



## A CUP OF HEALTH WITH CDC

### *Get Ticks Off*

*Surveillance for Lyme Disease — United States, 1992–2006*

Recorded: October 7, 2008; posted: October 9, 2008

*[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC — safer, healthier people.*

[Dr. Gaynes] Welcome to *A Cup of Health with CDC*, a weekly feature of the MMWR, the Morbidity and Mortality Weekly Report. I'm your host, Dr. Robert Gaynes.

With the arrival of fall comes the call of the wild. If you're planning a hike in the woods, a camping trip, or any other outdoor activity, beware of a lurking danger. Lyme disease is an illness caused by the bite of an infected tick.

Dr. Paul Mead is a medical epidemiologist with CDC's National Center for Zoonotic, Vector-Borne, and Enteric Diseases. He's joining us today by phone to discuss Lyme disease and ways to avoid this debilitating condition. Welcome to the show, Paul.

[Dr. Mead] Great! Thank you very much, Bob.

[Dr. Gaynes] Paul, how many cases of Lyme disease are detected in the United States each year?

[Dr. Mead] Currently, there are about 20,000 cases of Lyme disease reported to CDC each year. As with all diseases though, that's probably a bit of an underestimate in that some cases go unreported.

[Dr. Gaynes] Is it more common in certain areas of the country?

[Dr. Mead] Lyme disease is a focal disease, which is really concentrated in about ten states, principally, in the northeast, the mid-Atlantic, and the upper mid-West of the United States.

[Dr. Gaynes] So, what time of year are people most susceptible to this disease?

[Dr. Mead] Well, people are susceptible to Lyme disease at any time of year, but most new infections occur in the late spring and early summer months. This reflects the activity of the tick and, particularly, the nymphal tick, which is very small and is thought to be a principle source of infection.

[Dr. Gaynes] Paul, you mentioned ticks are the principle source of infection. Exactly how do people get Lyme disease?

[Dr. Mead] Lyme disease is transmitted through the bite of certain species of ticks known as deer ticks or black-legged ticks. The ticks acquire the infection from small mammals, such as mice and shrews, and typically transmit that to more mice and shrews, keeping the cycle going in nature. But occasionally, these ticks will bite humans, and when they do, they can transmit the infection to them.

[Dr. Gaynes] So, what are the signs and symptoms of Lyme disease in people?

[Dr. Mead] Lyme disease has several different stages. The early stages of (the) disease, which are most common, include flu-like symptoms, such as fever and aches and pains and most often, a characteristic rash at the site of where the tick bit. This is a large, sort of expanding, red rash of the skin. Later in the course of illness, people can get other symptoms, such as a facial droop or paralysis of the face, arthritis, and various forms of nervous system involvement.

[Dr. Gaynes] Paul, what is the standard treatment for Lyme disease?

[Dr. Mead] Well, the treatment depends a little bit upon the stage of illness a person has when diagnosed, but overall, Lyme disease can be treated quite effectively with antibiotics.

[Dr. Gaynes] Well, treatment is one thing, but how can people avoid getting Lyme disease in the first place?

[Dr. Mead] Well, Bob, I think prevention is key, and there are many things people can do to help reduce their risk of getting Lyme disease. The first is to avoid areas where ticks are common, such as tall grass or the edge of forests. If you do go into those areas, it's important to use repellent, using DEET, to help keep ticks from attaching to your body. Third, people can regularly check themselves for ticks everyday after they've been out in that habitat. And the nice thing about Lyme disease, if there is a nice thing, is that if you can remove the tick promptly, within twenty-four hours, then even if you've been bitten by an infected tick, the risk of transmission is very low. One other thing people should know is that a lot of Lyme disease is acquired near their home, in their own backyard. And there are important things you can do to help reduce the risk of acquiring Lyme disease around your house. This includes some landscaping tips to reduce tick habitats, as well as working to keep ticks off your pets through the use of tick-control products.

[Dr. Gaynes] Paul, you mentioned about removing ticks from your body promptly. Exactly how does one remove a tick?

[Dr. Mead] The best way to remove a tick is using fine-tipped tweezers, grabbing the tick as close to the skin as possible, and pulling directly away from the body. You can get more information on tick removal, as well as other aspects of diagnosis, treatment, and the epidemiology of Lyme disease by visiting our website at [www.cdc.gov](http://www.cdc.gov) and clicking on "Health topics A to Z," and looking under Lyme disease.

[Dr. Gaynes] Paul, thanks for sharing this information with our listeners today.

[Dr. Mead] My pleasure. Thank you.

[Dr. Gaynes] That's it for this week's show. Be sure and join us next week. Until then, be well. This is Dr. Robert Gaynes for *A Cup of Health with CDC*.

[Announcer] For the most accurate health information, visit [www.cdc.gov](http://www.cdc.gov) or call 1-800-CDC-INFO, 24/7.