

## Tickborne Disease Fact Sheet

1. **Introduction:** Toward the end of the 19th century, scientists began to understand that ticks act as important transmitters of disease. Several tickborne diseases have since been recognized in the United States: anaplasmosis, babesiosis, ehrlichiosis, Lyme disease, relapsing fever and Rocky Mountain spotted fever (RMSF), *Rickettsia parkeri* rickettsiosis, southern tick-associated rash illness, tickborne relapsing fever, and tularemia.
2. **Which of these diseases could I become infected with in Pennsylvania?** In Pennsylvania, humans can be infected with anaplasmosis, babesiosis, ehrlichiosis, Lyme disease, RMSF, and tularemia.
3. **Where can I be infected?** - These diseases can be acquired state-wide in areas endemic to ticks. Ticks are found in wooded or brushy areas, on the edge of hiking or animal trails, or on the edge of a lawn where it meets a wooded or brushy area.
4. **What precautions should hikers, homeowners, hunters, park visitors, etc. take?**
  - a. Avoid possible tick habitats during the peak time of year for tick activity, from late March to mid-October.
  - b. Wear tick repellent that contains Permethrin, or DEET.
  - c. Wear long-sleeved shirts, long pants, and closed-toed shoes and tuck pant legs into top of socks or boots.
  - d. Wear light-colored clothes to make it easier to spot ticks.
  - e. Check for ticks frequently and remove them promptly.
  - f. Taking a shower after returning from a tick infected habitat is a good way to begin checking for and removing ticks.
  - g. Bare hands should not be used to remove ticks, due to the risk of exposure to the tick's fluids or feces. If gloves are not available, the fingers should be shielded with a tissue or paper towel. The tick should not be excessively squeezed, crushed or punctured, but rather carefully pulled away from the skin using tweezers inserted between the tick's body and the skin.
  - h. Tick removal techniques such as the use of hot matches or petroleum jelly actually may stimulate the tick to release additional infected saliva into the wound and, therefore, could increase the risk of infection.

- i. Tick bites should be thoroughly disinfected after removal of the tick, and the hands should be washed with soap and warm water. Finally freeze the tick in a plastic bag, and saving for later identification in case of suspected illness.
- j. There are no vaccines available for any of these tickborne diseases.

**5. For more information:**

- a. Anaplasmosis: <http://www.cdc.gov/anaplasmosis/>
- b. Babesiosis: <http://www.cdc.gov/babesiosis/>
- c. Ehrlichiosis: <http://www.cdc.gov/ticks/diseases/ehrlichiosis/>
- d. Lyme Disease: <http://www.cdc.gov/ncidod/dvbid/lyme/index.htm>
- e. Rocky Mountain Spotted Fever:  
[http://www.cdc.gov/ticks/diseases/rocky\\_mountain\\_spotted\\_fever/](http://www.cdc.gov/ticks/diseases/rocky_mountain_spotted_fever/)
- f. Tularemia: <http://www.cdc.gov/tularemia/>

This fact sheet provides general information. Please contact your physician and/or veterinarian for specific clinical information related to you or your animal.