

TICK BITE PROTECTION WITH PERMETHRIN-TREATED CLOTHING



Protect yourself and your family with proven strategies to prevent tick bites.



Wearing permethrin-treated clothing while outdoors and performing daily tick checks are among the most effective ways to prevent getting a tick-borne disease.

Many people wear tick repellents such as DEET to protect themselves from ticks. But, Be Aware: skin-applied repellents are not sufficient to protect against tick bites. DEET and other skin-applied repellents only repel ticks to areas where they could bite and even that little protection does not last long.

The best protection you can achieve is by using a repellent that contains Permethrin on your clothes, a skin-applied repellent that contains DEET, and performing daily tick checks.

What are clothing-only repellents?

Clothing can be pre-treated with the insecticide Permethrin. ***Permethrin kills ticks on contact.*** Pants, socks, shoes, shirts, hats and bandanas and camping gear can be treated with permethrin to provide effective, easy, long-lasting protection against tick bites. Permethrin applied to clothing is odorless and invisible, will not harm clothing, and is effective through multiple washings.

More information about the effectiveness and safety of permethrin-treated clothing is available at the University of Rhode Island Tick Encounter Resource Center website: http://www.tickencounter.org/prevention/protect_yourself

Is it safe to wear Permethrin-treated clothing? Yes!

- Permethrin is derived from the chrysanthemum flower and has very low toxicity to humans and other mammals.
- Permethrin is more than 2500 times more toxic to ticks than humans.
- The US EPA states that there is reasonable certainty that permethrin-treated clothing poses no immediate or long-term health effects to toddlers, children, pregnant women or nursing mothers.
- If put directly on skin, absorption is <1%
- The US EPA states that a 140-pound person would have no adverse health effects if exposed to 32 grams of permethrin per day. There is less than 1 gram of permethrin in one container of clothing treatment spray.

Where Do I Get Permethrin-treated Clothing?

★ **Retailers:** Permethrin-treated clothing such as men's, women's and children's pants, socks, shirts, hats, bandanas and hoodies can be purchased from outdoor stores and on-retailers including Insect Shield, REI, Cabelas, Dick's Sporting Goods, LL Bean, Eastern Mountain Sports, Orvis, Amazon, etc. Permethrin-treated items are also available for dogs including treated dog beds, dog neck gaiters, bandanas and t-shirts.



* **InsectShield.com** offers an on-line service which will treat your clothing. For small fee (about \$10 per item) clothing items can be mailed in for treatment. Treated clothing is mailed back within several days. *Treatment is effective through 70 washings or for an entire spring-fall season of use.* Visit www.insectshield.com for more information and ordering.



* **Do-It-Yourself:** Permethrin aerosol sprays, pump sprays, and liquid rinses are available to treat your own clothing. Brand names include Sawyer's, Ben's, Duranon, Permanone, Repel and others. These products are available at most outdoor stores and on-line: REI, Cabelas, Dick's Sporting Goods, Eastern Mountain Sports, Walmart, Amazon, etc. *Most products provide protection through 6 washings/6 weeks.*



How do I apply permethrin sprays to clothing?

- Read label and follow instructions
- DO NOT apply to skin
- DO NOT apply to clothing or shoes while being worn
- Wear gloves while applying the permethrin and while handling the damp clothing.
- Hang clothing items on a line outdoors in an unenclosed area protected from wind
- Hold nozzle 6-8 inches from clothing
- Spray outer surface of clothing with slow sweeping motion to lightly moisten surface of clothing
- Treat outer surface of clothing for 30 seconds on each side or as on label instructions
- Allow to dry thoroughly for at least 2 hours before wearing (4 hours in humid weather)
- Shoes can also be treated—place shoes on newspaper outdoors and use same procedure
- If you get permethrin on your skin, follow First Aid instructions on container
- Wash hands thoroughly with soap and water when finished
- Camping gear such as sleeping bags and tents can also be treated.

Instructional videos and more information are available at:

http://www.tickencounter.org/prevention/treat_clothing

http://www.tickencounter.org/prevention/spray_method

http://www.tickencounter.org/prevention/soak_method

<https://vimeo.com/39012753>

<http://travelreadymd.com/how-to-make-your-clothing-insect-repellent/>

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