

U.S. Department of Agriculture Forest Service	1. WORK PROJECT/ACTIVITY Working in environments that harbor ticks	2. LOCATION Grand Rapids MN	3. UNIT RWU 4101/4351
JOB HAZARD ANALYSIS (JHA) References-FSH6709.11 and -12 (Instructions attached)	4. NAME OF ANALYST	5. JOB TITLE	6. DATE PREPARED
8. HAZARDS		9. ABATEMENT ACTIONS Engineering Controls* Substitution* Administrative Controls* PPE	
<ul style="list-style-type: none"> <li>• <b>Hazard Vector:</b> Deer Ticks (<i>Ixodes scapularis</i>) <ul style="list-style-type: none"> <li>○ Vector ID: Deer ticks have no white markings and are only one quarter the size of wood ticks.</li> </ul> </li> <li>• <b>Hazard Location:</b> Anywhere vegetation grows and animals roam. This includes everything from a mouse on a residential lawn to a deer in a remote, wilderness area. <ul style="list-style-type: none"> <li>○ Between April and October, ticks are found on vegetation and animals in grassland, marshland, and woodland habitats.</li> </ul> </li> <li>• <b>Disease Hazard:</b> Lyme, Ehrlichiosis, and Babesiosis are diseases that can be serious if not treated. All cause similar symptoms.</li> <li>• <b>Disease Risk:</b> A low percentage of ticks transmit the disease. Of the ticks that do transmit the disease, 70 to 90 percent were from nymphal ticks. Nymphs are much smaller than adult deer ticks and thus are harder to spot on clothing or skin. In addition, tick must have been attached to you for 24-48 hours for disease transmittal.</li> <li>• <b>Disease Signs &amp; Symptoms:</b> <ul style="list-style-type: none"> <li>○ Early Lyme Disease: The early stage of Lyme disease is usually marked by one or more of the following symptoms and signs: <ul style="list-style-type: none"> <li>▪ fatigue, chills and fever, headache, muscle and joint pain, swollen lymph nodes, a characteristic skin rash, called erythema migrans. Erythema migrans is a red circular patch that appears usually 3 days to 1 month after the bite of an infected tick at the site of the bite.</li> </ul> </li> <li>○ Late Lyme Disease: Some symptoms and signs of Lyme disease may not appear until weeks, months, or years after a tick bite: <ul style="list-style-type: none"> <li>▪ Arthritis is most likely to appear as brief bouts of pain and swelling, usually in one or more large joints, especially the knees. Nervous system abnormalities can include numbness, pain, Bell's palsy (paralysis of the facial muscles, usually on one side), and meningitis (fever, stiff neck, and severe headache).</li> </ul> </li> </ul> </li> <li>• <b>Disease Diagnosis:</b> If you suspect signs or symptoms, see a doctor.</li> </ul>		<p>ENGINEERING CONTROLS – AVOID HAZARD</p> <ol style="list-style-type: none"> <li>1) When possible, stay indoors during tick season.</li> </ol> <p>ADMINISTRATIVE CONTROLS – KNOW ABOUT THE HAZARD</p> <ol style="list-style-type: none"> <li>1) Education <ol style="list-style-type: none"> <li>a. Recommended reading: (<a href="http://www.cdc.gov/ncidod/dvbid/lyme/lyme_brochure.pdf">http://www.cdc.gov/ncidod/dvbid/lyme/lyme_brochure.pdf</a>)</li> <li>b. Know how to ID tick, prevent bites, and recognize signs &amp; symptoms</li> </ol> </li> </ol> <p>PERSONAL PROTECTION EQUIPMENT – PREVENT THE HAZARD</p> <ol style="list-style-type: none"> <li>1) <u>Clothing</u> <ol style="list-style-type: none"> <li>a) Long-sleeved shirt with tight cuffs and long pants with the cuffs tucked into socks and taped securely are recommended</li> <li>b) Light-colored clothing so ticks will be easier to spot are recommended.</li> <li>c) Brushing off clothing before entering buildings is recommended.</li> <li>d) Check for ticks after undressing. A daily shower or swim followed by a thorough toweling off is recommended as well.</li> <li>e) Remove any ticks that are found. To remove an attached tick, use thin curved forceps, small tweezers, or a tick removal device. Wash &amp; disinfect the bite area.</li> </ol> </li> <li>2) <u>Tick Repellents</u> are recommended. Products containing DEET or permethrin are almost 100% effective in repelling ticks. Follow manufacturer's directions.</li> </ol> <p><i>The information presented here is for information only. Under no circumstances should it replace the expert care and advice of a qualified physician.</i></p>	
10. LINE OFFICER SIGNATURE		11. TITLE	12. DATE

The JHA shall identify the location of the work project or activity, the name of employees(s) writing the JHA, the date(s) of development, and the name of the appropriate line officer approving it. The supervisor acknowledges that employees have read and understand the contents, have received the required training, and are qualified to perform the work project or activity.

**Blocks 1, 2, 3, 4, 5, and 6:** Self-explanatory.

**Block 7:** Identify all tasks and procedures associated with the work project of activity that have potential to cause injury or illness to personnel and damage to property or material. Include emergency evacuation procedures (EEP).

**Block 8:** Identify all known or suspect hazards associated with each respective task/procedure listed in block 7. For example:

- a. Research past accidents/incidents
- b. Research the Health and Safety Code, FSH 6709.11 or other appropriate literature.
- c. Discuss the work project/activity with participant.
- d. Observe the work project/activity.
- e. A combination of the above.

**Block 9:** Identify appropriate actions to reduce or eliminate the hazards identified in block 8. Abatement measures listed below are in the order of the preferred abatement method:

- a. Engineering Controls (the most desirable method of abatement). For example, ergonomically designed tools, equipment, and furniture.
- b. Substitution. For example, switching to high flash point, non-toxic solvents.
- c. Administrative Controls. For example, limiting exposure by reducing the work schedule; establishing appropriate procedures and practices.
- d. PPE (least desirable method of abatement). For example, using hearing protection when working with or close to portable machines (chain saws, rock drills, portable water pumps).
- e. A combination of the above.

**Block 10:** The JHA must be reviewed and approved by a line officer. Attach a copy of the JHA as justification for purchase orders when procuring PPE.

**Blocks 11 and 12:** Self-explanatory.

Work supervisors and crew members are responsible for developing and discussing field emergency evacuation procedures (EEP) and alternatives in the event a person(s) becomes seriously ill or injured at the worksite.

Be prepared to provide the following information:

- a. Nature of the accident or injury (avoid using the victim's name).
- b. Type of assistance needed, if any (ground, air, or water evacuation).
- c. Location of accident or injury, best access route into the worksite (road name/number), identifiable ground/air landmarks.
- d. Radio frequency(s).
- e. Contact person.
- f. Local hazards to ground vehicles or aviation.
- g. Weather conditions (wind speed & direction, visibility, temperature).
- h. Topography.
- i. Number of person(s) to be transported.
- j. Estimated weight of passengers for air/water evacuation.

The items listed above serve only as guidelines for the development of emergency evacuation procedures.

**JHA and Emergency Evacuation Procedures Acknowledgment**

We, the undersigned work leader and crew members, acknowledge participation in the development of this JHA (as applicable) and accompanying emergency evacuation procedures. We have thoroughly discussed and understand the provisions of each of these documents:

**SIGNATURE      DATE                      SIGNATURE              DATE**
