LYME DISEASE -
BE WARY, NOT WORRIED,
WHEN ENJOYING THE OUTDOORS!

Lyme disease is becoming increasingly common in Minnesota and numerous other states. Since Lyme disease is spread by the bite of certain ticks, it is important for people who work or recreate outdoors to learn the facts about the disease and how to prevent it. By taking some simple precautions, we can all continue to safely enjoy the pleasures and benefits of outdoor activity.

WHAT IS LYME DISEASE?
The symptoms of Lyme disease can vary a great deal from one case to the next.

In general, early signs and symptoms appear 3 to 32 days after a tick bite and include fever, fatigue, headache, aching joints, nausea, and often a characteristic skin rash. This rash, which occurs in about 70% of people with Lyme disease, tends to be roughly circular in shape, and is usually found at the site of the tick bite, although multiple rashes may often occur at other sites. In time, as the rash lesion gets larger, the center become clear (not reddened). The early symptoms may disappear on their own over a period of several weeks.

If Lyme disease is not treated when the early symptoms are present, many persons will develop late symptoms of the disease. These may occur weeks to even years after the initial exposure and can involve the joints, nervous system, and heart.

Severe headache, stiff neck, weakness and/or pain in extremities, and facial paralysis (Bell’s palsy) can result if the nervous system is affected.

If Lyme disease affects the heart, conduction disturbances in the heart can result, which may produce fainting spells or an abnormally slow heart rate.

Arthritis of the large joints is a common problem in the later stage of Lyme disease. The arthritis may be intermittent and in some persons may move from joint to joint.

Remember that an individual with Lyme disease will likely have only a few of the above symptoms, and that the early and later stages of the illness may overlap.

HOW DOES A PERSON GET LYME DISEASE?
The disease is acquired by a tick bite. The ticks that transmit the Lyme disease bacterium (Borrelia burgdor-
feri) typically become infected when the larval stage of the tick feeds on infected field mice. When subsequent stages of that tick (the nymph and adult stage) feed again, the infection can be transmitted to the tick's new host. The tick must actually be attached to a person's skin before it can transmit the Lyme disease bacterium.

DO ALL TICKS CARRY LYME DISEASE?

No. The principle carrier of Lyme disease is a tick named *Ixodes dammini*, commonly known as the deer tick or the bear tick. The nymphal stage of the deer tick, which is responsible for most human Lyme disease, is very small. Because of the small size of the nymphs and the fact that tick bites are frequently painless, many people who develop Lyme disease are not aware of ever having been bitten by a tick. Not all deer ticks are infected with the Lyme bacteria.

WHAT TIME OF THE YEAR ARE THE DEER TICKS ACTIVE?

Deer ticks can survive through winter and may become active any time of year if the temperatures are warm enough, even during a January thaw. However, the majority of human Lyme disease cases occur from tick bites received in May through August, which correlates with the feeding activity of nymphs.

CAN LYME DISEASE BE TREATED?

Yes. If a person is diagnosed as having Lyme disease, his or her physician will prescribe a course of antibiotics. Prompt treatment can cure the infection and usually prevents later complications. In general, the longer the disease has been present, the longer it takes for the signs and symptoms to subside.

HOW CAN LYME DISEASE BE PREVENTED?

The following precautions can significantly reduce the risk of acquiring Lyme disease:

1. If you are in areas where ticks may be present, wear a long-sleeved shirt, long pants, and high socks (with pant cuffs tucked into the socks). Light colored clothing will make ticks easier to find and remove.
2. Walk in the center of mowed trails to avoid brushing up against vegetation.
3. Conduct thorough "tick checks" on yourself and your children after spending time outdoors. Prompt removal of ticks, even after they have attached, can drastically reduce any chance of Lyme disease transmission.
4. To remove a tick that has attached, grasp it firmly with tweezers as close to the skin as possible and gently pull it straight out. If tweezers are not available, grasp the tick through a piece of tissue. In any case, avoid squeezing the tick's abdomen during the removal process. Once the tick has been removed, wash the bite area with soap and water and apply an antiseptic to the site.
5. Insect repellents containing 0.5% permethrin or 30% DEET have been shown to be effective in repelling deer ticks. If such products are used, be sure to follow the manufacturer's directions on the label.

For additional information about Lyme disease, contact your local public health agency.

My tenure as Editorial Chairman for HOLE NOTES so far, has certainly been an eye opener. Little did I realize the amount of time-consuming work and effort that was necessary to put out a publication of this size. Our newsletter goes out to 650 mailboxes each month as our members and other turf organizations receive their copies. To date, with the help of many fine people and the great work of the MGA office, our work has been kindly received and we appear to be reaching our goal of improving both the editorial quality and format of our publication. Many tanks to all involved. As always, member-generated articles are scarce and difficult to gather. Now that your course is fully staffed and things are slowing down, consider putting pen to paper and getting us an article on a subject that interests you. A $50.00 reward waits for those who submit a published article. You, and MGCSA, will greatly benefit from the knowledge gathered.