Preventing Tick-Borne Diseases

Tick-borne pathogens can be passed to humans by the bite of infected ticks. Ticks can be infected with bacteria, viruses, or parasites. Some of the most common tick-borne diseases in the United States include: Lyme disease, Rocky Mountain Spotted Fever, Southern Tick-Associated Rash Illness, Tick-Borne Relapsing Fever, Colorado tick fever, Powassan encephalitis, and Q fever.

Outdoor workers are at risk of exposure to tick-borne diseases if they work primarily at worksites with woods, bushes, high grass, or leaf litter. Outdoor workers in most regions of the United States should be extra careful to protect themselves in the spring, summer, and fall when ticks are most active. Ticks are usually more active in the months of April through October and peak in the summer months of June through August. The time of year when ticks are active may vary with the geographic region and climate. Ticks may be active all year in some regions with warmer weather.

**Symptoms:** What are the symptoms of tick-borne infection? Some common symptoms include:
- Body/muscle aches
- Headaches
- Joint pain
- Stiff neck

**Jobs At Risk:** What workers are most at risk? Below lists some of the primary job categories:
- Construction
- Farming
- Landscaping
- Railroad work
- Forestry
- Oil field work
- Brush clearing
- Utility line work
- Land surveying
- Park or wildlife management

**Treatment:** Most cases can be successfully treated with antibiotics, especially if started early. However, some workers may have symptoms such as arthritis, muscle and joint pain, or fatigue for an extended period of time.

**Prevention:** The following may be helpful in preventing exposure:

1. Wear light-colored, long-sleeved shirts, long pants (tucked into boots or socks), socks, and a hat when possible.
2. Wear repellents (containing 20% to 30% DEET) on skin and clothing for protection against tick bites. Remember to reapply the repellent as needed.
3. Some repellents (such as Permethrin) provide greater protection. Permethrin kills ticks on contact. It can be used on clothing but not skin. One application of Permethrin to pants, socks, and shoes typically stays effective through several washings.
4. When possible, avoid working at sites with woods, bushes, tall grass, and leaf litter.
5. If work in these higher-risk sites must occur, take the following steps to reduce tick populations:
   a. Remove leaf litter.
   b. Remove, mow, or cut back tall grass and brush.
   c. Discourage deer activity.
6. Check your skin and clothes for ticks every day. The immature forms of these ticks are very small and may be hard to see.
   a. Remember to check your hair, underarms, and groin for ticks.
   b. Immediately remove ticks from your body using fine-tipped tweezers.
   c. Grasp the tick firmly and as close to your skin as possible.
   d. Pull the tick's body away from your skin with a steady motion.
   e. Clean the area with soap and water.
7. Wash and dry work clothes in a hot dryer to kill any ticks present.
8. If you suspect you have been exposed or have symptoms, seek medical attention immediately!