

A bumper crop of acorns in 2015 seemed harmless...until it triggered a population boom in the mice that eat them...creating an abundance of rodents for deer ticks to feed on...who are now ready to attack *you*. It's like a Hitchcock film, but instead of killer birds, we're suddenly facing a tick-pocalypse! (*Dun-dun-dunnn!*)

Deer ticks (and their cousin, Western Blacklegged ticks) are the types—the *only* types—that host Lyme, which has taken up residence in 20 percent more people than it did five years ago. The Centers for Disease Control and Prevention estimates around 300,000 people are diagnosed with the disease each year.

Before a deer tick feasts on you, 35 percent of them have picked up the bacteria that causes Lyme from one of

those mice (or, less frequently, another animal). It hangs out in the tick's gut; when it latches on, the bacteria travels to its salivary glands, where it can be passed to you, explains Maliha Ilias, Ph.D., a Lyme disease research program officer at the NIH National Institute of Allergy and Infectious Diseases. If that happens, you'll likely get a rash and/or flu-like symptoms (fever, headache, achiness) within 30 days of being bitten. Without a two-to-three-week course of antibiotics, the infection can spread to the nervous system and heart over the following weeks or months, causing issues like meningitis, facial paralysis, knee-joint arthritis, or heart rhythm disturbances (which can, very rarely, be deadly).

And while Lyme accounts for 70 percent of tick-borne illnesses, other types of ticks, and the illnesses they spread, are also on the rise. For example, about 4,500 people (more than twice the number of a decade ago) will get Rocky

Mountain spotted fever, a potentially fatal bacterial infection transmitted by several types of ticks, including American dog ticks and brown dog ticks.

That's why this summer, you need to be especially vigilant while you're out where ticks love to hang: shady, damp places, like along the edge of the woods and leaf-strewn forest floors, and knee-high grasses and meadows. When you walk by these hot spots, ticks find it easy to hitch a ride on your feet, then climb up your body and start lurching, says Felicia Keesing, Ph.D., codirector of The Tick Project at the Cary Institute of Ecosystem Studies in Millbrook, New York. All reasons it is key to do a full-body tick check anytime you've been in one of these settings.

We know this all sounds frightening, but unlike in horror movies, there are clear ways to stay safe. Find out which ticks live in your area and when they're most active—then take preventive measures to head them off before first bite.

LYME-CARRYING TICKS

Deer ticks are found in much of the U.S. but most widely in the Northeast, mid-Atlantic, and Upper Midwest, says Thomas Mather, Ph.D., director of the University of Rhode Island's TickEncounter Resource Center. (Western Blacklegged ticks, the other Lyme-carriers, live along the Pacific Coast.) The tick-to-human Lyme transfer can happen during two stages of deer tick development. What the deer type of ticking Lyme bombs look like:



LARVA

About the size of a grain of table salt, and with six legs (they grow two more later), these just-hatched ticks are active July through September and mostly found crawling in damp leaves, waiting to feed on an unsuspecting mouse, small mammal, or bird. If you're eagle-eyed enough to spot one of these teeny critters, don't worry—they are not infected with any pathogens yet so are unable to spread Lyme.



NYMPH

These juvenile ticks emerge in spring and summer and hang out at the edge of wooded areas, among the leaves. They are poppy-seed size, have eight legs, and are hungry—i.e., seeking a host (chipmunks, dogs, humans) to feed on. These little ones carry the biggest threat of transmitting Lyme—because they're so small, they can latch on and spread germs before you notice them.



ADULT

In the fall, nymphs develop a sex as they change into adults, which are a touch bigger than a sesame seed.

ADULT FEMALE

Grown-up lady ticks have an orangey-red body and a blackish-brown shield, or scutum, between the body and mouthparts (the bit that looks like the head). These ticks can spread Lyme and are out—and out for your blood—October through May, so keep up your tick protection anytime temps stay above freezing.



ADULT MALE

These creepy-crawlies have light brown bodies and larger blackish-brown shields. Like adult females, they're mostly found knee-high on the tips of branches of low-growing shrubs, looking for a passing human or dog to attach to. Although they can carry the bacteria that causes Lyme, they don't feed on their hosts, so they can't actually spread the disease.