

What role do mice and deer play in the Lyme disease cycle?

- Ticks require a blood meal to reproduce.
- Deer ticks become infected with Lyme disease (and other disease-causing agents) when they take their blood meal from infected small rodents, such as white-footed mice. This means that animals like mice are the 'reservoir' for Lyme disease. Deer ticks typically attach to rodents during the first year of their life cycle and these blood meals provide the tick with nourishment for growth.
- Deer ticks commonly feed on deer to get the nutrients needed for laying eggs. Deer do not carry Lyme disease or pass it to ticks, so deer are reproductive hosts in the Lyme disease cycle.

What can I do to reduce the number of deer and rodents coming into my yard?

1. Use bird feeders only in the fall and winter, since bird seeds attract mice.
2. Put up deer fencing to effectively control deer access to your property.
3. Keep stonewalls and wood piles away from the home and free of brush, high grass, weeds, and leaf litter. This will decrease potential mouse nesting sites.
4. Keep your wood piles and rock walls neat and away from your home and areas where children play. Small animals like mice often make these areas their home.

How safe is Permethrin?

Permethrin is very safe. In fact, it is the only active ingredient in Elimite cream. Elimite cream is used to treat scabies. It is slathered on the skin for ten hours to clear up scabies. This concentration is much stronger than the passing contact from the cotton treated permethrin in the tubes placed on our properties in our Lyme Disease prevention program.

The first set of tubes kills the current crop of ticks. The second set of tubes is placed to eliminate mites for the next season.

There's new evidence to support a decades-old strategy for preventing the tick bites that lead to all sorts of nasty diseases, including Lyme disease and Rocky Mountain spotted fever. The remedy involves spraying your clothing with permethrin — a pesticide that's chemically similar to extracts of the flowering chrysanthemum plant.

Preventing tick bites on people before you go outdoors:

1. **Know where to expect ticks.** Ticks live in grassy, brushy, or wooded areas, or even on animals. Spending time outside walking your dog, camping, gardening, or hunting could bring you in close contact with ticks. Many people get ticks in their own yard or neighborhood.
2. **Treat clothing and gear** with products containing 0.5% permethrin. Permethrin can be used to treat boots, clothing and camping gear and remain protective through several washings. Alternatively, you can buy permethrin-treated clothing and gear.
3. **Avoid contact with ticks.** Avoid wooded and brushy areas with high grass and leaf litter. Walk in the center of trails.
4. **Use Environmental Protection Agency (EPA)-registered insect repellents** containing DEET, picaridin, IR3535, Oil of Lemon Eucalyptus (OLE), para-menthane-diol (PMD), or 2-undecanone. EPA's helpful search tool can help you find the product that best suits your needs. Always follow product instructions. Do not use products containing OLE or PMD on children under 3 years old. When used as directed, EPA-registered insect repellents are proven safe and effective, even for pregnant and breastfeeding women.
5. If you are using sunscreen, apply sunscreen first and insect repellent second.

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