

ALPHA-GAL ALLERGY – RED MEAT ALLERGY WHAT IS ALPHA-GAL SYNDROME?

Alpha-gal is an allergy to the alpha-gal molecule.

The molecule is found naturally in most mammals except humans. If a person has an allergy to the alpha-gal molecule they may not be able to eat meat from mammals or products that come from mammals, including some dairy products. An alpha-gal allergy may cause mild allergic symptoms or may cause severe reactions, including anaphylaxis, in some people.

How could I get Alpha-Gal Syndrome (AGS)?

AGS is associated with tick bites. In the United States, AGS appears to be linked to the bite of lone star ticks (*Amblyomma americanum*). **AGS is not a disease** and it's not something a tick can be infected with. It's a molecule that is naturally occurring in the ticks' saliva. Most people who are bitten by a lone star tick do not develop AGS, but some will. It is not well understood why some people develop AGS following lone star tick bites and some don't.

Symptoms may include any of the following:

- Hives or itchy rash
- Nausea, vomiting, or diarrhea
- Severe stomach pain, heartburn or indigestion
- Cough, shortness of breath, or difficulty breathing
- Drop in blood pressure, dizziness or faintness
- Swelling of lips, throat, tongue, or eye lids

Seek immediate medical care for severe allergic reactions.

Anaphylaxis (severe, multi-symptom, allergic reaction) may happen. Symptoms typically occur 2-6 hours after eating a meat product.

AGS requires a diagnosis by a health professional.

Your medical provider may conduct a physical examination, inquire about your medical history, and order a blood test to check for antibodies to the alpha-gal molecule. Skin prick testing may also be conducted in some cases. At this time, treatment is staying away from meat from mammals or products that come from mammals that contain the Alpha-gal molecule.

What food products should I avoid if I have AGS?

Meat products that have high levels of the alpha-gal molecule include:



Mammal meat: beef, pork, lamb, venison, rabbit, etc.

Mammal organ meat: liver, kidneys and tongue

Dairy products contain lower amounts of the alpha-gal molecule and may be tolerated by some people with AGS. Sensitivity to products with low amounts of alpha-gal molecule may also occur. These include gelatin, broth from mammalian meat and foods cooked in fat from mammalian meat like lard.

What food products do not contain ALPHA-Gal?



Poultry and eggs: chicken, turkey, pheasant Fish and shellfish

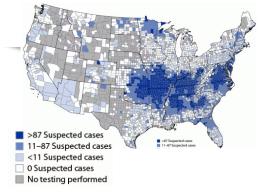
Fruits and vegetables



Ticks are very small. The adult female **lone star tick** is round, reddish-brown in color, and has a distinct, single, white 'dot' in the center of its back.



Where is AGS found? Most AGS cases are reported in southeastern and southcentral states.

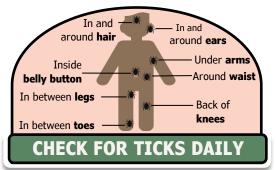


How common is AGS?

CDC estimates that between 2010-2022, 110,000 people in the United States were suspected to have AGS.* In Pennsylvania, surveillance is just beginning, between 2017-2022, about 200 people were identified with AGS.

Prevent getting sick from ticks.

- Treat shoes, gear, and clothing with 0.5% permethrin.
- Use insect repellents that contain DEET, picaridin, IR3535, or oil of lemon eucalyptus.
- Shower as soon as possible after being outdoors.



For more information:

Use the links to find a full list of products that may contain Alpha-gal or for more information on ticks and tickborne disease.

*Geographic Distribution of Suspected Alpha-gal Syndrome Cases — United States, January 2017–December 2022 | MMWR