

New Guidelines Published by The Wilderness Medical Society

A recent article published by The Wilderness Medical Society describes evidence-based guidelines for the prevention and management of tick-borne illness. These guidelines were developed on a grade system by an expert panel designated by The Wilderness Medical Society. Panelists were selected based on level of clinical interest or research experience. Evidence for each recommendation was collected by searching peer reviewed articles identified through searching PubMed and Google Scholar databases. Additional articles were reviewed manually by searching the references section of the acquired articles, reviewing existing practice guidelines, as well as review of CDC references.

Tick-borne illnesses that were discussed in these guidelines include: Diseases caused by *Borrelia spp.* (Lyme disease), Anaplasmosis, Ehrlichiosis, Tick-borne Relapsing Fever, Rocky Mountain Spotted Fever, Tularemia, Babesiosis, Colorado Tick Fever, Powassan virus, and Alpha-gal syndrome.

The Panel proposed recommendations based on the quality of supporting evidence according to criteria established by the American College of Chest Physicians (ACCP) classification scheme for grading evidence and recommendations. Where the ACCP scheme did not adequately describe recommendations, recommendations that were not supported by data but based on reasonable clinical practice, were classified as “expert opinion.”

Authors reviewed clinical presentation, epidemiology, prevention, and management of tick-borne illness in the United States, focusing primarily on interventions appropriate for

restricted environments. A summary of guideline recommendations are provided below.

Strong Recommendations:

- Skin repellents including DEET, picaridin, and permethrin
- Tick checks
- Washing and drying clothing at high temperatures
- Mechanical tick removal within 36 hours of attachment
For treatment,
- Single-dose doxycycline for high-risk Lyme disease exposures were recommended versus “watchful waiting”
- Evacuation from backcountry settings for symptomatic tick exposures
- Education programs focused on tick-borne illnesses

Weak Recommendations:

- Use of light-colored clothing
- Insect repellents other than DEET, picaridin, and permethrin
- Showering after exposure to tick habitat Weak recommendations are also provided against
- Passive methods of tick removal, including the use of systemic and local treatments

Evidence was insufficient to support the use of long-sleeved clothing and the avoidance of tick habitat such as long grasses and leaf litter. And although evidence supporting Lyme disease vaccination was present, the vaccine is not available in the US and therefore was not provided a grade.

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