



ANAPLASMOSIS

What is Anaplasmosis?

Anaplasmosis is a tick-borne disease caused by the bacterium *Anaplasma phagocytophilum*. This disease was known as human granulocytic ehrlichiosis until 2001, when it was determined that this bacterium belonged to the *Anaplasma* genus. It is most commonly reported from the upper midwestern and northeastern United States.

Who gets Anaplasmosis?

People who live near or spend time in tick habitats may be at increased risk for infection. Reported cases of anaplasmosis are highest among males and people over 40 years old. Risk factors of severe illness include delayed treatment, age (the elderly are at a greater risk); and those with a weakened immune system.

How is Anaplasmosis spread?

In Delaware, anaplasmosis is spread to people by the bite of an infected black-legged (deer) tick (*Ixodes scapularis*). This is the same tick species that is the vector of Lyme disease. Not all ticks carry pathogens and not all people bitten by a tick will get sick. A tick needs to be attached to a person for a certain amount of time before it can cause disease. For anaplasmosis, a tick must be attached at least 12 to 24 hours. In rare cases, anaplasmosis can be spread by infected blood transfusions.

What are the symptoms of Anaplasmosis?

Anaplasmosis is classified into two stages: early illness and late illness. During early illness (days 1-5), symptoms are mild and may include fever, chills, severe headache, muscle aches, nausea, vomiting, diarrhea, and loss of appetite. Symptoms of late illness (which is rare) can include respiratory failure, bleeding problems, organ failure, and death.

How soon do symptoms appear?

Symptoms appear within one to two weeks after the bite of an infected black-legged tick.

How is Anaplasmosis diagnosed?

Anaplasmosis is diagnosed with blood tests ordered by your health care provider.

Should an infected person be excluded from work or school?

An infected person does not need to be excluded from work or school.

What is the treatment for Anaplasmosis?

A health care provider can prescribe an antibiotic to treat anaplasmosis. The Centers for Disease Control and Prevention (CDC) recommend doxycycline. Early treatment can prevent severe illness and death.



Frequently Asked Questions

What can a person or community do to prevent the spread of Anaplasmosis?

The most important way to prevent your chances of becoming infected with Anaplasmosis is to prevent tick bites. Take these recommended steps:

- Wear light-colored clothing when outdoors.
- Wear loose-fitting, long-sleeved shirts and pants.
- Tuck pant legs into socks so ticks cannot crawl up the inside of the pants.
- Use Environmental Protection Agency (EPA) registered insect repellents containing DEET, picaridin, or oil of lemon eucalyptus (OLE) and apply them according to the product label.
- Treat clothing and gear with products containing 0.5% permethrin. Permethrin can be used to treat boots, clothing, and camping gear and it remains protective through several washings. Alternatively, you can buy permethrin-treated clothing and gear.
- When outdoors, stay on the center of trails. Ticks crawl on the tips of grasses and shrubs and crawl on people and animals when they brush against the vegetation.
- Repair any tears or rips in window screens to prevent mosquitoes from entering your home. Use air conditioning if available.
- Clean leaves and debris from gutters, which can hold water if they are clogged.
- Recycle old tires, which are perfect habitats for mosquito larvae.
- Tip and toss containers that are holding water. Empty water from tarps that are covering items like boats, mulch, dirt, etc.
- Turn containers and wheelbarrows over, so that they cannot collect water.
- Change the water in bird baths.
- Use netting over strollers, playpens, etc.
- When travelling overseas:
 - Check for CDC travel health notices.
 - Pack EPA-registered insect repellents, long-sleeved shirts and long pants, and clothing and gear treated with 0.5% permethrin.
 - Choose lodging with air conditioning and window and door screens.

Resources

Centers for Disease Control and Prevention, <https://www.cdc.gov/anaplasmosis/index.html>