

## What is babesiosis?

Babesiosis is an illness caused by infection with *Babesia* parasites. The parasites are transmitted by the bite of an infected tick or, less commonly, through a blood transfusion. *Babesia microti* is the species that is present in the northeastern United States. It is transmitted by the black legged tick, *Ixodes scapularis*, also known as the deer tick. This is the same tick that can transmit Lyme disease and anaplasmosis. Awareness of this disease is increasing, and in January of 2011, babesiosis became a nationally notifiable condition.

## Do we have babesiosis in Vermont?

Babesiosis is present in Vermont, although infection seems to be uncommon. Only one case has been documented in a person who did not travel out of the state. The disease is most commonly reported in southern New England and is considered endemic in areas in of Connecticut, Massachusetts, Rhode Island, southern New York and New Jersey. Babesiosis is also prevalent in some Midwestern states, such as Minnesota and Wisconsin.

## How is babesiosis spread?

In the Northeast, babesiosis is spread most commonly through the bite of infected deer ticks. In addition to tickborne transmission, it can be spread through blood transfusions. The American Red Cross is currently conducting a study to monitor babesiosis prevalence in prospective blood donors.

## Who is at risk of getting babesiosis?

People who spend time outside in areas that have a lot of ticks infected with *Babesia* organisms may be at risk. In the Northeast, illness frequently occurs between spring and fall when the ticks are most active and people spend a lot of time outside. While anyone can develop babesiosis, the disease tends to be most severe in individuals who are older or have compromised immune systems.

## What are the symptoms of babesiosis?

Many people who are infected with *B. microti* do not experience any symptoms at all, while others may develop nonspecific symptoms including headache, fever, chills, and fatigue. Symptoms can appear from about one week to several months after infection. Because these parasites infect and destroy red blood cells, infection can lead to hemolytic anemia which can result in jaundice and dark urine. Babesiosis can be a potentially life-threatening illness for the elderly and people with weakened immune systems. People with health conditions, such as liver, spleen or kidney dysfunction are at higher risk for developing a serious illness.

## What is the treatment for babesiosis?

Babesiosis can be effectively treated with antimicrobials. Most people who are infected but don't have symptoms will not need treatment.

## How do you prevent babesiosis?

The best way to prevent babesiosis is to prevent tick bites.

While outdoors:

- Wear long pants and long-sleeved shirts to minimize skin exposure to ticks.
- Tuck your pants into your socks to form a barrier against tick attachment.
- Wear light-colored clothing to help see ticks on your clothing.
- Check for ticks, looking particularly for what may look like nothing more than a new freckle or speck of dirt, and remove ticks promptly.

- Use an effective tick repellent on your skin or on your clothing. There are several repellents that are effective against ticks. For an up-to-date list of EPA registered products, see <http://cfpub.epa.gov/oppref/insect/>. Repellents should not be used on infants under 2 months of age. Read the label carefully and use according to the recommendations.
- Use permethrin on clothing you wear outside. Permethrin is an insect repellent that is very effective in preventing tick bites.

After you come inside:

- Check your or your child's body for ticks, and remove them promptly. Pay special attention to the head, armpits, and groin area.
- Examine clothing and gear for ticks. Placing your clothes in a hot dryer for 60 minutes will kill any ticks that may be clinging to the fabric.
- Check your pets for ticks as well. Consult your veterinarian for advice on choosing effective tick repellents for your pets.

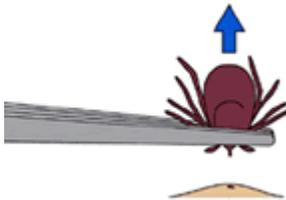
### How do you remove ticks?

Try to remove the tick as soon as you discover it because prompt removal can prevent transmission of tick-borne diseases.

To safely remove ticks:



1. Use fine-tipped tweezers and firmly grasp the tick close to the skin. Avoid touching the tick with your bare hands.



2. With a steady motion, pull straight up until all parts of the tick are removed. Do not twist or jerk the tick. Do not be alarmed if the tick's mouthparts remain in the skin. Once the mouthparts are removed from the rest of the tick, it can no longer transmit the disease-causing organism.

**DO NOT** use petroleum jelly, a hot match, nail polish, or other products to remove a tick. These methods are not effective.

### Thoroughly wash your hands and the bite area

After removing the tick, wash your hands with soap and water or use an alcohol-based hand sanitizer if soap and water are not available. Clean the tick bite with soap and water or use an antiseptic such as iodine scrub or rubbing alcohol.