Yale Environmental Health & Safety

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Acknowledgment Form on Hazards Associated with Outdoor Fieldwork

As a Yale employee, visiting scientist or student you have been identified as having potential exposure to ticks or other vectors during field work for your job or as part of a course.

Ticks can transmit several human and animal disease pathogens. Please read the attached fact sheet on *Tick-Associated Diseases* to become familiar with the different kinds of ticks and developmental stages and the signs and symptoms of different tick associated diseases. In this region, we are mainly concerned with diseases transmitted by deer ticks, which bite humans during both adult and immature nymphal stages.

Lyme disease caused by a spirochete bacteria *Borrelia burgdorferi*, affects the skin, joints, nervous system and less frequently, the heart and eyes. A red rash usually develops within a few days to several weeks after the tick bite. The rash often remains red, but swelling, blistering, scabbing or bulls-eye appearance is also common. The rash may be warm to the touch. Mild nonspecific, flu-like symptoms may be associated with the rash. Nearly all cases occur during the summer months and are caused by nymphal stage deer ticks.

Babesiosis is a malaria-like illness caused by a protozoan *Babesia microti*. Infection may not produce symptoms but the disease can be severe or fatal in elderly, immunosuppressed people or those without spleens. Symptoms include fever, headache, fatigue, chills, and anemia. Like Lyme disease, most cases of babesiosis are acquired by bites from nymphal stage deer ticks during the summer months.

Ehrlichiosis is the most recently discovered tick-borne disease and is caused by rickettsial bacteria. Nonspecific symptoms include fever, headache, nausea, vomiting and malaise. Most cases occur from April through October are caused by both adult and nymphal deer ticks.

Recommended Precautions to follow are:

<u>Personal Protective Clothing</u>: Wear light colored clothing with the pants tucked into socks, long sleeved shirts and closed toed shoes. White coveralls may be appropriate if in heavy underbrush areas. Please note that ticks do not jump, fly or drop from trees, but grasp passing hosts from various sources such as the leaf litter and tips of grass. The ticks usually are picked up on the lower legs and then crawl up the body seeking a place to feed. Consider using a tick repellent. Those containing DEET can be used on exposed skin. Repellents containing permethrin can be applied to clothing (shoe tops, socks and pant cuffs, etc.).

<u>Inspecting for Ticks</u>: After leaving the field area, and before entering transportation vehicle, brush yourself off, remove personal protective clothing, and check for ticks. At home, remove and wash clothing. Carefully inspect body and remove any ticks quickly.

<u>Supplies</u>: Tweezers for tick removal; alcohol for cleaning and disinfection of tweezers; a plastic jar or vial for collection of attached ticks; and antiseptic hand wipes for handwashing after leaving field.

<u>Tick Removal</u>: To remove attached tick, gently grasp the tick as close to the skin surface as possible with tweezers. Pull the tick with the mouthparts intact. See the attached fact sheet on *Tick and Tick control*. Wipe the skin near the bite with an antiseptic and wash your hands with soap and water.

I have received and read this acknowledgment form and the fact sheet information on *Tick and Tick Control* and *Tick-Associated Diseases*. I am aware of the hazard working in the field and understand that it is my responsibility to follow the recommended guidelines outlined in this form.

Name

Department / Course

Principal Investigator / Instructor Name

Signature

Date

Signature

Please return form to the Occupational Health & Safety Section at the above campus address.