

Story statement: A bite from a Lone Star tick can make a person allergic to meat — and Missouri's Lone Star tick population is increasing.

Motor: This once-rare occurrence is happening a lot more than it used to and anyone who is exposed to ticks is at risk.

Concept 1: A simple tick bite can have serious consequences

WAYPOINT 1: Introducing Alpha-Gal and Mary Jones

B-ROLL: Jones walking in forest

VO: Alpha-Gal may sound empowering — but it just may make you allergic to meat.

VO: Mary Jones met Alpha-Gal while she was hiking at Rock Bridge State Park.

Jones: Later that day I noticed a tick bite. A couple days later I had a steak dinner for my anniversary. And I got sick. Like, so sick.

WAYPOINT 2: The bite that changed everything

VO: That single tick bite had transmitted Alpha-Gal to Jones. And now she'll never be able to eat meat again.

B-ROLL: Different shot of Jones walking through woods

Concept 2: The mechanics of the problem

WAYPOINT 1: What happens immediately after the bite

B-ROLL: Brown working in lab

BROWN: You're walking through the woods, and that tick has had a meal of cow blood or mammal blood. The tick is carrying Alpha-Gal and bites you.

VO: Your immune system doesn't recognize Alpha-Gal and so it attacks it. The result? You become allergic to animal proteins.

GRAPHIC: IMMUNE SYSTEM SWARM

WAYPOINT 2: It's hard to diagnose

BROWN: Most patients don't know what they have. They just know it hurts when they eat steak or chicken or lamb.

B-ROLL: Jones shopping

VO: It can take weeks for tests to suss out Alpha-Gal. And those weeks can be tortuous.

JONES: Hives. Dizziness. Shortness of breath. And so much throw up.

Concept 3: The tick population in Missouri is getting bigger and there's no cure

WAYPOINT 3: The tick that carries Alpha-Gal is becoming more common

RT: The Lone Star tick is the only one of Missouri's 12 tick species that carries Alpha-Gal. But it's also the most common.

B-ROLL: Gallardo working in forest collecting tick samples

Gallardo: We've seen the Lone Star tick population just explode here. You see that tick with the star on its back everywhere. A decade ago, it was pretty rare.

WAYPOINT 2: There's no cure.

STANDUP: There is no cure for Alpha-Gal. No vaccine. Experts say that though it's increasing, it's not so common that drug companies want to invest money in creating one.

B-ROLL: Jones cooking something

JONES: I guess that leaves me out of luck. On the bright side, I've learned to make a really good seasonal vegetable casserole. And not resent my kids when they go for hamburgers.