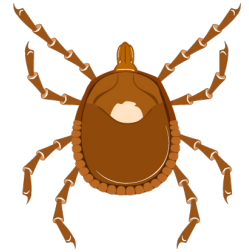


Alpha-gal Syndrome Information for local boards of health and food establishments

What is alpha-gal syndrome?

Alpha-gal syndrome, or AGS, is a serious and potentially life-threatening allergy to alpha-gal, a sugar found in most mammals. AGS can develop after a bite from certain ticks. In the United States, the lone star tick is most often linked to AGS. The condition is not contagious.

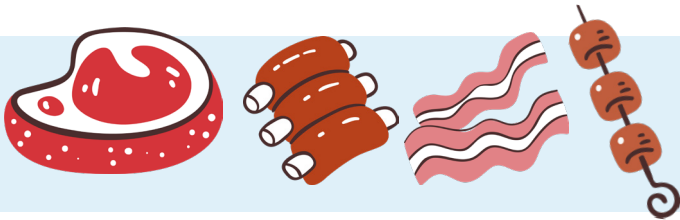
A person with AGS may have an allergic reaction after eating mammal meat or being exposed to other products made from mammals. AGS is sometimes called a red meat allergy, but that name does not describe all possible triggers.



Why food businesses and local boards of health should know about AGS

AGS can create challenges for customers and food handlers because mammal-derived ingredients are used in many foods, including some items that may not appear to contain meat. Reactions are also often delayed. Symptoms usually begin about two to six hours after exposure, rather than within minutes.

People with AGS may not react to every product containing alpha-gal, and the same person may have different symptoms or a different level of reaction after separate exposures. **Food businesses should take every allergy request seriously** and follow a consistent process to verify ingredients and prevent cross-contact.

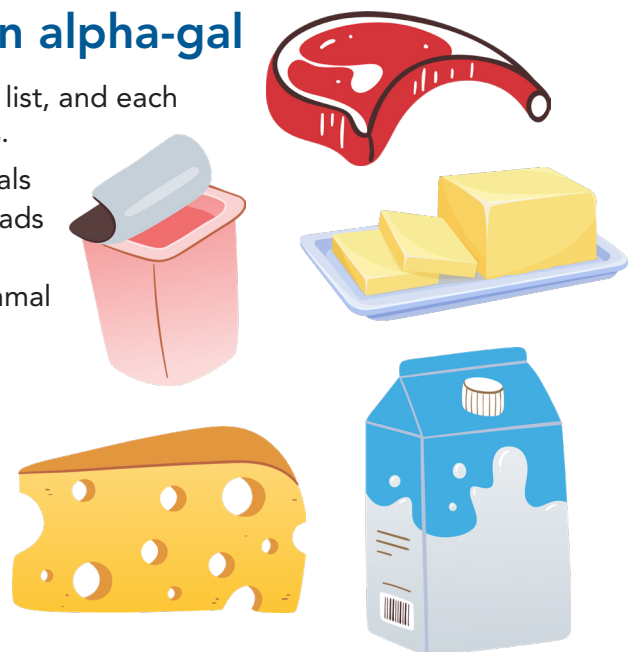


AGS makes you sick 2-6 hours after you eat mammalian meat.

Foods and ingredients that may contain alpha-gal

The following list includes common examples. It is not a complete list, and each person with AGS may need to avoid different foods or ingredients.

- Beef, pork, lamb, venison, rabbit, and other meat from mammals
- Organ meats, including liver, kidneys, intestines, and sweetbreads
- Mammal fats, including lard, tallow, and suet
- Meat broth, bouillon, stock, gravy, and sauces made with mammal ingredients
- Gelatin made from beef or pork
- Dairy products, such as milk, butter, cream, and cheese; some people with AGS tolerate dairy and others do not
- Mammal casings, including casings used on some chicken or turkey sausages
- Seasonings, flavorings, or prepared ingredients that contain mammal-derived components



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Learn more about
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Non-food products

Some medications, vaccines, medical products, cosmetics, and personal care products may contain mammal-derived ingredients. Examples may include gelatin, glycerin, magnesium stearate, or bovine extract. Not everyone with AGS reacts to these ingredients. People with AGS should discuss medicines, vaccines, and medical products with a healthcare provider.



Food labels may not tell the full story

Alpha-gal is not one of the nine major food allergens that federal law requires to be named in a “Contains” statement. Milk is one of the nine major allergens and must be identified when required, but other mammal-derived ingredients may not be highlighted as allergens.

Food handlers should **read the full ingredient list and verify ingredients** with a manager, chef, manufacturer, or supplier. Do not rely only on a “Contains” statement. Check prepared sauces, stocks, seasonings, cooking fats, sausage casings, and any ingredient that may have changed since the recipe was last reviewed.



Know the symptoms

AGS symptoms usually appear about two to six hours after a person eats or is exposed to a product containing alpha-gal. Some medical products may cause a faster reaction. Because symptoms can be delayed, AGS may be mistaken for food poisoning or another digestive problem.

Symptoms may include:

- Hives, itching, or a rash
- Swelling of the lips, tongue, throat, eyelids, or other parts of the body
- Stomach pain, heartburn, nausea, vomiting, or diarrhea
- Cough, shortness of breath, or trouble breathing
- Dizziness, weakness, fainting, or a drop in blood pressure
- Anaphylaxis, a life-threatening allergic reaction
- Only stomach or digestive symptoms in some people

Alcohol, exercise, illness, stress, and some pain medicines, such as nonsteroidal anti-inflammatory drugs (NSAIDs), may make a reaction more likely or more severe for some people.



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How food businesses should respond to an AGS request

Ask	Ask the customer what foods and ingredients they avoid and whether they have specific instructions. Do not assume that every person with AGS has the same restrictions.
Verify	Check the full recipe, ingredient labels, supplier information, cooking fats, casings, and any shared equipment. Confirm that ingredients have not changed.
Communicate	Tell the person in charge, kitchen staff, and all employees handling the order. Clearly mark the order and communicate the allergy through preparation, cooking, and service.
Prevent cross-contact	Use properly cleaned and sanitized equipment and surfaces, and keep the order separated from mammal meat and mammal-derived ingredients.
Be honest about limitations	Do not promise that an item is safe until the ingredients and preparation process have been verified. If cross-contact cannot be prevented, explain that clearly to the customer.

Preventing cross-contact

Cross-contact happens when a food that is meant to avoid an allergen touches the allergen or a surface, utensil, or cooking medium that contains it. To reduce the risk:

- Keep mammal meat and mammal-derived ingredients separated from the requested order during storage, preparation, cooking, plating, and service.
- Thoroughly clean and sanitize food-contact equipment before preparing the order.
- Clean cutting boards, knives, tongs, spatulas, spoons, bowls, pots, pans, sheet pans, and preparation surfaces.
- Do not forget flat-top grills, grill tools, fryers, shared cooking oil, and other equipment that may hold animal fat or food residue.
- Wash hands and change gloves after handling mammal meat or mammal-derived ingredients.
- Use clean, verified ingredients and avoid garnishes, sauces, or finishing fats that have not been checked.



If a customer has an allergic reaction

Call 911 and notify management immediately. Follow the establishment's emergency and food-allergy procedures. Do not wait for symptoms to become severe. Even if the person uses prescribed epinephrine, they should still receive emergency medical care.

A customer may react differently each time, and symptoms may begin after they have left the establishment. Staff should document and report the incident according to the business's procedures.



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Information for local boards of health

Local boards of health can use this information to raise awareness among restaurants, caterers, mobile food operations, temporary food vendors, and other food establishments. Boards should also be aware of their role in food-allergy education and oversight.

During education and routine oversight, boards can:

- **Reinforce required food-allergy training.** Under [105 CMR 590.002: 2-103.11\(N\)](#), the person in charge is responsible for ensuring that employees are properly trained in food-allergy awareness as it relates to their assigned duties. This applies when a customer identifies an allergy, including an allergy to meat or other foods that are not among the nine major food allergens.
- **Ensure allergy requests are taken seriously.** Customers are responsible for informing food-establishment staff of a food allergy. Once an allergy is communicated, staff should follow their established food-allergy procedures, including communicating the request, checking ingredients, and taking steps to prevent cross-contact.
- **Use existing DPH/Division of Food Protection allergen-awareness resources.** Boards can direct food establishments to [DPH-approved food-allergy awareness materials and posters for information](#) on employee training, responding to allergy requests, and preventing cross-contact.
- **Reinforce safe food preparation practices.** Food establishments should maintain current recipes and ingredient information, clean and sanitize equipment and food-contact surfaces, and use procedures to reduce cross-contact.
- **Reinforce emergency procedures.** Food establishments should have procedures for responding to suspected allergic reactions and should call 911 for a severe reaction.
- **Follow current MDPH guidance on AGS reporting and case investigation.** Alpha-gal syndrome is reportable to MDPH as of April 1, 2026. Local boards of health should follow current MDPH guidance regarding any role in reporting or case investigation.

Resources

About Alpha-gal Syndrome

Learn the basics of alpha-gal syndrome, including how it can develop after a tick bite, possible risk factors, diagnosis, management, and steps to prevent tick bites. (CDC)



Products That May Contain Alpha-gal

Review common food ingredients, medicines, vaccines, and medical products that may contain alpha-gal, along with examples of foods that do not contain it. (CDC)



Alpha-gal Syndrome Resources

Find information about alpha-gal syndrome, common myths, delayed reactions, educational webinars, and downloadable resources for people managing food allergies. (F.A.R.E.)



Alpha-gal Posters, Brochures, and Handouts

Browse downloadable fact sheets, tick-bite prevention guides, posters, and educational materials, including some Spanish-language resources. (AGI)



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