



Don't Let One Bite Change Your Life...

A Guide to the use of Tick Repellents

The use of repellents can be a highly effective way to prevent tick bites and reduce the risk of getting any number of tick-borne diseases including Lyme, babesiosis and anaplasmosis.

Beginning in 2015 manufacturers will have the option of using images developed by the EPA to place on product packaging. The intent is to CLEARLY communicate the effectiveness of the product. Note, these images apply to the effectiveness of repellents applied to skin. Consumers should also follow all label directions concerning application.



Deet - The most widely available active ingredient on the market. Protection times 1–10 hours. Product concentrations 7–100%. Deet is EPA approved for use on children at all concentrations. FDA recommends application to children greater than two months old.

Picaridin - Synthetic version of piperine, a chemical found in black pepper. Protection times 6–8 hours. Product concentrations 10–20%.

IR3535 - Beta-alanine, synthetic version of an amino acid. Protection times 2–12 hours. Product concentrations 7–20%.

Oil of Lemon Eucalyptus – Modified version of a natural plant oil. Protection time 6 hours. Product concentrations 30 – 40%. FDA recommends application to children greater than age three.

“Herbal” or Botanicals – A number of repellent products contain plant oils such as peppermint, lemongrass, cedar, rosemary and others. There are no published data to support the effectiveness against ticks or mosquitoes and they are not EPA registered.

Permethrin – For application to clothing including footwear. Highly effective at repelling/killing ticks. Effectiveness lasts through multiple washings. Pre-treated clothing is also on the market. This is a good complement to skin-applied repellents. EPA’s position is that treated clothing poses no immediate or long-term effects to toddlers, children, pregnant women or nursing mothers.

EPA skin repellent selector tool:

<http://www2.epa.gov/insect-repellents/find-insect-repellent-right-you>