# Lyme Disease

### What is Lyme disease?

Lyme disease is caused by a bacterium that is spread to people by certain types of ticks. Lyme disease can be difficult to diagnose and, if not treated in the early stages, can lead to serious health problems.

#### How do I get Lyme disease?

Lyme disease is spread to people through tick bites, especially deer tick bites. Almost all cases occur in the north-central and eastern parts of the United States. An infected tick must bite a person and feed on them for at least a day to spread the disease. The type of tick that carries Lyme disease is very small and often spreads the disease to people when it is in its nymph (baby) stage. When the tick is in its nymph stage, it is about the size of this dot  $[\cdot]$  and the adult tick can fit inside this circle: O

#### **Symptoms**

Lyme disease symptoms are very complex. Symptoms vary from one person to another and occur in stages. Symptoms of the disease begin with fatigue, fever, headache, stiff neck and muscular pain and a distinct red, circular rash that gradually grows and looks like a small, red doughnut. Some people never develop the rash or other early-stage symptoms. Weeks to months later, other symptoms may begin and will occasionally overlap one another. These symptoms change from person to person and may come and go periodically. Many of the symptoms are similar to other diseases which make Lyme disease a very difficult disease to diagnose.

Some of the symptoms that help to diagnose Lyme disease are the rash during the early stage of the disease; Bell's palsy which causes facial paralysis; and transitory migrating arthritis which is joint pain that moves from joint to joint over a period of weeks. Anyone developing these symptoms should see their health care provider immediately. Be sure to mention any exposure to ticks or travel to areas that have a high occurrence of Lyme disease such as the eastern or north-central parts of the United States.

#### Prevention

- Avoid tick-infested areas, especially wooded areas and meadows, during the summer.
- ➤ Wear light colored clothing so that ticks can be seen easily and removed from clothing before they attach to you. Wear long-sleeved shirts and long pants tucked into socks. Clothing may be treated with insect repellents containing permethrin.
- Apply an insect repellent that contains 20-30% DEET to exposed skin. Read labels carefully. Do not apply insect repellent to faces, skin that is cut, scraped, has a rash or sunburn.
- > Ticks must feed on you for 24 to 48 hours before they can give you Lyme disease. It is important to look for ticks every 3-4 hours and remove any ticks you find immediately. You may want to have someone help you look for ticks because they are very small and can be difficult to find. Be sure to look behind ears and along the hairline, especially with children.

## To safely remove a tick:

- 1. Do not use your bare hands. Grasp the tick with tweezers as closely to the head of the tick as possible.
- 2. Slowly pull the tick out of the skin using a gentle, steady motion.
- 3. Wash the area with soap and water.
  - DO NOT burn or smother the tick to remove it!

#### Treatment for Lyme disease

Lyme disease is treated by antibiotics. Treatment is not always successful, and is more effective during the early stages of the disease. Some people develop chronic Lyme disease and do not respond to treatment.