

Alpha-gal Syndrome

Frequently Asked Questions

What is Alpha-gal Syndrome (AGS)?

Alpha-gal syndrome is an allergic reaction that occurs after a person has been bitten by a tick. Symptoms occur after a person has eaten or is exposed to red meat or products from mammals. AGS is sometimes known as red meat allergy. AGS is not an infectious disease.

What are the symptoms of AGS?

A person with AGS may have hives, swelling of the lips, throat, tongue, or eyelids, nausea or vomiting, stomach pain, heartburn or indigestion, diarrhea, cough, difficulty of breathing, drop in blood pressure, or dizziness.

Symptoms appear between 2 to 6 hours after eating or exposure to meat or dairy products. The allergic reaction can be mild and vary from person to person. Some may have a severe allergic reaction (anaphylaxis) which can be life-threatening and require hospitalization.

How is AGS spread?

Alpha-gal is a sugar found in most mammals except humans and apes. When a tick feeds on the blood of a mammal (that alpha-gal) and then bites a human, the tick transmits the alpha-gal sugar into the person's body. A person with the alpha-gal sugar in his bloodstream can then develop an allergic reaction after exposure to red meat.

AGS is most associated with the bite of the lone star tick (*Amblyomma americanum*), a tick commonly found in West Virginia. However, other kinds of ticks have not been ruled out.



AGS is not transmitted from person-to-person.

What products cause an allergic reaction?

- Dairy products
- Mammalian (beef, pork, lamb, venison, rabbit, goat) meat and organs
- Gelatin and other foods from mammals – gelatin capsules, some vaccines, gummy vitamins
- Medicines, medical and surgical products
- [Products that may contain alpha-gal](#)

How is AGS diagnosed? Is there a test?

AGS is diagnosed by an allergy specialist or healthcare provider following a thorough interview, examination, and blood test for alpha-gal antibodies.

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What do I need to know or do if I have AGS?

The patient will need to work with the healthcare provider to determine what products to avoid. The patient will need to be aware of [Products that may contain alpha-gal](#).

There is no antibiotic or vaccine against AGS. Treatment is supportive.

Can I donate blood if I have AGS?

Yes. For more information, see [America's Blood Centers: Frequently Asked Questions about Alpha-gal Syndrome](#)

How do I prevent AGS?

- Avoid getting tick bites.
- Wear light-colored clothes and tuck pant legs into socks so ticks cannot crawl up
- Use EPA approved insect repellents such as permethrin-containing products which kill mosquitoes and ticks on contact, DEET, or picaridin
- Stay on the center of trails. Ticks crawl on the tips of grass and shrubs and crawl on people and animals.
- Check yourself, children, and pets for ticks upon returning from outdoors.

What is public health doing about AGS?

- Educate the public about avoiding tick bites.
- Educate healthcare providers about AGS and the need to report to the WV Department of Health
- Conduct surveillance by investigating cases, reporting, analyzing and disseminating data to control and prevent disease.