

THE TROUBLE WITH TICKS



American dog tick

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N.C. TICKS THAT BITE HUMANS

AMERICAN DOG TICK

BEHAVIOR: Slow-moving and not as aggressive as the lone star tick. Only adults feed on people.

BITE: Usually not immediately painful or itchy, allowing it to go undetected longer.

HABITAT: Widely distributed east of the Rocky Mountains. Found in woods and overgrown fields. Second-most encountered tick in North Carolina.

BLACK-LEGGED (DEER) TICK

BEHAVIOR: Smaller than other ticks that bite humans. Slow-moving and not aggressive.

BITE: Usually not painful or itchy while attached. All life stages will bite humans. Often called a deer tick for its favorite host, but other ticks also bite deer.

HABITAT: Usually found in pine forests and forests with lots of leaf litter. Needs high humidity.

BROWN DOG TICK

BEHAVIOR: Eggs are deposited in cracks and crevices near where dogs sleep.

BITE: Prefers to feed on dogs (check their ears or between toes) but will bite other big mammals.

HABITAT: Most widespread tick worldwide. Typically found in kennels and dog bedding. Can survive and reproduce indoors.

GULF COAST TICK

BEHAVIOR: Slow-moving, small to medium-sized.

BITE: Often leaves a scar. Prefers to attach around the ears, head or neck. Common livestock pest.

HABITAT: Commonly found within 150 miles of the Gulf of Mexico and southern Atlantic coast, but it has been found in the N.C. Piedmont and mountains. Likes grassland and forest edges.

LONE STAR TICK

BEHAVIOR: Aggressive and will feed on anything. Female has a white spot in the middle of her back.

BITE: Painful, itchy and may cause a circular rash. All stages will bite humans and pets. Bites humans more than any other tick in the East and South.

HABITAT: Shaded, wooded areas with low-growing vegetation. Cannot survive sun exposure for long.

AVOIDING TICKS

WHEN OUTDOORS

- Avoid wooded or brushy areas with high grass and leaf litter.
- Walk in the center of trails.
- Wear long sleeves and pants, and tuck pants into socks.
- Check your clothes, gear and body well after being outdoors.

ON YOUR PETS

- Do a tick check daily whenever they have been outside. Ticks and bites can be hard to spot under fur.
- Use a tick preventative on your dog. (Cats are more susceptible to chemicals, so check with your vet first.)

IN YOUR YARD

- Remove leaf litter, tall grass, brush, trash and debris.
- Place a 3-foot wide barrier of wood chips or gravel between lawns and wooded areas to keep ticks from migrating.
- Mow the lawn frequently.



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FOUND A TICK?

REMOVE IT AS SOON AS POSSIBLE:

Use fine-tipped tweezers to grasp the tick as close to the skin as you can and pull straight up with steady, even pressure. If you twist or jerk the tick, its mouth parts could break off and stay in the skin.

DISINFECT: Clean the bite area and your hands with rubbing alcohol or soap and water.

SAVE IT: Attach the tick to an index card, fully covered with clear tape, and write the date on it. This way, there's a record if you become ill.

LIVE TICK? Dispose of it by putting it in alcohol, placing it in a sealed bag or container and wrapping it tightly with tape, or flushing it down the toilet.

TICK DON'TS

- Never crush a tick with your fingers.
- Don't use a match to burn the tick off the skin or put any type of substance (like nail polish) on it — that could cause the tick to regurgitate more saliva and bacteria into the host.

HOW TICKS SPREAD DISEASE

► FIND A HOST

Ticks transfer to a person or animal when the new host brushes past their resting place on shrubs or the ends of grass blades. Some will sit with a pair of legs outstretched to better grab on.

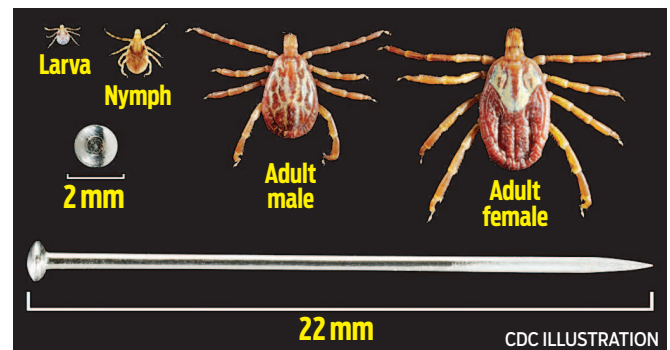
► ATTACH TO HOST

Some ticks attach quickly, but others will crawl around looking for thinner skin. When the tick decides to feed, it will grasp and cut into the skin, then insert its feeding tube. Some tubes have barbs to keep the tick anchored; other species secrete a sticky substance to keep them attached. Their saliva can contain an anesthesia to keep the bite undetected. If unnoticed, the tick can suck blood for days.

► FEED

As a tick feeds, it ingests any pathogens in the host's blood. Saliva can transfer from the tick to the host, transferring any diseases that the tick may carry. After feeding, most ticks will drop off.

TICK SIZES, BY LIFE STAGE (GULF COAST TICK)



CDC ILLUSTRATION

SOME NOTABLE TICK DISEASES

► ALPHA-GAL (RED MEAT) ALLERGY

SYMPTOMS: Hives or rash, nausea, stomach cramps, indigestion, vomiting, diarrhea, stuffy/runny nose, sneezing, headache. Can trigger potentially deadly anaphylaxis. Can be difficult to diagnose because reaction can take hours longer than for typical food allergies, and the condition is rare and only recently linked to tick bites.

CARRIER TICK: Juvenile lone star tick. **TREATMENT:** Antihistamines and corticosteroids. Epinephrine for anaphylaxis. Avoidance of red meat.

► EHRLICHIOSIS

SYMPTOMS: Fever, headache, fatigue, muscle aches, conjunctival infection (red eyes). Can be fatal if not treated correctly.

CARRIER TICK: Lone star tick. **TREATMENT:** Doxycycline.

► LYME DISEASE

SYMPTOMS: Fever, headache, fatigue, muscle and joint aches, swollen lymph nodes. Characteristic expanding skin rash can have a "bull's eye" appearance. Can spread to joints, heart and nervous system.

CARRIER TICK: Black-legged tick. **TREATMENT:** Antibiotics.

► POWASSAN VIRUS

SYMPTOMS: Fever, headache, vomiting, weakness, confusion, loss of coordination, speech difficulties and seizures. Many infected don't have any symptoms. Can cause encephalitis and meningitis. Former Sen. Kay Hagan developed encephalitis from this disease, which caused long-term neurological effects.

CARRIER TICK: Black-legged tick. **TREATMENT:** No drug available.

► ROCKY MOUNTAIN SPOTTED FEVER

SYMPTOMS: Fever, headache, nausea, stomach pain, rash (though not always in early stages). Can rapidly become life-threatening. North Carolina is one of five states that account for 60 percent of cases.

CARRIER TICK: American dog tick. **TREATMENT:** Doxycycline.

NEW SPECIES FOUND IN NORTH CAROLINA



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A **longhorned tick** has recently been found on an opossum in Polk County, the first time that this exotic tick from East Asia has been seen in North Carolina. It has not typically been found in the United States before its identification last fall in New Jersey. It is an aggressive biter and a serious livestock pest in its

native regions, but hasn't been linked to any human infection in the U.S. Dr. John Sanders with Wake Forest Baptist Medical told WFDD that the tick is more of an agricultural concern than a worry for people as of now. It was found in the state as part of a tick survey by the N.C. Division of Public Health.