
Anaplasmosis

What is anaplasmosis?

Anaplasmosis is a disease caused the bacterium *Anaplasma phagocytophilum*. The illness is transmitted to people by tick bites primarily by the black-legged tick (*Ixodes scapularis*), which are found in New England.

Who gets anaplasmosis?

Anyone who is bitten by an infected tick can develop anaplasmosis, but people who spend time in wooded or grassy areas are more at risk because of increased exposure to ticks. However, some people, such as those with chronic medical conditions, a compromised immune system, or seniors, are at increased risk of illness complications if infected.

How is anaplasmosis spread?

Anaplasmosis is spread by the bite of an infected tick. Not all types of ticks can carry the bacterium and not all black-legged ticks are infected.

What are the symptoms of anaplasmosis?

Typical symptoms of anaplasmosis include fever, headache, chills, nausea, fatigue, abdominal pain, cough, muscle aches, confusion, and rash (rarely). Usually symptoms develop within 1-2 weeks of being bitten by an infected tick. However, most people infected will not develop all symptoms and the number and combination of symptoms varies from person to person. Anaplasmosis can be a serious illness that can

be fatal even in previously healthy people. Severe clinical presentations may include difficulty breathing, hemorrhage, renal failure, or neurological problems.

How is anaplasmosis diagnosed?

Diagnosis of anaplasmosis is based on the symptoms, but this can be difficult since the symptoms look like many other illnesses and not all patients have the same symptoms. There is a diagnostic test that can detect anaplasmosis antibodies in the blood but patients often do not test positive in the first 7-10 days of illness.

What is the treatment for anaplasmosis?

Fortunately, patients can be effectively treated with antibiotics. To help prevent severe disease, it is best for physicians to treat people based on the symptoms instead of waiting for lab results. Even after effective treatment, patients can feel tired and weak for several weeks afterward.

Is there a vaccine for anaplasmosis?

There is no vaccine available at this time.

What can people do to prevent getting anaplasmosis?

Fortunately, anaplasmosis can be prevented by preventing being bitten by ticks. When in tick-infested areas:

- Wear light-colored clothing to make ticks easy to see
- Tuck pants into socks and shirts into pants

- Consider using an insect repellent. Products containing $\geq 20\%$ DEET have been shown to be effective in repelling ticks. Clothes may be treated with Permethrin. Always follow manufacturer's instructions when applying repellents
- Check after every two or three hours of outdoor activity for ticks on clothing and skin
- A thorough check of body surfaces for attached ticks should be done at the end of the day
- Reduce the number of ticks around your home by keeping grass short, removing leaf litter, and creating a wood chips or gravel barrier where your lawn meets the woods.
- It is believed that a tick needs to be attached to your skin for 24-48 hours before there is a chance of getting anaplasmosis from an infected tick. If you discover a tick on you though, monitor your health closely and be alert for any signs and symptoms of illness.

What is the best way to remove a tick from skin?

Grasp the mouthparts with a tweezer as close as possible to the attachment (skin) site. If tweezers are not available, use fingers shielded with tissue or rubber gloves. Do not handle a tick with bare hands. Be careful not to squeeze, crush, or puncture the body of the tick, which may contain infectious fluids. It is important that a tick be removed as soon as it is discovered. After removing the tick, thoroughly disinfect the tick site with rubbing alcohol or an antibacterial wash and then wash hands with hot water and soap. See or call a doctor if there are concerns about incomplete tick removal. Do not attempt to remove ticks by using petroleum jelly, lit cigarettes, or other home remedies because they may actually increase the chance of contracting a tick-borne disease.

What should I do if I think I was exposed to anaplasmosis?

If you think you have anaplasmosis, seek medical attention as soon as possible. If you were bitten by a tick, monitor your symptoms and call your healthcare provider if you start to feel ill.

For more information about anaplasmosis, call the New Hampshire Department of Health and Human Services, Bureau of Infectious Disease Control at 603-271-4496 or 1-800-852-3345 x4496 or visit our website at www.dhhs.state.nh.us. Or visit the Centers for Disease Control and Prevention website at www.cdc.gov.