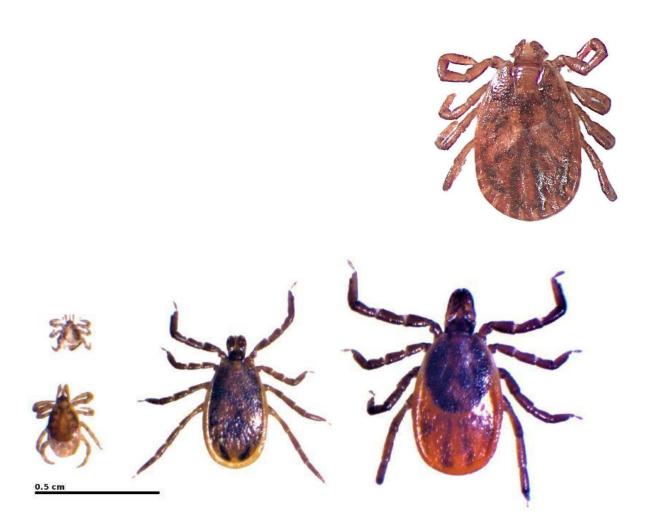
# The Day

# imminent horizons











2/6

Donald Healy Peck poses for a portrait at his home in New London Thursday, April 17, 2025. He contracted Lyme disease about 10 years ago working in his yard and said it took over a few months to get diagnosed. (Sarah Gordon/The Day)

## Tick-borne terror: New London County has high rate of ticks, disease

## By Theresa Sullivan Barger, Special to The Day

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Healy Peck was sick for months with Lyme disease when he first moved back to New London a decade ago. Because he had been living in Philadelphia for years, he didn't make the connection between his persistent flulike symptoms — overwhelming fatigue and headache — and Lyme disease. He suffered through Thanksgiving and the holidays with a variety of symptoms before finally going to a doctor.

Groton resident Debbie Garmon got Lyme disease more than a decade ago. After a few days of aches, chills, a headache and nausea, she saw a walk-in clinic doctor and received antibiotics. But then, after her Lyme test came back negative a few days later, the clinic doctor told her to stop taking the doxycycline. As her symptoms continued, her primary-care doctor suggested she retest for Lyme. By then, about a week had passed since symptoms began and the second test detected Lyme. Her doctor put her back on the antibiotic. It takes time before the antibodies the body develops in response to a tick-borne disease can be detected in a blood test, so doctors said a physical exam and taking the patient's history are the best ways to diagnose a tick-borne illness.

Niantic resident Dan Shea said he has had a tick-borne disease six times since retiring in 2020. He tries to protect himself with long sleeves, tick checks and soaks in the hot tub after working in the yard, but he still finds ticks on his body after even short periods outdoors.

New London County has the unfortunate distinction of having the state's highest rate of tick density: New London County reported the highest average adult blacklegged (deer ticks) tick density (83 per acre) and the highest average nymphal blacklegged tick density (25 per acre), according to records kept by the Connecticut Agricultural Experiment Station (CAES) in New Haven.

And while warmer winters mean ticks are active year-round, spring is prime tick season because the nymphs, or immature ticks, are looking for a "blood meal," said Megan Linske, an entomologist at CAES. To make matters even worse for us, the nymphs are about the size of a poppy seed, so they're really hard to see or feel. The blacklegged tick has four life stages: egg, larva, nymph and adult. Once they progress from the egg stage, they need a blood meal at each subsequent stage, Linske said.

With our warming planet, southern Connecticut is seeing ticks and tick-borne illnesses that hadn't made it this far north in the past. Two emerging species, lone star ticks and longhorned ticks, were identified in New London, Fairfield, Middlesex and New Haven counties in 2024, CAES reported. When scientists started looking for these tick species in 2019, they were only found in New London and Fairfield counties.

But all this dire news does not mean we need to stay indoors and avoid the woods and our yards, said Linske, who specializes in studying and tracking ticks. We can make our yards inhospitable to ticks by removing plants — invasive Japanese barberry, honeysuckle and Pachysandra — that harbor ticks, clearing away leaf litter, keeping grass short and adding plants that repel ticks.

We can apply insect repellant containing DEET, wear clothing treated with a tick repellent called permethrin, tuck our pants into our socks and our shirts into our pants, wear a hat and check

ourselves for ticks. Using duct tape on our clothes and a lint roller on our skin helps catch the nymphs and adult deer ticks, which are smaller than wood ticks, also known as dog ticks. (Deer tick adults are about the size of a sesame seed.)

And after a hike in the woods or doing yard work, we can take a shower to wash away what we don't see, Linske said.

"Never give up gardening," she said.

Gardens, including flower beds and vegetable gardens, are not conducive to ticks. Ticks don't like to be in the sun and prefer shade and moist areas. More ticks are found in the 9-foot area on the edge of a lawn where it borders a wooded area, she said. A border of cedar woodchips or small rocks serve as an effective barrier.

"I'm out in shorts all the time. If you go out in the woods, it's just more frequent tick checks." She wears permethrin-treated socks and has found dead ticks on her socks, so they work.

"We always tell people. Stick to the trails for multiple reasons. The ticks are in the understory, shrubbery and leaf litter," she said. "They're not out in the open, short-grass area." If you spot a tick, pull it out slowly and carefully with tweezers. Capture it inside two pieces of clear tape and send it to CAES to see whether it was carrying Lyme or another tick-borne disease.

### Signs of tick disease

Scientists with both the Yale School of Medicine and the Yale School of Public Health are working on a vaccine for tick-borne disease that may be available to the public in the next five to 10 years. Scientists are studying whether they can use the body's immune response to a tick bite to develop an anti-tick vaccine, according to a March paper in Science Translational Medicine. Some people and animals develop a resistance to tick bites, causing ticks to detach prematurely, and scientists are trying to isolate the antigen that will prevent tick infection.

Until there is a vaccine, and if all the additional tips later in the sidebar to this story on how to avoid tick bites don't work, it helps to know the signs that you may have a tick-borne disease. In Connecticut, blacklegged or deer ticks carry more than Lyme disease, (Borrelia burgdorferi). Scientists have also found ticks carrying babesiosis, anaplasmosis, hard tick relapsing fever (Borrelia miyamotoi) and Powassan virus, or Powassan encephalitis. While these are less common, some people have been infected with both Lyme and babesiosis from a single tick, doctors said. Shea, the Niantic resident, had both Lyme and babesiosis one time.

In addition, CAES identified the first person to acquire the disease rickettsiosis (Rickettsia parkeri) in Connecticut. Transmitted by the Gulf Coast tick, rickettsiosis is an emerging tick-borne disease similar to Rocky Mountain spotted fever, with relatively milder symptoms in the

United States. It can be hard to diagnose; common symptoms that typically develop within one week of infection include fever, headache, fatigue, nausea or vomiting, according to the Centers for Disease Control and Prevention (CDC).

First, while a bullseye rash is usually a sign of Lyme disease, people can be infected with a tick-borne illness and have a reddish oval-shaped rash, said Dr. Henry M. Feder Jr., professor of family medicine and pediatrics at the UConn School of Medicine and an infectious disease clinician at Connecticut Children's Medical Center. The bullseye occurs only about 30% of the time, he said, while about half the time the tick bite leaves a red oval or round rash.

If you have a spring or summer fever and feel like you were run over by a truck, Feder said, call your primary care physician. If you don't have a sore throat, cough or diarrhea, it's likely to be a tick-borne illness.

"The biggest time (for tick-borne illnesses) is April," he said.

When Dan Shea's wife came home from work, she had to wake him up after he had fallen asleep in the middle of the day, something he never did. Shea said he had been feeling lousy for a few days, but "all of a sudden, I felt myself draining."

He slept deeply all night and, when he still felt fatigued, went to a walk-in clinic the following day, he said. He had a 100-degree temperature. The doctor spotted the telltale bullseye on his shoulder, he said, and, after 30 days on antibiotics, he recovered.

Sometimes people have the rash but don't see it because it's in their hair or on their back. Other times, people get the symptoms of Lyme, and the rash doesn't show up until later or not at all.

For others, such as Garmon, the symptoms come on gradually. In September 2015, about two days after working around ornamental grass in her garden, she felt achy and had difficulty sleeping, her diary entry said. The following day, she felt chills as well; and the day after that, a Saturday, she felt nauseous and had a headache. She went to a walk-in clinic and the doctor found a big spot near her left armpit.

"It was like a big Target sign," Garmon said.

Finding a tick or seeing a red rash on your skin doesn't guarantee a tick-borne disease, said Dr. Richard Martinello, professor and infectious disease doctor at Yale School of Medicine.

"There are a lot of diseases that are transmitted by ticks, but not all ticks transmit disease and not all tick bites are a risk," he said. "This is where we rely on symptoms."

A fever and feeling like you got hit by a truck are the most common signs Lyme disease, Martinello said. But the less-common Powassan disease is a viral infection of the brain, he said, and fever, confusion, changes to alertness level and cognitive ability are warning signs. Other initial symptoms can include headache, vomiting and weakness, according to the CDC, and symptoms of severe disease include confusion, loss of coordination, difficulty speaking and seizures. There is no medication to treat Powassan disease, Martinello said. People who get it are given "supportive care," he said, which could include being put on a breathing machine, given IV fluids, and monitoring blood pressure.

"It can cause permanent damage. Some end up dying," he said. "This is very uncommon. We may see three cases in the state of Connecticut in a year."

The Powassan virus is transmitted by blacklegged/deer ticks. It is very, very rare; only 0.01% of ticks collected by CAES scientists are infected with it, Megan Linske said. Unfortunately, because the virus infects people through its mouth, it only takes about 15 minutes to transmit the virus, she said. For the other types of tick-borne illnesses, the tick normally has to be attached for 24 to 48 hours to infect someone, she said.

Martinello urges people to contact their primary care physician if they have a fever that persists for more than 48 hours. He cautions using urgent care rather than primary care, since a critical part of diagnosis is knowing a patient's history.

If someone has had Lyme disease in the past, "tests for Lyme disease can remain positive for decades," he said. "If I was to develop a fever, and achiness, and they test me for Lyme disease and it comes back positive, does that mean I have Lyme disease causing my fever? Maybe. It may be that I have Lyme disease from 10 years ago, and it went away on its own. Now I have something else and my Lyme test is positive."

You can also have the bullseye rash without a fever. About 20 years ago, as a 14-year-old patient was being prepared for surgery because of appendicitis, medical staff saw a bullseye rash on her back, Martinello said. She had no fever or other symptoms, but they treated her for Lyme disease because of the bullseye rash.

Some people get Lyme disease and it goes away on its own, but not always, Martinello said. "People can develop neurologic problems. That actually needs to be diagnosed and treated appropriately," he said. Untreated Lyme disease could develop into Lyme neuroborreliosis, which occurs when the bacteria crosses the blood-brain barrier and triggers swelling in the brain. Symptoms include facial palsy, nerve pain, abnormal sensations, difficulty walking and vision changes, according to the CDC.

Just as some people suffer from long COVID, some people who get Lyme disease can develop chronic Lyme disease or post Lyme disease syndrome, Martinello and Feder said.

If you don't get better from the antibiotic prescribed, follow-up with your doctor, Martinello advised. "We need to be very careful about what may be a long-term complication," he said. "We are still learning a lot about chronic inflammatory conditions."

Sidebar:

## Plant these plants and wear these clothes to prevent tick bites

## By Theresa Sullivan Barger, Special to The Day

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### In the yard

Certain plants contain natural oils and compounds that deter ticks and other insects don't like. Planting these plants provide a natural way of repelling ticks and adding color and scents at the same time, suggested Dr. Daniel Cameron, whose Mount Kisko, N.Y. practice specializes in tickborne infections.

Lavender or mint – Strong scent repels ticks, fleas, and mosquitoes.

Sage and rosemary – Aromatic herbs that ticks avoid.

Marigolds and Chrysanthemums – Contain pyrethrum, a natural insect repellent.

Remove invasive plants with thorns such as Japanese barberry and invasive honeysuckle shrubs; they are tick magnets because the mice carrying ticks hide from predators under them.

#### What to wear

Megan Linske, the scientist with CAES who specializes in studying ticks, suggests the following to prevent tick bites and find them after being outside:

Wear socks and other clothing treated with permethrin, a synthetic insecticide in the pyrethroid family that replicates the chrysanthemum flower.

Tuck shirts into pants & pants into socks.

Wear tall rubber boots.

Spray clothing, footwear and hats with insect repellent containing DEET.

#### Tick check:

Use duct tape on your clothing and a lint brush on your skin to pick up ticks you may not see with your eyes.

Have someone check your back and hair.

If alone, use a full-length mirror to check yourself front and back.

Remove clothes and put them in the dryer for 20 minutes to kill any ticks.

Take a shower right after working outside in the yard or hiking in the woods.