AGS can be severe and even life-threatening. Seek immediate emergency care if you are having a severe allergic reaction.

Foods or products that can cause an AGS allergic reaction

Common foods containing alpha-gal:



BEEF





PORK





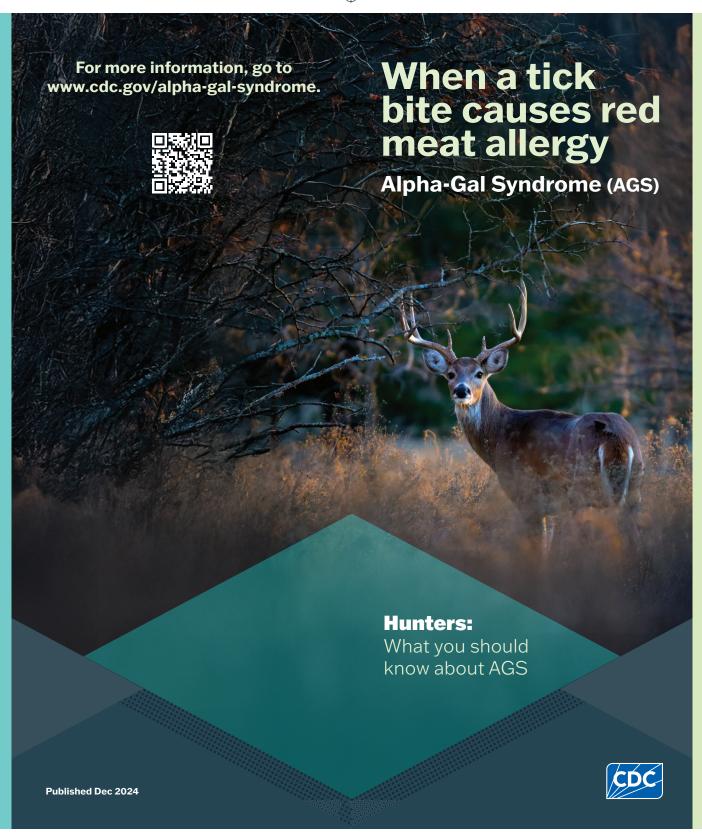
VENISON

RABBIT

Alpha-gal may also be found in **milk and other dairy products**, **gelatin** made
from beef or pork, **meat broth**, and **mammal fat**, like lard, tallow, or suet.

Alpha-gal is **NOT found in poultry**, such as chicken, turkey, duck, or quail; **fish and seafood**, such as shrimp; or eggs.





Symptoms of AGS

Alpha-gal syndrome (AGS) symptoms can range from mild to severe, and some may be life-threatening.

Different people have different kinds of reactions that can take weeks or months to develop after being bitten.



Symptoms commonly appear 2-6 hours after a person with AGS is in contact with products containing alpha-gal, like red meat, dairy, and some medications.

AGS symptoms can include:

- Hives or itchy rash
- Swelling of the lips, throat, tongue, or eyelids
- Nausea, vomiting, or diarrhea
- Heartburn or indigestion
- Cough, shortness of breath, or difficulty breathing
- Dizziness, faintness, or drop in blood pressure
- A combination of symptoms referred to as anaphylaxis





AGS is a serious, potentially life-threatening allergy and tickborne disease. You may know it as "red meat allergy" or "tick bite meat allergy."



People with AGS can have a serious allergic response, such as difficulty breathing or anaphylaxis, after eating red meat or other products that contain alpha-gal.



You can develop AGS after being bitten by some types of ticks, primarily the lone star tick in the United States.



Hunters have a heightened risk of developing AGS because of increased time spent outdoors, including walking through thick grass, being low to the ground, and spending time in densely wooded areas where ticks live. It is important hunters know about allergic responses that can occur when someone with AGS eats red meat.



Not every person bitten by a lone star tick will develop AGS, and it can take weeks to months for a person to have symptoms after being bitten.



See a healthcare provider if you develop AGS symptoms after eating red meat or other products containing alpha-gal. Tell the provider if you had a recent tick bite.



Remove a tick as soon as possible

Use clean, finetipped tweezers to grasp the tick close to the skin's surface. 2.

Pull upward with steady, even pressure. Don't twist or jerk the



Thoroughly clean the bite area with rubbing alcohol or soap and water.

How to prevent AGS

Preventing tick bites is the best way to protect yourself from developing AGS. Remember, ticks don't only bite in the summer. They can be active in the fall and on warmer winter days.

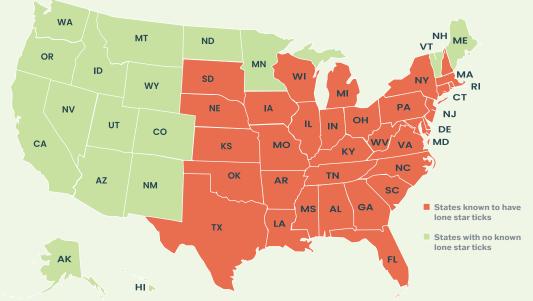
BEFORE YOU GO OUTDOORS TO HUNT:

- Use Environmental Protection Agency (EPA)-registered insect repellent.
- **Treat clothing and gear** with 0.5% permethrin. Follow product instructions.
- Use a tick preventive product on your dog.

AFTER YOU COME INDOORS:

- **Examine** clothing, hunting gear, and pets for ticks.
- Shower and perform a thorough tick check. If you find a tick, remove it as soon as possible.

States with established lone star tick populations



Connecticut Delaware Florida Georgia Indiana Kansas Kentucky Louisiana Marvland Massachusetts Michigan Missouri Nebraska **New Hampshire New Jersey New York** North Carolina Oklahoma Pennsylvania Rhode Island South Carolina South Dakota Tennessee Texas Virginia **West Virginia** Wisconsin

Arkansas

+110,000 SUSPECTED AGS CASES

were identified between 2010 and 2022. From 2017 to 2021 the number of cases increased by around 15,000 per year.



Healthcare providers
diagnose AGS using patient
history, a physical
examination, and a blood test.
They may also recommend
allergy skin testing.