

Reducing the Risk of Worker Exposure to Disease-Carrying Ticks

The United States is home to many species of tick that can **transmit diseases to humans**. Disease-carrying ticks have spread to new regions over recent years. On average, more than 50,000 cases of tick-borne diseases in humans are **reported** to the Centers for Disease Control and Prevention (CDC) each year. The true disease burden is estimated to be much higher because many cases go unreported. Outdoor workers are at increased risk of exposure to infected ticks. Some examples of occupations that involve outdoor work include: construction, landscaping, forestry, land surveying, utilities, service and recreation, and park/wildlife management. Properly identifying ticks, preventing tick bites, and recognizing signs and symptoms of common tick-borne diseases can reduce the risk of acquiring a tick-borne disease.

Disease-carrying ticks can be found throughout the 48 contiguous United States.

Ticks must feed on blood at every stage of their life to survive. Some ticks can transmit diseases to humans within minutes of beginning to feed, while others start transmitting diseases only after several hours of continuous feeding. For example, ticks that carry Lyme disease (Blacklegged ticks, also known as Deer ticks) require more than 24 hours of continuous feeding to transmit Lyme disease to a human host, but other tickborne diseases can be transmitted in minutes. Learning to properly identify ticks can help you determine if you are at risk for one of the diseases they may carry and if you need to seek medical care.

Where and when to find disease-carrying ticks:

- **Throughout the United States** (except for Alaska and Hawaii) in areas that support tick habitats, especially warm and humid climates.
- Tick habitats include:
 - Wooded areas and areas with brush and overgrown grasses.
 - Leaves and tall grass near outdoor work sites or in residential areas.
 - Areas where deer, rodents, and other tick-carrying animals roam.
- Most ticks are most active during warmer weather in the spring and summer, but they can emerge any time during the year, including on warm days in the fall and winter.

Know your ticks

Learn to properly identify ticks you may find on yourself, your coworkers, or any pets/animals. Different ticks can carry different diseases with unspecific symptoms. Adult female ticks can transmit diseases and are pictured below.



American dog tick ("Wood tick")

Transmits: Tularemia, Spotted Fever Rickettsiosis



Blacklegged tick ("Deer tick")

Transmits: Lyme disease, Human Anaplasmosis, Human Ehrlichiosis, Babesiosis, Powassan Virus



Lone Star tick ("Turkey tick")

Transmits: Human Ehrlichiosis, Heartland Virus, Tularemia, Southern Tick-Associated Rash Illness (STARI)



Brown Dog Tick ("Kennel tick")

Transmits: Spotted Fever Rickettsiosis



Various fully engorged ticks

Ticks feed on blood at multiple stages in their lives, and it can be difficult to identify the species of tick once engorged. These engorged ticks have been feeding for several hours.

For more information about these ticks and where to find them, visit https://www.cdc.gov/ticks/geographic_distribution.html

Steps to help prevent tick bites:

- **Take extra precautions** while in tick habitats, especially during warm months.

- Wear long light-colored pants (to more easily see ticks) and tuck your pant legs into your socks or boots. This can help prevent or delay ticks from reaching your skin.
- **Apply tick repellent** to exposed skin that is not under clothing. Use permethrin to treat clothes and gear in accordance with the Environmental Protection Agency [guidelines](#).
- Check yourself, your clothing, and gear/ equipment for ticks when you have been in a tick habitat. Shower after exposure to tick habitats and wash and/or **dry your clothing** at high temperatures immediately after returning home.
- Do a **careful body check for ticks**, concentrating on the feet, armpits, backs of knees, elbows, hair and behind ears, waist, and groin areas. Promptly remove and dispose of any found ticks.

Removing a Tick:

1. Do not burn the tick, smother it in anything, or paint it with nail polish. These **methods** may only cause further harm. Never crush a tick with your fingers.
2. Clean the area around the tick with rubbing alcohol.
3. To remove the tick, put tweezers on the skin and grasp the tick's head as close to the skin's surface as possible.
4. Pull upward slowly and firmly with even pressure.
5. Don't twist or jerk the tick; this can cause the mouthparts to break off and remain in the skin. If this happens, remove the mouthparts with tweezers. If you cannot remove the mouth easily with tweezers, leave it alone and let the skin heal.
6. Clean the area again once the tick is removed with rubbing alcohol or soap and water.
7. Dispose of a live tick by drowning it in alcohol, putting it in a sealed disposable bag, wrapping it tightly in tape, or flushing it down the toilet.

Signs and Symptoms of Tickborne Diseases

Many tickborne diseases have non-specific symptoms at the onset of illness. Common symptoms of tickborne diseases include:

- **Fever/chills.**
- **Aches and pains.** Many tickborne diseases can cause headache, fatigue, and muscle aches. Lyme disease may also cause joint pain.

- **Rash.** Lyme disease, southern tick-associated rash illness (STARI), spotted fever rickettsiosis (including Rocky Mountain Spotted Fever), ehrlichiosis, and tularemia can cause distinctive rashes.

Contact your healthcare provider if you develop these symptoms within a few weeks of getting a tick bite.

For more information, visit www.cdc.gov/ticks.

Workers' Rights

Workers have the right to:

- Working conditions that do not pose a risk of serious harm.
- Receive information and training (in a language and vocabulary the worker understands) about workplace hazards, methods to prevent them, and the OSHA standards that apply to their workplace.
- Review records of work-related injuries and illnesses.
- File a complaint asking OSHA to inspect their workplace if they believe there is a serious hazard or that their employer is not following OSHA's rules. OSHA will keep all identities confidential.
- Exercise their rights under the law without retaliation, including reporting an injury or raising health and safety concerns with their employer or OSHA. If a worker has been retaliated against for using their rights, they must file a complaint with OSHA as soon as possible, but no later than 30 days.

For additional information, see OSHA's Workers page (www.osha.gov/workers).

How to Contact OSHA

Under the Occupational Safety and Health Act of 1970, employers are responsible for providing safe and healthful workplaces for their employees. OSHA's role is to ensure these conditions for America's workers by setting and enforcing standards, and providing training, education and assistance. For more information, visit www.osha.gov or call OSHA at 1-800-321-OSHA (6742), TTY 1-877-889-5627.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

