



### ABOUT THE DISEASE

**Anaplasmosis** refers to a disease caused by any of the species of bacteria in the *Anaplasma* genus. These bacteria can infect different types of circulating blood cells.

While some species of *Anaplasma* have been reported to cross the placenta into unborn animals, up to 17 different tick species have been reported to transmit **Anaplasmosis** between infected and non-infected animals. It has been found that a tick needs to be attached for over 24 hours to transmit the bacteria.

After being exposed, most patients will develop symptoms within 1-2 weeks after being exposed. In canine patients, they will often show lameness, lethargy, unwillingness to eat (anorexia), and fever. From a symptom stand point, this is indiscernible from Lyme disease. Please see the [Lyme Disease](#) document for additional information.

Two most common species of *Anaplasma* are:

- *A. phagocytophilum*
  - Transmitted by the black-legged deer tick (*Ixodes scapularis*).
  - Infects white blood cells (neutrophils) and can affect platelets.
    - Canine patients also develop a low platelet count (thrombocytopenia), low white blood cell count (leucopenia), and sometimes a low red blood cell count (anemia).
    - Feline patients can also be infected, but it is much more rare.
- *A. platys*
  - Transmitted by the brown dog tick (*Rhipicephalus sanguineus*).
  - Infects blood platelets.
    - Considered of low infectious potential (virulence).
    - Often seen in association with other diseases.
    - Most dogs infected are outwardly healthy, but experience random and intermittent reductions in platelets (cyclic thrombocytopenia).

### OBTAINING A DIAGNOSIS

In-clinic blood tests exist to determine if a patient has been exposed to **Anaplasmosis** by looking for antibodies to the organism. Unfortunately, because these are antibody tests, it can only be determined if a patient has been exposed at some time in its life.

If a patient tests positive for exposure, it is common for a complete blood count to be performed to determine blood platelet levels. In some circumstances, patients may have a blood count performed 1-2 times per year to ensure adequate levels.

A microscopic evaluation of a blood smear can sometimes show the infectious organism.

### TREATMENT

**Anaplasmosis** is easy to treat with antibiotics and is often seen as curative. Even if patients improve in the first few days, it is important to run the entire course of antibiotics to help ensure the organism is cleared from the system.

If a patient has low blood platelets, they are often placed on glucocorticoids (steroids) to help reduce immune-mediated destruction of platelets. Please see the [Immune-Mediated Thrombocytopenia](#) document for additional information.

Many patients are placed on anti-inflammatory and pain medications to help control pain while the antibiotics are taking effect.

### TIPS FOR SUCCESS

- There is no vaccine for **Anaplasmosis**. The only effective means of prevention is monthly tick prevention.
- Do not assume every dog with a limp and a fever has Lyme disease. **Anaplasmosis** looks very similar and can have more serious effects on cells in the blood stream.