



LYME DISEASE IN PENNSYLVANIA

A Supplement to the Report Issued by the

Task Force on Lyme Disease and Related Tick-Borne Diseases

Pursuant to Act 83 of 2014

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OTHER REFERENCES ONLY

Other

Personal protection measures are a critical component of overall prevention of tick exposure. Tick checks are a potentially important strategy for reducing tick-borne diseases. Not only are they not always conducted rigorously enough to be fully effective but ticks, especially nymphal ticks, are very small, and there may be practical limitations on people's ability to detect them. (endnote 14)

Three personal behaviors that have consistently shown benefit and should be highly recommended are:

- bathing/showering within 2 hours of exposure
- use of permethrin-treated protective clothing
- removing and running clothes in a dryer after exposure

Community level interventions may be more impactful; interventions such as

- controlling tick and host populations
- use of acaricides to kill ticks on host populations, such as mice or deer

Pharmacological preventative evidence is limited and currently available medical treatment guidelines address this and should be reviewed by HCPs with their patients to make individualized patient decisions.

There are currently no human vaccines licensed for sale in the US. The most significant challenge for tick-borne disease vaccines is the sheer diversity of tick-borne pathogens and their variation. More promising are the vaccines being developed that target the host-tick interaction, rather than pathogens, which would instead prevent transmission occurring to the host.

Awareness Campaigns should attempt to drive public motivation to act upon these prevention measures and should address the public's knowledge of tick-borne diseases and what measures can reduce their exposure to ticks. These campaigns should target high-risk locations, and populations.

[Critical Needs and Gaps in Understanding Prevention, Amelioration, and Resolution of Lyme and Other Tick-Borne Diseases: The Short-Term and Long-Term Outcomes: Workshop Report \(2011\) \(Institute of Medicine\)](#)

Personal protection methods have not been shown to actually prevent tick-borne diseases (Smith et al., 1988; Schwartz and Goldstein, 1990; Ley et al., 1995; Orloski et al., 1998; Connally et al., 2009; Smith et al., 2001).

Insect repellent results have been mixed with some studies showing a protective effect (Smith et al., 1988; Schwartz and Goldstein, 1990; Lane 1992; Ley et al., 1995; Klein 1996; Orloski et al., 1998; Phillips et al., 2001; Smith et al., 2001; Vazquez et al., 2008; Connally et al., 2009).

Detailed recommendations for property and landscaping changes can be found at:
http://www.cdc.gov/lyme/prev/in_the_yard.html and www.tickencounter.org.