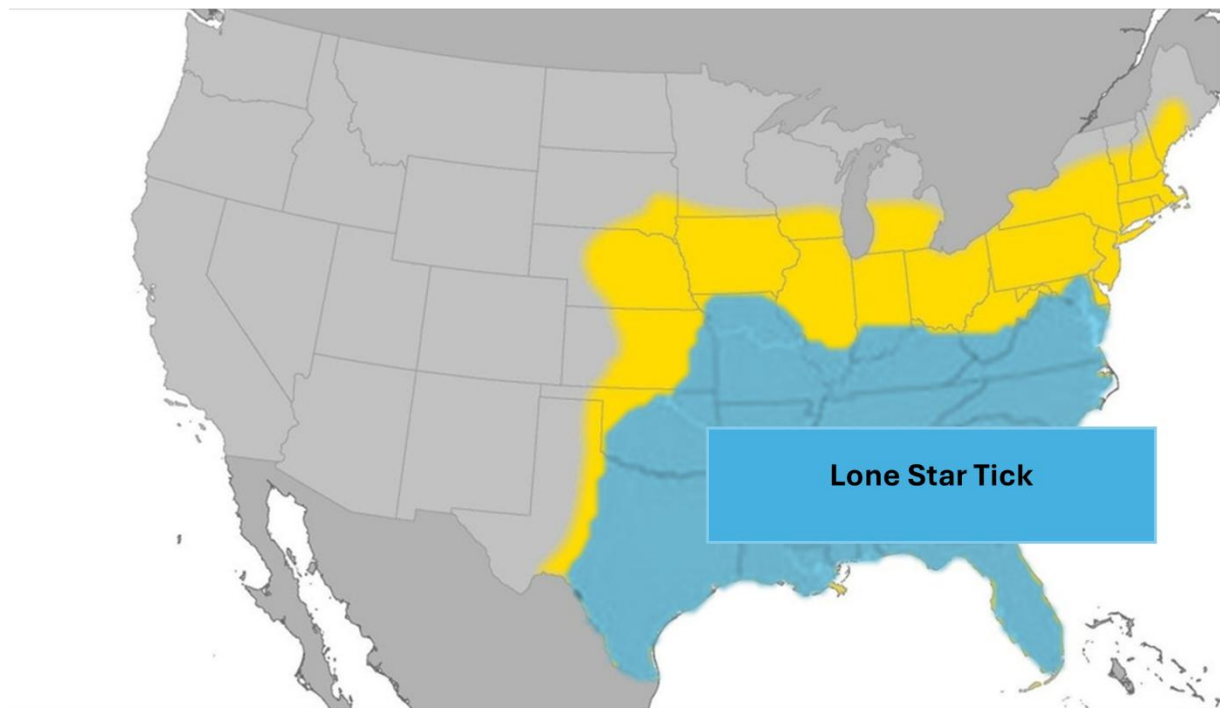


Lone star ticks spread allergen north

By Mandy Archer

Sep 15, 2025



Historic range of the lone start tick, *Amblyomma americana*, in blue and expanded range in yellow. When they bite, these ticks can transmit an allergen to humans, causing an allergic reaction called alpha-gal syndrome.

Photo courtesy of the CDC

Tick-borne diseases are making headlines more than ever this season, and one nasty tick called the lone star tick is making its way up through the Midwest and Northeast.

When they bite, these ticks can transmit a life-altering allergen to humans, causing an allergic reaction called alpha-gal syndrome.

Alpha-gal is a sugar found in mammals, and the syndrome causes an allergy to some meats and other animal by-products.

Just this summer, Martha's Vineyard was impacted enough that many residents had to adopt a vegan lifestyle. Storefronts promoted "alpha-gal safe" food to help the community.

This isn't just happening in the Northeast — new cases in Iowa are on the rise.

In 2017, there were 5,000 estimated cases of AGS across the U.S. The CDC estimates that as many as 450,000 people may have been affected by AGS since 2010.

We talked to Jeff Simmons, who contracted alpha-gal syndrome about seven years ago. He said he was first diagnosed with Lyme disease after not initially knowing a tick had bitten him. Months later, his symptoms led to learning he also had alpha-gal syndrome.

He could not eat red meat and experienced memory loss and memory fog. This impacted his social life as well as his eating habits.

While Jeff is technically no longer reacting to eating red meat, he still finds himself anxious about whether it will come back — eating very little red meat on occasion now

“I have no idea how long it would take to get back to being 100% healthy again,” Simmons said.

He warns others to always wash their clothes and head when coming back in from the woods or yard work.

Mandy Roome, a researcher studying tick-borne diseases at the Binghamton University Tick-Borne Disease Center, indicated that alpha-gal syndrome can go away in some individuals, but not all cases go away on their own.

Lone star ticks are phenomenal hunters. Unlike deer ticks, which wait in place for their victims, lone star ticks are known to smell a human and track them down.

Not only are they skilled at finding us, but the lone star tick can transmit alpha-gal sugar with a single bite. Simply by attaching to a host, this tick has enough time to spread alpha-gal through its saliva, unlike other ticks that must stay attached for over 24 hours.

Also important to know, lone star ticks can transmit the allergen at any stage of its life. “Tick bombs” containing hundreds of lone star larvae can explode open on impact, leading to potentially hundreds of bites.

“Each bite can increase the severity of the syndrome,” Roome said.

One farmer she knows was bitten once and became allergic to red meat. Then, after another bite, both dairy and red meat were off the table.

If symptoms are severe, farmers must avoid cattle dander, saliva and amniotic fluid, which can be arduous during calving season or during farm chores that kick up dust.

AGS allergy symptoms can appear 3 to 8 hours after ingesting food that contains alpha-gal sugars, which includes red meat, pork and lamb. This makes it challenging to identify allergy triggers. Even outdoor barbecue smoke could expose you to these sugars, causing a reaction.

Roome additionally said that those with the syndrome should avoid lanolin, latex (which may have animal-derived gelatin), and some soaps and body washes.

Roome recommends visiting alphagalinformation.org for advice on living with alpha-gal. Check out their mammalian by-products lists, which include certain medicines, some vaccines and many additional by-products that may have alpha-gal.

On the extreme side of reactions, 60% of individuals with AGS have anaphylactic reactions. It is also the No. 1 leading cause of anaphylaxis in adults, which can come out of nowhere when the onset of symptoms comes hours after allergic contact.

Lesser symptoms experienced by 90% of those with AGS include skin responses, including hives, itching or swelling in the palms of their hands or the balls of their feet. Some individuals only react with gastrointestinal upsets.

Now that the lone star tick is bringing AGS to the Midwest, we have yet another reason to avoid ticks and prevent them from attaching to the skin.

Roome recommends spraying clothing with permethrin to kill ticks. While ticks might survive the washing machine, they don't survive a run through a hot clothing dryer.

Other tips include tucking pants into boots, wearing light-colored long sleeves and pants, staying in the middle of a path or trail, and using a lint roller to grab ticks when outdoors.

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