**Filename: HWSHOW TRT: 3:59.000 SOC**

This is KBIA, I’m Najifa Farhat.

According to the Centers for Disease Control and Prevention, at least 450,000 people in the US have alpha-gal syndrome - a tickborne allergy to red meat — while many others have never heard of the condition at all.

KBIA’s Rebecca Smith has more on the condition, which is believed to be prevalent here in Missouri.

**Filename: 1021TICKS\_ONE TRT: 3:XX OC: “...tickborne condition”**

***[Nats] Walking through the woods, crunching gravel***

Walking through the woods of Missouri, one could encounter bears, coyotes or cougars, but one of the biggest risks to human health in the woods is actually one small arachnid – ticks.

***(:XX) Yeah, unfortunately, we have lots of reasons in Missouri to be worried about tick bites.***

That’s Dr. Molly Baker. She’s an epidemiologist at the Missouri Department of Health and Human Services who studies how disease, viruses, parasites and other pathogens can be transmitted from animals to humans.

She says there are many tickborne illnesses to be aware of in Missouri, such as ehrlichiosis and Rocky Mountain Spotted Fever. But lately attention and conversation has focused on a somewhat puzzling condition called alpha-gal syndrome.

*(:XX) It is known commonly as the red meat allergy.*

Alpha-gal syndrome is an allergy that can be caused by the bite of a lone star tick. It makes humans allergic to a specific sugar called alpha galactose, which is found in nearly all mammals — except humans and other higher primates.

*(:XX) So, that includes beef, pork, venison, rabbit…*

Dr. Johanna Salzer is a veterinarian who leads the Centers for Disease Control & Prevention’s team that focuses on alpha-gal.

*(:XX) …and so, what happens is… they'll consume a meat product that they maybe have consumed their whole life, and then all of a sudden, they have an allergic reaction.*

Salzer says the condition is UNIQUE. It’s an allergy one can catch and the allergic reactions from ingestion are delayed — 2 to 10 hours can pass before someone has any reaction at all.

And these reactions are also unpredictable: some have gastrointestinal distress, others get full body hives, some deal with cardiac symptoms or even full anaphylactic reaction.

Salzer adds there’s also no good way, at this time, to predict who’s going to develop the alpha-gal allergy.

*(:XX) There are a fair number of people, especially in areas like Missouri and Arkansas, where people are bitten by lone star ticks more often, that will have antibodies, but they have no clinical symptoms, so they don't have alpha gal syndrome.*

The condition is diagnosed with a combination of a blood test looking for a specific antibodies and clinical symptoms. But Salzer says the blood tests for antibodies can’t predict SEVERITY of reaction.

*(:XX) It’s not consistent. So, someone can have very high antibodies and have more, milder reactions, and then you’ll have other people with lower antibodies that are much more sensitive, even reacting to gelatin and some of the products that have lower concentrations of alpha-gal in them*

The sugar alpha galactose is not only found in mammalian meat – it can be found in a myriad of products that are derived from mammalian sources, such as dairy products, lard, tallow, gelatin and more.

Which means some people have an allergic reaction only when they eat beef and pork, while others struggle with dairy products and fats, and, anecdotally, others even struggle with airborne alpha-gal particles in fumes.

Dr. Molly Baker says it’s hard to know just how prevalent the condition is in Missouri because many doctors don’t know to test for it.

In 2022, the CDC did a survey of healthcare providers across the country and 42% of them had never heard of alpha-gal.

Baker and Salter both believe awareness of the condition has grown since then – both among healthcare professionals and the general public, BUT:

*(:XX) The true prevalence is unknown because it’s not currently nationally reportable.*

So, for now, Baker says, the best thing people can do is avoid tick bites and speak with their medical provider if they are concerned about this odd emerging tickborne condition.

I’m Rebecca Smith, KBIA News.