

H: Allergies and Food Issues

MODULE H: UNDERSTANDING ALLERGIES AND FOOD ISSUES[1]

IN THIS MODULE

- [WHAT ARE ALLERGIES?](#)
- [ALLERGIC REACTIONS](#)
- [ANAPHYLAXIS](#)
- [ALLERGY & ANAPHYLAXIS EMERGENCY CARE PLANS](#)
- [EMERGENCY MEDICATIONS](#)
- [MANAGING ENVIRONMENTAL EXPOSURES](#)
- [FOOD SELECTION](#)
- [FOOD PREPARATION](#)
- [SWALLOWING DISORDERS](#)
- [FOOD AVERSIONS](#)
- [MEDICALLY RESTRICTED DIETS](#)
- [RELIGIOUS DIETS](#)

This module focuses on prevention of serious allergic reaction incidents. We will discuss environmental allergies for thoroughness, but most of this module will focus on food allergies (see also BSA 680-063 Food Allergy Guidance[2]). Several other special food considerations are also addressed in this module because the accommodations for them are similar to those for food allergies.

First aid treatment for general allergic reactions is covered in a number of other BSA resources so those details are not being repeated here. However, **anaphylactic reactions are a serious concern** and are discussed in this module.

Perhaps more so than with other special needs, there needs to be good communication with the family of a Scout with high-risk allergies. All the communication information in Module F applies here. The leaders will need to check in with the family before and during most outings to address risks. It is also common for an adult family member to want to be present on outings to monitor food intake or preparation.

WHAT ARE ALLERGIES?

In simple terms, an allergy is a condition where a person's immune system responds too aggressively when the person is exposed to a substance. Allergic reactions can be mild or extremely serious. While we can take some preventive actions for people with known allergies, everyone is at risk of a reaction from something they are not yet aware they are allergic to, or from a common allergen that is very difficult to avoid.

Allergens are substances that cause allergic reactions. Common allergens that are found in the environment or in foods include: pollens, molds, house dust mites, animal dander and saliva,

chemicals, latex, milk, fish, peanuts, tree nuts, shellfish, medicines, and venom from insect stings. Allergens have to come in contact with the body to provoke a reaction, but that contact could be inhaling particles (which stick to sinus tissues), touching the skin, touching the mouth and gastric tissue by eating, or being injected by stinging insects.

ALLERGIC REACTIONS

Allergic reactions occur when your immune system mistakes a harmless substance as a dangerous invader. Your immune system plans a response to the invader (allergen) by building antibodies. These antibodies are always on the lookout for the specific allergen and cause a chain reaction when you are exposed to the allergen again. This reaction causes strong chemicals such as histamine to be released into the body. These chemicals cause allergic symptoms. Any allergic reaction can be mild to extremely serious. Just because you had a mild reaction when you were exposed to the allergen before does not mean it will be a mild reaction the next time. However, **if you had a severe reaction before, there is a good chance that the next one will be as bad or worse.**

Since your body's immune system is active from head to toe, inside and out, allergies can cause many different symptoms. There are many different ways the body can react, and the exact symptoms can vary from person to person and from allergen to allergen in any one person. Below are the symptoms of an acute allergic reaction:

Airway restriction and cardiovascular symptoms are the gravest concerns out of these symptoms.

ANAPHYLAXIS

Anaphylaxis is a severe and potentially deadly allergic reaction. In anaphylaxis, the reaction can come on very fast (within minutes of exposure) and can affect multiple systems of the body. In addition to the extreme versions of the typical allergic symptoms mentioned above, anaphylaxis can mimic cardiac distress with a rapid heartbeat, drop in blood pressure, shock, fainting, or unconsciousness. **Anaphylaxis should always be treated as a medical emergency**, and the person needs to be moved to a medical facility as quickly as possible, even if emergency epinephrine is administered. Food Allergy Research and Education (FARE) also offers a free training module on recognizing and responding to anaphylaxis^[3].

Like other types of allergic reactions, anaphylaxis is unlikely to happen the first time a person is exposed to a particular allergen, but the person may not notice the first reaction. However, when people have already had an anaphylactic reaction to an allergen, they often have severe symptoms the next time, and they should **be prepared for an anaphylactic reaction to happen again someday.**

ALLERGY & ANAPHYLAXIS EMERGENCY CARE PLANS

An allergy/anaphylaxis emergency care plan is a detailed and personalized first aid plan for a person at risk for an anaphylactic reaction. The plan includes details about what allergens to be concerned about, what symptoms require medications, what medications to use, and how much medication to administer. It is personalized to the patient and is prepared in consultation with a physician. A copy of the care plan needs to be with the adult leaders on any Scout outing, and if age-appropriate, a copy of the plan should be carried by the Scout with the allergy. While the BSA

Annual Health and Medical Record (AHMR) includes questions about allergies, the AHMR is not necessarily on the person of the leader or Scout at all times. The care plan needs to be on their persons at all times when an anaphylactic reaction is possible. When a Scout with a care plan is attending camp, a copy of the care plan should be attached to the AHMR so camp medical staff know what the action plan is.

While there are several care plan forms available on the internet, you may want to look at the plan forms produced by the American Academy of Pediatrics (AAP/healthychildren.org) and Food Allergy Research & Education (FARE/foodallergy.org)

EMERGENCY MEDICATIONS

There is a general discussion about medication in Module F that you should read first. BSA 680-036 *Medication Use in Scouting* offers additional guidance for planning and preparation. Prescription and over-the-counter antihistamines may be emergency medications for an allergy even though we don't routinely think of them this way. Rescue inhalers, more commonly used for asthma, may also be an emergency medication for keeping the airway open. The emergency medication we are most familiar with is the epinephrine auto-injector, which you may know as an EpiPen®[4]. EpiPen® is just one model of auto-injector and there are other brand-name and generic models on the market. All models of auto-injectors all use the same medication, but they do not all work the same, so it is important to know the differences. It is a good idea for the Scout or the Scout's family to explain to adult leaders how to operate their model of auto-injector and inhaler, ideally with a training simulator. All the manufacturers have training videos. During an emergency you are more confident when you have practiced.

Note that epinephrine is only available by prescription. It also has a limited life, whether used or not. Before an outing, leaders and families need to check the expiration date on the epinephrine auto-injectors to ensure the medication will not expire before the end of the outing.

With allergy and anaphylactic risks, some thought and planning are needed to assure that emergency medications are close by at all times. Leaving them with the camp health lodge or secured at the campsite may not be sufficient. Preferably, the Scout will carry the emergency medication on his or her person. However, there may be situations where the Scout is too young to be responsible for the medication, or where the Scout is not able to administer his or her own medication. In these situations, another responsible person will need to hold the emergency medication and stay close to the Scout at all times.

The Scout needs to notify the adult leader immediately if he or she self-administers the emergency medication. **In ALL cases, the Scout needs further evaluation, observation, or treatment from a health-care provider when emergency medication (such as epinephrine) is used**, even if the Scout feels okay. An allergic reaction can repeat itself up to four hours after the first reaction. Once the Scout has been cleared by doctors, the emergency medication needs to be replenished before resuming activities.

MANAGING ENVIRONMENTAL EXPOSURES

Under the category of environmental allergies, we need to consider seasonal airborne pollen/mold allergies, direct contact with plants or animals, biting and stinging insects, and contact with latex. Many people with mild to moderate allergies can manage the discomfort with over the counter medications, such as antihistamines and nasal steroids.

A challenge with Scouts is that young people may not know yet what triggers their allergies. Even if they do, they may not have figured out what times of year to avoid being outdoors or which medications are effective for them. For a skin contact allergy, they may not know how to recognize and avoid a plant that causes them trouble. For insect bites, they may not know how to identify the type of insect they need to protect themselves from. As a practical matter, a leader may not be able to do much to prevent such accidental and unexpected exposures. A leader can consider allowing the Scout to stay indoors for part of the day or possibly go home early from an event rather than be miserable.

Latex is made from the sap of the rubber tree, so it has plant proteins that are an allergen for some people. There are two common sources of latex in the Scouting program. The first source is first aid supplies. Latex is used in some gloves, tapes, bandages, adhesives, and more. We use these supplies for first aid teaching and training as well as to actually tend to minor injuries. There are non-latex substitutes for all of these first aid items, though it might take some effort to find them. If you have a Scout or adult in your unit with a latex allergy, it would be a good idea to convert the entire first-aid kit over to non-latex supplies. The other major source of latex is balloons and art supplies. Water balloon fights and party balloons could be a problem. One challenge is that non-latex balloons are not stretchy, so when latex balloons are necessary for science experiments you may have to figure out how to prevent direct contact for the Scout with a latex allergy.

A Scout that has had a serious environmental allergy reaction will usually have been evaluated by an allergist to identify which allergens present a health risk over and above general discomfort. In these situations, the leader, the Scout, and the family need to develop a plan to take into account what allergens might be present at any particular camping location at that particular time of year. Preparing an allergy/anaphylaxis emergency care plan is part of this process.

As a practical matter, there may be some events that a particular Scout cannot safely attend. However, the unit leadership should make an effort to find ways to adapt outings to allow all their Scouts to take part on an equal footing. It may take a change of venue or going at a different time of year, but that is a worthwhile tradeoff for allowing all youth the opportunity of Scouting.

FOOD SELECTION

The obvious step with food allergies is to be careful with ingredient lists of the food you purchase. Usually less processed foods are safer. The most common food allergens are milk, eggs, peanuts, tree nuts, wheat, soy, fish, and crustacean shellfish. The Federal Allergen Labeling and Consumer Protection Act of 2004 requires these eight food allergens to be listed on the label if they are present in any amount in a packaged food in the U.S. With that said, any food is a potential allergen, not just these eight types.

It is important to plan ahead for food allergies with the Scout and the family. Planning includes choosing the menu and reading labels before purchasing food. It is important to constantly check labels as the ingredients tend to change names. The entire list is important, even including flavorings and preservatives that are only trace ingredients. As if it were not hard enough, some ingredients have more than one name or abbreviation. For example baking soda, sodium bicarbonate, and bicarbonate of soda are all the same thing. Furthermore, some ingredients that are listed as one item in the ingredient list are actually mixtures. For instance, baking powder is a mixture of ingredients and may not have the exact same ingredients from one brand to another. FARE has resources to help make reading labels easier[5].

There are three approaches to accommodating food allergies and other food restrictions when purchasing food for unit events. **For social reasons, it is preferable to have the Scout with the allergy or restriction eating the same foods as everyone else.** This means trusting others, beside the Scout and the Scout's family, to purchase food. This approach is only viable when the problem food ingredients are well identified and are all primary ingredients that will appear clearly in ingredient lists. In simpler terms, this is when the person buying the food can be given a short, clear list of ingredients to avoid.

The second option is for the Scout with the allergy or restriction to purchase and bring his or her own food for the outing and to make plans to cook in parallel with the rest of the group. This may be the only realistic option if the list of food restrictions is long or complicated. With this approach, the Scout should be given the group menu plan in advance and an opportunity to mimic the menu to stand out less from the group.

A hybrid approach is for the Scout with food restrictions or his family to plan and purchase the food for the entire group. Many will do so willingly just to be certain that there will not be a problem. While this solution is straightforward, it may become an unfair burden on the Scout and family to do this all of the time. Another difficulty is that in the Scouts BSA advancement system, there are rank requirements that require menu planning, food budgeting, and food purchasing for an outing, so other Scouts will need their turns to do the selection and purchasing.

A different type of complexity is involved when there is a meal or snack stop at a restaurant or convenience store while traveling. Depending on the maturity level of the Scout, a parent or guardian may need to come on a Scout outing to help watch out for problem foods.

The institutional cooking facilities used at Scout camp dining halls may not be able to provide or prepare special foods for someone with a food allergy. It is a good idea to contact the camp in advance to see what they can and cannot accommodate. In many instances, a Scout will need to bring food from home to have the specialty foods he or she needs.

No matter what the plan is for accommodating special food needs, **it is always a good idea for the Scout to have a personal stash of non-cook, shelf-stable food to substitute for one or two meals** when someone makes a mistake purchasing food or mixes a problem ingredient into otherwise acceptable food.

FOOD PREPARATION

Preparation methods are just as important as selecting the right food products. Most food allergies are triggered by specific proteins that are found in that type of food. Even small particles of protein can trigger an allergic reaction, so it's important to avoid cross-contact of safe foods with allergens. **When you are dealing with food allergies, you need to mentally disconnect the two steps of cleaning and sanitation.** Cleaning is removing all the food particles (thus proteins) from the utensil and sanitizing is killing all the germs. For example, if you kill the germs by drying a dish with heat but leave behind a dried out particle of food on the surface, there is still a hazard for the person with the food allergy.

There is no substitute for soap and water when washing your hands, dishes, and surfaces. Hand sanitizer and water-rinsing are more likely to move allergens around than clean them. Dry your hands and dishes with fresh disposable towels. Porous things like sponges, scrubbers, cloth towels, and wooden utensils can never be trusted to be clean enough after the first

time they are used. Either treat them as disposable or carefully segregate the ones used on allergen-free foods and utensils from the rest. You will find yourself using a lot of disposable paper towels to wipe up as you cook. Sanitizing wipes can be used, but only after the food has been cleaned from the surface.

In the extreme, the people preparing special food need to be isolated from allergen foods while they are cooking, and they need to have their own separate equipment (including deep fryers[6]), utensils, cleaning supplies, and storage containers to work with. This may not be achievable for a camp dining hall, so it may be necessary to cook in your campsite even though the camp serves cooked meals. With this said you may not need such total isolation unless a person is extremely sensitive to the smallest amount of the allergen or tends to have an extreme reaction to the allergen.

Outdoor cooking is an integral skill to Scouting programs. However, experience shows that Scouts are not the most diligent dishwashers and cleaners, so extra planning and supervision is needed to protect a Scout with a food allergy. Here are some practical points that avoid most of the problems:

- Cover wooden picnic tables with a plastic tablecloth before using them. You have no control over what foods were laid on them in the past and no practical way to clean them yourself.
- Don't store foods, ingredients, or seasonings in the same storage bins with cooking equipment.
- Use plastic totes with smooth surfaces instead of a traditional wooden chuck box. A wood surface chuck box can absorb allergens and is not easy to clean inside.
- Keep cooking containers and cooking tools clean between outings by storing them in new zip-type plastic storage bags or small trash bags that can be securely closed. Don't reuse these bags.
- Wash hands frequently with soap and water while cooking and make copious use of food-handling gloves.
- Teach Scouts to strip off and replace gloves before moving to a new task, handling a new food item, or handling a new cooking tool. The point is to not spread allergens from surface to surface.
- Have a generous supply of cooking bowls, pots, and utensils so you don't have to wash dishes while you cook. If there is a need, keep allergen-exposed and allergen-unexposed cookware separated on an outing even after it has been washed, and keep the pieces dedicated to their purposes.
- No wooden utensils or cutting boards.
- Avoid sharing a camp stove between allergen-free foods and other foods due to the risk of spatters from one getting in the other.
- Teach and enforce a policy of "a spoon only gets used in one pot", "a knife is only used on one ingredient", and "each container only gets used once" before it is washed. The tools and containers are washed thoroughly with soap and water between each use and each ingredient.

- Wash dishes that have only been exposed to allergen-free foods first, before you wash the other dishes.
- If you use sponges, dish rags, and scrubbers to wipe surfaces and clean dishes, treat them like disposable single-use items. They cannot be cleaned well enough in a camping environment to be reused on the same outing.
- Washed dishes need to be inspected by an adult before they are used again. They need to be completely clean.
- Be prepared to modify any part of the cooking procedures and systems your unit uses based on the information and advice you get from the parents/guardians of the Scout with a food allergy.

SWALLOWING DISORDERS

Swallowing disorders are physical disabilities that are often cared for by a speech and language pathologist. Other speech and language difficulties are covered in Module S. The process of swallowing involves many different muscles to move food and liquids from the mouth to the stomach without it going into the lungs. The muscles have to work in an exact sequence and with the right amount of effort as well.

Swallowing disorders are covered in this module because they create another type of special food that a Scout could need. A Scout with a swallowing disorder will typically have a plan (set of instructions) from a health provider. The instructions often include eating foods/liquids with a narrow range of consistency. Typically this means a soft or liquid diet, with careful control of water content and thickness (viscosity). Regular foods can be processed in a blender, and/or liquid diet supplement “shakes” can be used. There are also additives that can be mixed into liquid food to thicken or thin the mixture to the right consistency. Though not very common, some swallowing disorders require a feeding tube to bypass the regular swallowing mechanism.

A person with a swallowing disorder is always at some risk of aspirating food or fluids, which means that the solids or liquids go into the lungs rather than the stomach. It is possible for aspiration to happen without an obvious sign like choking, coughing, or wheezing. If you work with a Scout with a swallowing disorder, **pay extra attention to any sign of breathing difficulty** and promptly get the Scout evaluated by a health provider if that happens. Aspiration presents potentially serious health complications that are worth avoiding.

As Scout leaders we need to work with family and the care plan for swallowing that has been provided for the Scout. However, being realistic, it would be very difficult to provide the right kinds of foods and food preparation within the resources of a typical Scout unit, Scout camp, or restaurant. In most cases, the family will need to provide the food for the Scout on an outing. It may also be necessary for a family member to attend outings to help the Scout with food preparation or with use of a feeding tube. A more mature Scout may be able to care for himself on an outing, but that needs to be discussed with the Scout and his family before taking that option.

FOOD AVERSIONS

Scout leaders have all encountered picky eaters, because the menu is different from home and the food is cooked in unfamiliar ways. Food aversions typically work themselves out because most kids

will not willingly starve themselves. When a Scout has a sensory disorder some sensations can be unpleasantly intense. Some Scouts with autism fall into this group. Eating is a complex sensory experience because food has taste, smell, texture, and appearance and **some Scouts refuse to eat many types of foods** no matter how much they are encouraged or reasoned with. Parents in these situations tend to be shy about asking for accommodations for their child or may not recognize it as a special need because they adapted gradually over the years at home.

Food aversions become a health and safety issue when there are not enough calories in the food that the Scout eats to sustain the Scout through the activity. At the same time, we need to preserve the dignity of the Scout and minimize the attention that a food aversion draws. Like an allergy, there are some foods that are in effect “no-go” and ultimately, you must find enough compatible food for the outing. Have a discreet and candid conversation with the family to learn what foods work well at home and what foods are simply no-go. For short-term outings and summer camp, it may be enough to allow the Scout to bring some familiar snacks from home to supplement the regular menu items.

High adventure trips with lightweight trail foods are another matter. One alternative is to seek out lightweight versions of foods that are well received at home, such as instant mashed potatoes, packaged meats, or dehydrated fruits and vegetables. Then, ask the Scout’s family to test drive the lightweight foods at home. For freeze-dried foods, you can have a tasting event in advance of the trip for everyone in the group and use the results to accommodate the special needs. A strategy for non-cook meals is to issue out a variety of pre-packaged foods that the Scouts can trade between them as needed to accommodate food aversions. It is OK to sacrifice some long-term nutritional balance for energy content during a limited term outing.

MEDICALLY RESTRICTED DIETS

There are a variety of diets that are prescribed for medical reasons. This is more common for adults than for youth, but there are a number of youth that need gluten-free diets. Some medical diets will require abstaining from particular foods or emphasizing particular foods, but most of them try to achieve a particular balance between major categories like sugars, starches, fats, protein, etc.

As with any other special food need, a person on a medically restricted diet may have to address the same kinds of food selection issues that were discussed earlier in this module.

RELIGIOUS DIETS

As Scout leaders, we should not obstruct or discourage our Scouts from fulfilling their religious duties as they understand them. There are a number of faith groups that have dietary restrictions as part of their religious duties. The more familiar ones are kosher, halal, and variations on vegetarian diets. These diets create special needs for food selection similar to what is needed to address food allergies. Less obvious is that some religious diets place restrictions on food preparation as well, where certain food types are not allowed to touch each other or be mixed together. In some instances a particular cooking container or utensil is dedicated to a particular class of food. This may require extra cooking equipment. Some of the suggestions for preventing cross-contamination given in the earlier section on Food Preparation may be helpful here as well. The Scout and his or her family will need to explain what restrictions are imposed and may be able to offer ideas for alternative foods that would be pleasing to the whole group.

Another feature of religious diets is that some have prescribed times of fasting and others

encourage fasting periodically at self-directed times. In consultation with the Scout's family, provisions might need to be made for food to be accessible at times other than customary meal times.

Last Revised 5/4/2020

[1] The Boy Scouts of America would like to thank Food Allergy Research and Education (FARE, foodallergy.org) for reviewing the contents of this module for accuracy and usefulness.

[2] This document was produced by the Risk Management department of the Boy Scouts of America and clarifies the responsibilities of the family, Scout, and adult Scout leaders.

[3] <https://www.foodallergy.org/life-with-food-allergies/anaphylaxis/recognizing-responding-to-anaphylaxis>

[4] EpiPen® is the registered trademark of Mylan Specialty LP.

[5] <https://www.foodallergy.org/life-with-food-allergies/living-well-everyday/how-to-read-food-labels>. FARE advised us in 2019 that this link may change but the content should still be available on their website.

[6] Particles and oils from an allergen food can come out into the oil in a deep fryer and then be infused into everything that is cooked in the oil afterward.