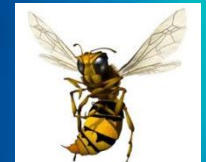


Life Threatening Allergies In School

and Glycogen Storage Disease Information

Southington Public Schools
Southington, Connecticut
Annual Employee Training



Scroll down to continue.

Sources of Life Threatening Allergies

- Food
- Insect Venom
- Latex
- Medication
- Exercise Induced
- Unknown

Food Allergy

Food allergy is a potentially serious immune response to eating or otherwise coming into contact with certain foods or food additives.

A food allergy occurs when the immune system:

- 1) identifies a food protein as dangerous and creates antibodies against it; and
- 2) tries to protect the body against the danger by releasing substances, such as histamine, tryptase, and others, into the blood when that food is eaten.

Food Allergy Basics



Eight foods cause 90% of allergic reaction to people in the United States as noted below, but ANY food can cause a serious allergic reaction.

Peanuts

Tree Nuts

Fish

Eggs

Shellfish

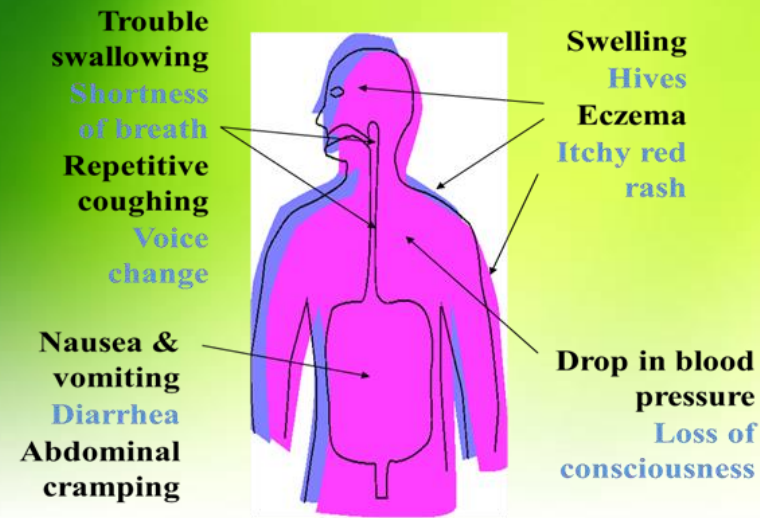
Milk

Wheat

Soy

Symptoms

Anaphylaxis refers to a collection of symptoms affecting multiple systems in the body. These symptoms may include any of these below:



Skin	Flushed, pale skin Swelling, hives or rash on any part of the body Itching of any body part especially lips
Respiratory	Cough, wheezing, difficulty breathing, shortness of breath , runny nose Throat tightness or closing /Difficulty swallowing Difficulty breathing, shortness of breath Change in voice
Gastrointestinal (GI)	Itchy tongue, mouth and/or throat Stomach cramps, abdominal pain, nausea, vomiting , diarrhea
Cardiovascular	Heartbeat irregularities Coughing, cyanotic (bluish) lips and mouth area Decrease in blood pressure, fainting or loss of consciousness Dizziness, change in mental status, shock
Other	Sense of impending doom /Anxiety Itchy, red, watery eyes

Food Allergies

Avoidance is the key to preventing a reaction.

- **Cross-contamination**
- **Mislabeled foods**
- **Unlabeled foods**



- There is no cure at this time for food allergies.
- Strict avoidance of the offending allergen is the only way to prevent a reaction.
- Students with food allergies should only eat foods brought in from home or approved by parent.

Beyond the Physical Risks



Recognize possible emotional needs:

- “At risk” for eating disorders, anxiety, and depression
- Be aware of teasing/ bullying
- Avoid isolating and stigmatizing

Insect Stings



Most stings are caused by yellow jackets, paper wasps, and hornets. Some students have allergies to insect stings that can lead to life-threatening systemic reactions.

Prompt identification of the insect and timely management of the reaction are needed.

Insect avoidance is advised for students and staff at risk for anaphylaxis.

Some precautions schools should follow include:

- 1) insect nests should be removed on or near school property,
- 2) garbage should be properly stored in well-covered containers, and
- 3) eating areas should be restricted to inside school buildings for students and staff at risk.

Latex

Latex products are a common source of allergic type reactions. Latex exposure should be avoided by students and staff at risk for anaphylaxis.

Immediate allergic reactions are potentially the most serious form of allergic reactions to latex products. Rarely, exposure can lead to anaphylaxis depending on the amount of latex allergen that they are exposed to and their degree of sensitivity.

You may develop a latex allergy if you are allergic to foods that have the same proteins that are in latex.

These foods include, but may not be limited to:

Bananas

Avocado

Chestnuts (Medline Plus 2012)



Latex Items

**Below are a few examples of items that may contain latex.
Other items that are not on this list could also contain latex.**

Balloons

Rubber bands

Band-Aids

Toys

Carpet backing

Clothing, including rain coats and elastic on underwear

Food that was prepared by someone who was wearing latex gloves

Handles on sports racquets and tools

Diapers, sanitary napkins, and other pads, such as Depends

Buttons and switches on computers and other electronic devices

Condoms and diaphragms

Shoe soles

Latex gloves

Paint

Stethoscopes

Other Potential Life Threatening Allergies



Medication: Drug allergies can be mild or life-threatening. Skin reactions, such as hives and rashes, are the most common type of drug reactions.

Exercise Induced: Exercise-induced anaphylaxis is a distinct form of allergy and, although rare, can be characterized by symptoms occurring during physical activity ranging from rashes to severe reactions such as fainting and even death.

Unknown: When no triggers for anaphylaxis can be identified, a diagnosis of an *idiopathic life-threatening allergic reaction* (anaphylaxis) is made. If a child experiences a life-threatening allergic reaction and the cause is unknown, their health care professional will analyze the events and conditions surrounding the reaction to try to find possible triggers.

Prevention

Protecting a student from exposure to offending allergens is vital to prevent life-threatening anaphylaxis.

Avoidance of exposure to allergens is the key to preventing a reaction.

The risk of adverse events related to allergens for a student is reduced when the school personnel, medical provider and parent or guardian work together to develop and follow a management plan for the student.

Allergy information for a student should be noted by school and health personnel while respecting the student's right to confidentiality.

Prevention Strategy

Create a safe environment for students with serious allergies.

- **PREVENT** reactions
- **RECOGNIZE** reactions
- **RESPOND** to reactions

Avoid exposure to the allergen:

- During school day
- While traveling to and from school
- During school events
- While on field trips
- Students with food allergies should only eat foods brought in from home or approved by parent



IHCP and ECP

It is important to follow the plan of care for students with life threatening allergies. Please review the:

IHCP: Individualized Health Care Plan

ECP: Emergency Care Plan

Please click on the links below to go to the Southington Public Schools web site and click on the plans of care for life threatening allergies.

These plans are individualized for each student needs as appropriate.

[IHCP: Basic Food Allergy Health Care Plan](#)

[ECP: Basic Food Allergy Emergency Care Plan](#)

Anaphylaxis

Every allergic reaction has the possibility of developing into a life-threatening and potentially fatal anaphylactic reaction. This can occur within minutes of exposure to the allergen.

- Anaphylaxis is a severe, whole-body allergic reaction to a substance that has become an allergen.
- Anaphylaxis is life-threatening and can occur at any time. Risks include a history of any type of allergic reaction.
- Individuals with a food allergy and asthma are at greatest risk for a serious or fatal reaction.

Symptoms of Anaphylaxis

If a student you're caring for shows signs or symptoms of a life-threatening allergic reaction (anaphylaxis), inject the prescribed EpiPen or EpiPen Jr. immediately, then promptly call 911 to seek immediate medical attention.

Signs of a life-threatening allergic reaction (anaphylaxis) may include:

Swelling of the lips, tongue

Numbness or tingling of the lips or tongue

Skin redness

Fast heartbeat

Weak pulse

Feeling very anxious

Stomach pain/Nausea/Vomiting

Losing control of urine or bowel movements (incontinence)

Faintness or "passing out" (unconsciousness)

Difficulty breathing

Wheezing

Hoarseness

Hives

Itching

Confusion

What a Child Might Say and Do

A few examples:

Say:

“My tongue (or mouth) itches”

“My tongue is hot/burning”

“My mouth feels funny”

“There’s something stuck
in my throat”

“It feels like there are bugs
in my ears”

“This food is too spicy”

Do:

Put their hands in their mouths

Pull or scratch at their tongues

Drool

Hoarse cry or voice

Slur words

Become unusually clingy

Children’s Memorial Hospital 2011

Biphasic Reaction

Children experiencing anaphylaxis should be observed in a hospital emergency department for a minimum of four to six hours or more after initial symptoms subside, to monitor for signs/symptoms of a *biphasic reaction*.

In up to 30 percent of anaphylactic reactions, the initial symptoms may be followed by a second wave of symptoms two to four hours later and possibly longer.

This combination of an early phase of symptoms followed by a late phase of symptoms is defined as *biphasic reaction*.

Treatment

Prompt administration of epinephrine is key to surviving anaphylaxis.



Know and follow the allergic student's treatment plan.

Epinephrine can be prescribed as EpiPen[®], Twinject[®], Adrenaclick[™], Auvi-Q[™] or other name.

In the presence of anaphylactic symptoms, **GIVE EPI-PEN WITHOUT DELAY!** Then **CALL 911** immediately.

Remain calm and reassuring with the student and do not leave him or her unattended.

The Classroom

The school nurse and classroom teacher(s) should meet to discuss a student's allergies and the symptoms that the teacher might see in the event of an allergic reaction.

Keep the classroom as “allergen-safe” as possible. Think about any allergens that might be included in instructional materials (science supplies, art materials, etc.).

With parent/guardian permission, inform classroom volunteers of any life-threatening allergies

No foods should be offered to students with food allergies without the approval of the parent.

Reinforce hand-washing before and after eating.

Elementary Classroom

Consider food-free rewards and celebrations.



If the student's parent/guardian requests, a letter can be sent home alerting all parent(s)/guardian(s) to the fact that there is a student with significant allergies in their child's classroom. The student's name should not be shared in the letter to protect the student's right to confidentiality.

Teachers can shift the focus of classroom rewards and celebrations from food to the students or an activity.

Field Trip Considerations

Collaborate with the school nurse well in advance of planning a field trip to avoid high risk situations and consider inviting the parent(s)/guardian(s) to accompany their child.

Ensure the epinephrine auto-injector and instructions are taken on the trip if there is a student attending with a specific order and identify who has been trained to administer epinephrine and trained in emergency procedures to accompany the student on the trip;

Consider all eating situations and plan for prevention of exposure to life-threatening foods, insect exposure, the presence of latex, and ways to wash hands before and after eating, including disposable wipes;

A land line, cell phone or other means of communication must be available;

Please click on the following link to go to the Southington Public Schools web site and review the **[FIELD TRIP MEDICATION AND HEALTH CONCERNS](#)**.

Students Can Be Safe at School

Students with life-threatening allergies can be kept safe at school.

Careful planning and prevention can greatly reduce the risk of students experiencing anaphylaxis, or a life-threatening allergic reaction at school.

It's important for school staff to know how to react and care for students experiencing allergic reactions.

Summary

Create a safe environment.

- Prevent a reaction:
Avoidance
Know the *Health Care Plan* for your student
- Recognize a reaction:
Know the signs and symptoms
- Respond to an allergic reaction:
Know the *Emergency Plan* for your student.
Respond quickly.

Southington Public Schools Life Threatening Allergy Plan

<http://www.southingtonschools.org/page.cfm?p=8157>

The plan contains checklists for:

- School nurse
- Transportation services
- Support Staff
- Outside of Classroom Activities
- Children with food allergy
- Parents of children with food allergy
- Administration
- Teachers/Specialists
- Food Service
- Custodial Staff
- Coaches

Additional Information



www.foodallergyinitiative.org

www.foodallergy.org

<http://www.foodallergy.org/staysafe/index.php>

[www.epipen.ca/en/about epipen/how to use epipen/#training](http://www.epipen.ca/en/about_epipen/how_to_use_epipen/#training)

[http://www.nasn.org/ToolsResources/FoodAllergyandAnaphylaxis/SNP PRA/episode1](http://www.nasn.org/ToolsResources/FoodAllergyandAnaphylaxis/SNP_PRA/episode1)

<https://www.auvi-q.com>

Glycogen Storage Disease (GSD)

Glycogen Storage Disease (GSD) occurs when there is an absence or deficiency of one of the enzymes responsible for making or breaking down glycogen in the body. (Association for Glycogen Storage Disease, 2012).

Glycogen storage diseases (GSDs) are a group of inherited genetic disorders that cause glycogen to be improperly stored in the body. People with glycogen storage diseases have a buildup of abnormal amounts or types of glycogen in their tissues.

Glycogen is the storage form of glucose in our bodies. Glucose is a simple sugar, which is a form of carbohydrate. It is found in many foods and is the main source of energy in our bodies.

Glycogen Storage Disease Symptoms

Symptoms of GSD vary based on the enzyme that is missing. They usually result from the buildup of glycogen or from an inability to produce glucose when needed. Because GSD occurs mainly in muscles and the liver, those areas show the most obvious symptoms.

Symptoms of GSD may include:

growth failure	enlarged liver
muscle cramps	low blood sugar
swollen belly	abnormal blood test (CCHMC, 2012)

Treatment of GSD

Treatment of GSD depends on the type of GSD. Some GSD types cannot be treated; others can be treated by controlling the presenting symptoms. For the types of GSD that can be treated, patients must carefully follow a special diet.

Frequent high carbohydrate meals during the day. For some children, eating several small meals rich in sugars and starches every day helps prevent blood sugar levels from dropping.

Cornstarch. For some young children over the age of 2, giving uncooked cornstarch every four to six hours can also relieve the problem.

Continuous tube feeding. Gastrointestinal tube feedings with solutions containing high concentration of glucose may need to be administered.

Drug treatment. GSD tends to cause uric acid (a waste product) to accumulate, which can cause gout (painful inflammation of the joints) and kidney stones. (CCHMC, 2012).

"Prevention is better than cure."

~ Desiderius Erasmus



Signature Page

Please click on this [Survey Monkey link](#) that will take you to a short quiz and verification of your completed annual employee *Life Threatening Allergies in School/GSD* training.

See your school nurse with any questions regarding this training.