigemina*
- Ehrlichiosis: *Ehrlichia canis*
- Hepatozoonosis: *Hepatozoon canis*
- Q fever: *Coxiella burnetii*
- Rickettsiosis: *Rickettsia amblyommatis*, *R. felis*



CLINICAL SIGNS AND SYMPTOMS:

- Bleeding and bruising (blood in urine, feces, vomit, skin, uterus, etc.)
- Fever, lethargy, depression, anorexia, inappetence
- Autoimmune hemolytic anemia and thrombocytopenia (destruction of RBC and platelets)
- Neurological disease such as seizures, pancreatitis, respiratory distress, kidney failure, cardiac dysfunction.

Ticks are serious disease carriers. With over 900 species worldwide, they carry hundreds of harmful germs that can make people and animals sick. In Guam, we have six tick species, three of which affect pets. The **Brown Dog Tick** is the most common, found on pets **95%** of the time. In an unpublished study conducted by Wise Owl, **50%** of the dogs at our hospital with at least 1 tick were positive for at least one tick-borne disease!

For info on tick-borne diseases, scan the QR code for an article by Dr. Genevieve Weaver DVM.



Tick-borne diseases usually spread through tick bites, but they can also be transmitted in other ways like tick ingestion, from the mother, or through dog bites. When ticks bite and start feeding, they inject pathogens into the host's body through their saliva. This can happen in as little as **8 hours!** Once inside, the pathogens attack certain blood cells and cause damage. The severity of the disease depends on the host's health and the specific pathogen. Animals can even have **multiple infections**.

Some animals show no symptoms, while others get very sick or even die suddenly. Some infected animals may not show signs of disease for months or years.



DIAGNOSIS:

- Any of the clinical signs and/or laboratory abnormalities (low platelets, low RBC, low or high WBC, abnormal blood chemistry values, positive antibody test or PCR test)
- Any past history or suspicion of tick bites in patient or its mother (for puppies)

TICK-BORNE TREATMENT

POSSIBLE TREATMENTS INCLUDE:

- Doxycycline for at least 1 month
- Imidocarb dipropionate (Imizol) of at least 2 injections, 2 weeks apart
- Prednisone
- Other antibiotics
- Blood transfusion and hospitalization for severe cases
- Herbal Medication

MY DOG LIVES INDOORS-HOW CAN IT POSSIBLY GET A TICK-BORNE DISEASE?

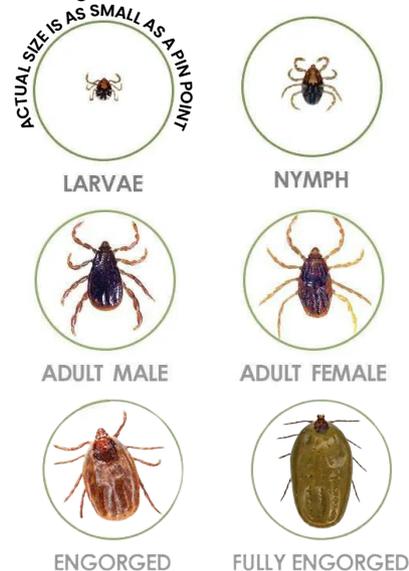
- People can bring in a fair number of ticks on their shoes and pants
- The Brown Dog Tick actually prefers to live in protected areas of yards, gardens, and in homes
- Tick eggs can persist in the environment for many months before hatching
- Ticks are often too small for most people to see especially the larvae and nymphal stages which can be the size of a needle point

TREATMENT FAILURE: WHY WASN'T MY DOG'S DISEASE CURED?

- Failure to give ALL medications as directed
- Persistently or chronically infected where infection remains in the bone marrow or spleen
- Re-infection because of failure to use tick prevention (Re-infection is frequent and immunity does not develop with the pathogens on Guam unlike viral diseases. There are also no vaccines).

THE BROWN DOG TICK

images are enhanced for details.



If you have any questions or concerns, please don't hesitate to reach out to your veterinarian.

For inquiries or appointments with Wise Owl, contact us at **671-646-2273**, or visit our website for further information: **www.wiseowl.net**

