

Protecting Yourself from

Ticks and Mosquitoes

If you spend time outside, you may be exposed to vector -borne diseases spread from the bites of infected ticks and/or mosquitoes. Ticks and mosquitoes may carry bacteria, parasites or viruses in your area.

One of the most common tick-borne diseases in the U.S. is Lyme disease. Ticks are found in wooded areas, high grass, or leaf litter. They are most active during the spring, summer and fall, but during warm days in the winter they may become active for a short period.

One of the most common diseases carried by mosquitoes in the U.S. is West Nile virus infection. Mosquitoes may be found near standing water or in shady, wooded areas. They are usually most active during dawn and dusk in the warmer months.

Symptoms of Vector-borne Diseases

- Body/muscle aches
- Joint pain

Fever

- Rash
- Headaches
- Stiff neck
- Fatigue

Paralysis

Controls and Protection

Decrease tick populations and your exposure:

- Remove leaf litter.
- Remove, mow, or cut back tall grass and brush.
- Discourage deer activity if possible.
- Use repellents as needed follow label directions.

Decrease mosquito populations and your exposure:

- Remove, turn over, cover, or store equipment.
- Put drain holes in containers that collect water and cannot be discarded.
- Avoid areas of high mosquito populations.
- Listen for public health announcements on mosquito diseases in your area.
- Use repellents as needed follow label directions.



Mosquitoes (left) and ticks (front of card) may carry bacteria, parasites or viruses.

Image courtesy of U.S. Department of Agriculture

Protect Yourself

- Wear a hat and light-colored clothing (so ticks can be easily spotted), including long-sleeved shirts and long pants tucked into boots or socks.
- Use insect repellents.
 - Use repellents containing 20–50% DEET on exposed skin and clothing.
 - Reapply repellents as needed. (Always follow products labels).
- Use insecticides such as permethrin for greater protection.
 - Permethrin can be used on clothing, but not on skin.
 - One application to pants, socks, and shoes may be effective through several washings.
- Check skin and clothing for ticks daily. Check hair, underarms, and groin.
- Immediately remove ticks using fine-tipped tweezers.
 - Grasp the tick firmly, as close to your skin as possible.
 - Pull the tick's body away from your skin with a steady motion.
 - Clean the area with soap and water.
- Wash and dry outdoor clothes using the "hot" settings to kill any ticks present.
- If you develop symptoms of a vector-borne disease, seek medical attention promptly. Tell your doctor that you spend time outdoors and report any ticks or mosquito bites.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention National Institute for Occupational Safety and Health

www.cdc.gov/niosh/topics/outdoor/ DHHS (NIOSH) Publication No. 2010–119

Telephone: 1–800–CDC–INFO TTY: 1–888–232–6348 E-mail: cdcinfo@cdc.gov



