

ALPHA-GAL SYNDROME STATE REPORTING

A CALL TO ACTION

STATE AGS REPORTING

AUGUST 2023



PREPARED FOR

The AGS Community
and State Legislators

**TICK-BORNE
CONDITIONS UNITED**

TBCUnited.org

WHAT IS ALPHA-GAL SYNDROME?

ALPHA-GAL SYNDROME - (AGS)

What is Alpha-gal?

- Alpha-gal (galactose- α -1,3-galactose) is a **sugar molecule** found in most mammals.
- Alpha-gal is not found in fish, reptiles, birds, or people.
- Alpha-gal can be found in meat (pork, beef, rabbit, lamb, venison, etc.) and products made from mammals (including gelatin, cow's milk, and milk products).

What is Alpha-gal Syndrome?

- Alpha-gal syndrome (AGS) is a serious, potentially life-threatening allergic condition. AGS is also called alpha-gal allergy, red meat allergy, mammalian products allergy, or tick bite meat allergy. AGS is not caused by an infection. AGS symptoms occur after people eat red meat or are exposed to other **[products containing alpha-gal](#)**.

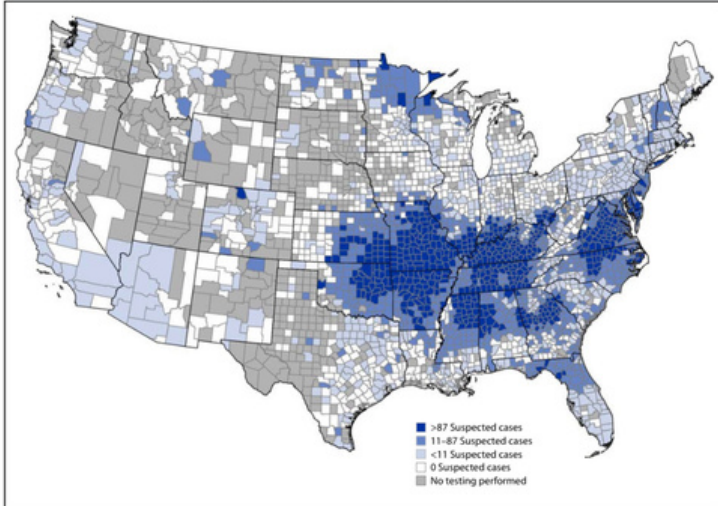
Source: cdc.gov/ticks/alpha-gal/products



ALPHA-GAL SYNDROME

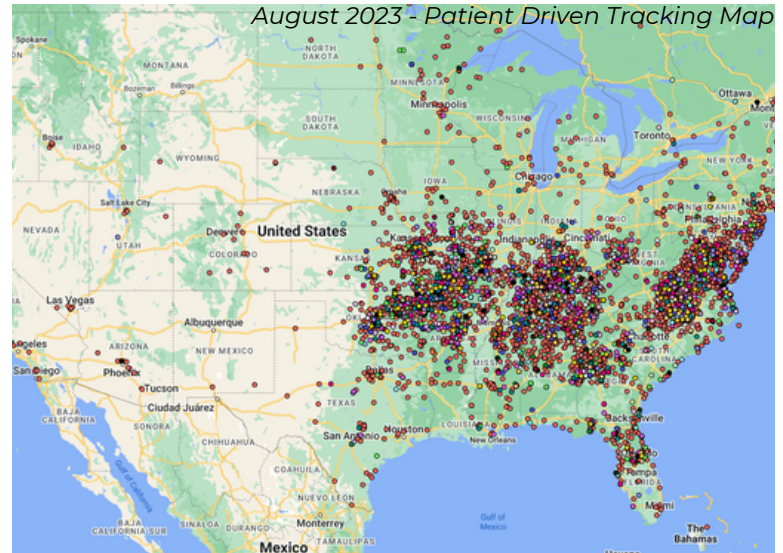
"reporting is needed in every state."

FIGURE. Geographic distribution of suspected alpha-gal syndrome cases* per 1 million population per year — United States, 2017–2022



Abbreviations: IgE = immunoglobulin E; IU = international unit; kU = kilounit.

* A suspected case of alpha-gal syndrome was defined as being in a person who had confirmatory laboratory evidence (serum or plasma alpha-gal-specific IgE ≥ 0.1 IU/mL or ≥ 0.1 kU/L) with no clinical information available.



Source: zeemaps.com/mobile?group=555038

Where is Alpha-gal Syndrome?

- The above maps use CDC-derived data (left) and patient-reported data (right) to show current known case locations. In the United States, Alpha-gal Syndrome is primarily associated with the lone star tick; however the alpha-gal carbohydrate has been isolated in the saliva of other ticks present in the US, including the black-legged tick.

How many people have AGS?

- In July 2023, the CDC released a report that **estimates between 90,000 and 450,000 people in the US have Alpha-gal Syndrome.** To better understand the growth and number of cases, **reporting is needed in every state.**

Source: cdc.gov/mmwr/volumes/72/wr/mm7230a2.htm





PUBLIC HEALTH IMPACT

ALPHA-GAL SYNDROME - (AGS)

Summary

What is already known about this topic?

Alpha-gal syndrome (AGS) is an emerging, tick bite-associated allergic condition characterized by potentially life-threatening hypersensitivity to an oligosaccharide found in most mammalian meat and products derived from it; however, in the absence of national surveillance, the geographic distribution and number of cases are largely unknown.

What is added by this report?

The number of suspected AGS cases in the United States has increased substantially since 2010, and states with established populations of lone star ticks are most affected, although suspected AGS cases were also identified in areas outside of this tick's range.

What are the implications for public health practice?

These data can facilitate initiating AGS surveillance, improve health care provider education in high-risk areas, and enhance targeted public health outreach and prevention.

Source: [cdc.gov/mmwr/volumes/72/wr/mm7230a1.htm](https://www.cdc.gov/mmwr/volumes/72/wr/mm7230a1.htm)



Forecast

"If the projection and estimate of nearly 450,000 cases is even approximately correct, this is the number 10 allergy in the country behind sesame, which is number nine and affects roughly half a million people," [Dr. Scott] Commins said.

Source: [cnn.com/2023/07/27/health/meat-allergy-alpha-gal-cdc](https://www.cnn.com/2023/07/27/health/meat-allergy-alpha-gal-cdc)

Public Health Impact

"Improved HCP education might facilitate a rapid diagnosis of AGS, improve patient care, and support public health understanding of this emerging condition."

Source: [cdc.gov/mmwr/volumes/72/wr/mm7230a1.htm](https://www.cdc.gov/mmwr/volumes/72/wr/mm7230a1.htm)



RESOURCES

ALPHA-GAL SYNDROME - (AGS)



For Public Health Officials

- Case Study & Form - <https://www.cdc.gov/ticks/alpha-gal/for-public-health-officials.html>
- CDC | Alpha-gal Syndrome - <https://www.cdc.gov/ticks/alpha-gal/index.html>

Publications and Resources

- CDC: Publications, Free CME) Training, and Resources - <https://www.medscape.org/viewarticle/988550>
- Assessing Current Practice in the Diagnosis and Management of Alpha-Gal Syndrome - https://www.medscape.org/viewarticle/988550_sidebar1
- [AGS, Physician & Nurse Questions - cme@medscape.net](mailto:cme@medscape.net)

Updates - July 2023

- Geographic Distribution of Suspected Alpha-gal Syndrome Cases — United States, January 2017–December 2022: <https://www.cdc.gov/mmwr/volumes/72/wr/mm7230a2.htm>
- Health Care Provider Knowledge Regarding Alpha-gal Syndrome — United States, March–May 2022" - <https://www.cdc.gov/mmwr/volumes/72/wr/mm7230a1.htm>



Tick-Borne Conditions United

Our Mission

Tick-borne Conditions United strives to bridge the gap between patients and emerging science and the education needed for health care providers and the public.

Advocate - Educate - Research

We Fight For The Under-Represented

Tick-borne diseases can be devastating to an individual's health, family, livelihood, and quality of life. TBC United devotes its energy and resources to education, research, and advocacy for lesser-known tick-borne diseases.

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