

Appalachian National Scenic Trail		1. WORK PROJECT/ACTIVITY Tick Exposure	2. LOCATION Trail Wide	Includes work performed on lands of National Park Service, and various states' park and lands
JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and -12 OSHA (Instructions on Reverse)		3. NAME(S) OF ANALYST(S) Keith Stegall, Facility Manager	4. Work Supervisor Various	5. DATE PREPARED 5/16/2022
Required Standards and General Notes:	General Notes: Tick bites can cause significant, life altering illness. Timely removal of ticks and prompt follow up medical treatment is critical to prevention.			
Required Personal Protective Equipment	List any primary PPE for project/activity here and refer to additional PPE that may be associated with specific tasks or activities below.			
Tools and Equipment	First aid kit including fine-tip tweezers, tick nippers, and/or v-shaped extractor ("tick spoon"), duct tape or lint roller to remove crawling ticks. Permethrin treated clothing. Insect repellent. Disposable outerwear.			
Available Training				
7. TASKS/PROCEDURES		8. HAZARDS, POTENTIAL HAZARDS / INJURY SOURCE	9. ABATEMENT ACTIONS OR PROCEDURES Engineering Controls * Substitution * Administrative Controls * PPE	
Reducing Exposure to Tick Bites		General Exposure	<ul style="list-style-type: none"> • Be aware of areas with higher tick incidence. • Picaridin is effective against ticks. DEET has only limited effectiveness against ticks, less than a couple hours. • Search the body on a regular basis, especially hair and clothing; ticks generally do not attach for the first couple of hours. A full body check should include: under the arms, in and around the ears, inside belly button, back of the knees, in and around the hair, groin area, and around the waist. • Ticks may be carried indoors on any clothing that has been outside. • Refresh permethrin treatment as recommended by manufacturer, or if protection appears to be waning. • Shower promptly upon arriving at home or operation base. 	
		Clothing	<ul style="list-style-type: none"> • Wear light colored clothing that fits tightly at the wrists, ankles, and waist. • Each outer garment should overlap the one above it. • Cover trouser cuffs legs with high socks, gaiters, or boots. • Shirts should be tucked in. • Treat clothing and gear with insect repellent as a barrier. • No DEET on NOMEX or a hardhat. • Permethrin (0.5%) can be used on NOMEX following product instructions. Permethrin is for use on clothing only - not on skin. The clothing must be allowed to fully dry before being worn. 	

		<ul style="list-style-type: none"> ● It is recommended that you first put your field clothes in the dryer on high heat upon returning home for 15-30 minutes to kill the ticks before putting clothes into the wash. ● Keep work clothes out of living areas until washed. Wash normally. If possible, dry at high heat setting for at least 15 minutes.
Treating Tick Bites	Removal procedure	<ul style="list-style-type: none"> ● If a tick becomes attached, pull it by grasping it as close as possible to the point of attachment and pull straight out with gentle pressure. ● Some ticks are very small, and may appear to be flecks of dirt or duff. ● Fine-pointed tweezers work best for nymph ticks. Tick nippers, tweezers, and V-shaped lifters work well for larger ticks. ● Do not try to remove the tick by burning with a match or covering it with chemical agents. ● After removal, wash hands and site with rubbing alcohol or soap and water. Monitor site for redness and/or rash. ● If you cannot remove the tick, or the head detaches, seek prompt medical help.
Reporting Ticks Bites (Initial)	Reporting Process	<ul style="list-style-type: none"> ● For all non-USFS volunteers, notify your direct supervisor or the APPA Safety Officer (APPA Chief Ranger) ASAP of embedded ticks. Email notification is preferred for documentation. Use email APPA_Administration@nps.gov and use subject line "Tick Bite". ● NPS employees will enter their own information into SMIS. Volunteers will have their information entered into the Safety Management Information System (SMIS) by the APPA Safety Officer. ● Tick bite will be recorded in SMIS as "Report Exposure". A CA-1 (acute injury) is NOT the preferred reporting method at this stage. ● A CA-1 would be filled out if medical attention was required to have the tick removed or from an injury resulting from the tick bite itself (such as a localized infection at the site of the bite). ● Once a CA-1 is started, the tick bite must be entered in SMIS as a recordable injury / illness. ● If the employee/volunteer seeks medical attention and the medical provider recommends preventative medical treatment, the park is responsible for that cost. However, if the employee/volunteer is prescribed antibiotics for treatment (phlebitis, cellulitis, etc.) from the tick bite or tick removal, then that is covered via a CA-1.

		<ul style="list-style-type: none"> ● APPA Managers/Supervisors - Refer to April 10, 2020 Memorandum, Guidance on the Tick Bite Protocol and to Clarify the OWCP Claim Process.
Tick-Borne Illness	Symptoms of tick-borne illness	<ul style="list-style-type: none"> ● Watch for warning signs of illness, reactions may appear up to two weeks after attachment. Rash may not appear in some cases. Do not rely on rash alone to determine if you have been infected. ● Seek medical attention if you show signs of: <ul style="list-style-type: none"> ○ A large red spot on the bite area. ○ Rash (web links) - distinctive for Lyme, Southern tick-associated rash illness, Rocky Mountain spotted tick fever, ehrlichiosis, tularemia ○ Fever ○ Chills ○ Headache ○ Joint and muscle ache that may appear in different locations at different times. ○ Significant fatigue ○ Facial paralysis ● Lyme disease specific <ul style="list-style-type: none"> ○ Confusion ○ Short-term memory loss ○ Disorientation ● Babiosis <ul style="list-style-type: none"> ○ Infected person may have no symptoms ○ Gradual on-set of not feeling well, fatigue, and loss of appetite. ● Alpha-gal syndrome (mammalian meat allergy); usually 2-6 hours after eating meat or dairy <ul style="list-style-type: none"> ○ Rash ○ Hives ○ Nausea or vomiting ○ Heartburn or indigestion ○ Diarrhea ○ Cough, shortness of breath, difficulty breathing ○ Drop in blood pressure ○ Swelling of the lips, throat, tongue, or eyelids ○ Dizziness or faintness ○ Severe stomach pain

	Reporting Process	<ul style="list-style-type: none"> ● If symptoms of a tick-borne illness develop either (1) before receiving the tick results from your nearby laboratory or (2) within 1 year of receiving a tick bite, advise your supervisor and consult a physician: <ul style="list-style-type: none"> ○ Follow the direction of their physician for diagnostic testing and initial treatment. ○ Ensure that the park is billed for preventative treatment by working closely with their supervisor and park administrator. ○ If the presence of a tick-borne illness is confirmed by a medical provider, then the employee/volunteer can fill out a CA-2 (Notice of Occupational Disease) through SMIS/ECOMP. Future payments for treatment under this scenario would be provided through OWCP once the claim is approved. ○ If the presence of a tick-borne illness is confirmed, the supervisor should complete an incident/accident report in SMIS/ECOMP (if they haven't already done so) which provides supporting documentation that an incident occurred.
10. OFFICIAL SIGNATURE	11. TITLE Acting Chief Ranger/SDSC	12. DATE 05/19/22

Previous edition is obsolete

(over)

JHA Instructions (References-FSH 6709.11 and .12)

The JHA shall identify the location of the work project or activity, the name of employee(s) involved in the process, the date(s) of acknowledgment, and the name of the appropriate line officer approving the JHA. The line officer 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 or 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 participants.
- 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, and 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.

Emergency Evacuation Instructions (Reference FSH 6709.11)

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 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 frequencies.
- e. Contact person.
- f. Local hazards to ground vehicles or aviation.
- g. Weather conditions (wind speed & direction, visibility, temperature).
- h. Topography.
- i. Number of individuals to be transported.
- j. Estimated weight of individuals 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

