

Avoiding Ticks Best Way to Prevent Diseases They Carry

Warm days and sunny skies draw many people outdoors this time of year. The same environment also brings out the insects, some of which carry diseases. "It's tick time in Texas," said Glenna Teltow, a medical entomologist with the Texas Department of State Health Services (DSHS). "Ticks often are found in the same spots people like to visit - wooded, brushy and grassy areas." A bite from an infected tick can cause illnesses such as Lyme disease, Rocky Mountain spotted fever, tularemia and human ehrlichiosis. With prompt medical attention, these illnesses almost always can be successfully treated with antibiotics. But if people do not recognize the symptoms and seek treatment, the illnesses can be serious, some even fatal, Teltow said. In Texas, the tick most likely to attach to humans is the lone star tick. "This tick, which is about the size of a watermelon seed, will readily feed on human blood," Teltow said. "The lone star female tick is easily recognized by a single white dot on her back, while the male tick has white markings around the edges of his back." The most frequently diagnosed tick-borne illness in Texas is Lyme disease, a bacterial infection that can cause skin, joint, heart and nervous system problems. The disease usually begins with a characteristic "bull's-eye" rash followed by fatigue, headache, fever, stiff neck and joint pain. Symptoms usually appear in 7 to 14 days. Rocky Mountain spotted fever is a serious disease transmitted most commonly by the bite of an infected tick. People who remove ticks also can become infected if they crush ticks between their fingers, allowing the bacteria to penetrate the skin or come in contact with mucous membranes. Initial symptoms, following an incubation period of 3 to 14 days, include sudden onset of high fever, headache, chills and muscle aches. A rash often appears a few days later. Prompt medical attention is extremely important because Rocky Mountain spotted fever can be fatal without prompt treatment with antibiotics.

Tularemia is a bacterial disease affecting animals and humans. It can be spread through a tick bite or through contact with blood or tissue from infected animals, especially wild rabbits, or by handling or eating undercooked meat from infected animals. Symptoms include fever, an ulcerative skin sore at the site of the tick bite and painful swollen lymph glands. If the organism is ingested, the person may have a throat infection, abdominal pain, diarrhea and vomiting. In Texas, human ehrlichiosis is a rare disease with fewer than 10 cases reported each year. Most infections cause a sudden onset of illness with fever, chills and headache, usually beginning about 12 days after the tick bite. "Avoiding ticks is always the best prevention for any of these diseases," Teltow said. "Keep ticks off pets and discourage unwanted animals such as rats, mice and stray dogs and cats around the home." Other suggestions from DSHS:

- * If you are in an area with ticks, check your body carefully for them every few hours. Ticks are small and can be hard to see, and they can attach to any part of the body.
- * Stay on trails, avoiding areas of overgrown brush and tall grasses.

- * Wear light-colored clothes so that ticks are more easily spotted. Protect skin from ticks by wearing a hat, long-sleeved shirt and long pants tucked into boots or socks.
- * Use insect repellent containing DEET applied to the skin or permethrin applied to clothing. Follow label directions.
- * Check pets frequently and remove ticks from them immediately.

To remove an attached tick, use fine-tipped tweezers to grasp the tick at the skin surface. If tweezers are not available, use a tissue or paper towel to protect your fingers from possible exposure to the tick's body fluids. With a steady motion, gently pull the tick straight out. Do not twist, jerk or crush the tick's body. After removal, clean site and hands with soap and water. Only ticks that were attached to humans may be submitted to DSHS for identification and testing. They should be put in a small container or vial with a leak-proof lid. Ticks may be submitted live or preserved in 70 percent ethyl or isopropyl alcohol. Never mail ticks loose in an envelope. A tick submission form should be completed for each tick. A copy of the tick submission form can be found online at: <<http://www.tdh.state.tx.us/zoonosis/forms>>. Place the tick container in a padded envelope or mailing tube and mail to: Texas Department of State Health Services, Health Service Region 7, ATTN: Zoonosis Control, 2408 S. 37th St., Temple, TX 76504. There is no testing charge.

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NOTE: The Texas Department of Health (TDH) has merged with other agencies and is now part of the new Department of State Health Services (DSHS), resulting in the following e-mail address format change for all employees: firstname.lastname@dshs.state.tx.us.