

MANAGING LIFE THREATENING ALLERGIES IN SCHOOLS

**School District of Elmbrook
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This manual was based on a document prepared by the Massachusetts Department of Education entitled Managing Life Threatening Food Allergies in Schools (2002).

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MANAGING LIFE-THREATENING ALLERGIES IN THE SCHOOLS

GOALS OF THE GUIDELINES

The guidelines are presented to assist our schools in caring for students with life-threatening allergic conditions. The guidelines address:

- The scope of the problem of childhood allergies,
- Types of detailed policies and protocols that should be in place in every school to help prevent allergic reaction emergencies and deaths from anaphylaxis,
- The systematic planning and multi-disciplinary team approach needed prior to school entry by the student with known life-threatening allergies,
- The school's role in preventing exposure to specific allergens,
- Emergency management should a life-threatening allergic event occur, and
- The roles of specific staff members in the care of the student with a life-threatening allergic condition.

OVERVIEW

Food allergies are presenting increasing challenges for schools. Because of the life-threatening nature of these allergies and the increasing prevalence, school districts and individual schools need to be ready for the entry of students with food allergies.

Food Allergy Prevalence

- Food allergies affect 8% of children under age three, 6%-8% of school-age children and 2.5% of adults.*
- Food allergy prevalence has increased 55% in the last five years.*
- Of those persons with a diagnosed food allergy, 40%-50% are judged to have a high risk of anaphylaxis* (a life-threatening allergic reaction). *Every food allergy reaction has the possibility of developing into a life-threatening and potentially fatal anaphylactic reaction.* They can occur within minutes of exposure to the allergen. Children may be allergic to more than one food.
*(Sampson, HA, "Food Allergy", from *Biology toward therapy, Hospital Practice*, 2000: May).

Characteristics of Food Allergy Reaction

- Allergic reactions to foods vary among individuals and can range from mild to severe life-threatening anaphylactic reactions. Some individuals, who are very sensitive, may react to just touching or inhaling the allergen. For other individuals, consumption of as little as one five-thousandth of a teaspoon of an allergenic food can cause death.
- Eight foods (peanut, tree nut, milk, egg, soy, wheat, fish, and shellfish) account for 90% of total food allergies, although any food has the potential to cause an allergic reaction.
- Most, but not all childhood allergies to milk, egg, soy, and wheat are outgrown by age 5.
- Peanut and tree nuts account for 92% of severe and fatal reactions, and along with fish and shellfish, are often considered to be lifelong allergies.

Impact on the School

Every school district should expect at some point to have students with food allergies. Schools must be prepared to deal with food allergies and the potential for anaphylaxis.

- *Accidental* ingestion of the offending allergen occurs most often at school.
- A recent study from the journal, *Archives of Pediatrics and Adolescent Medicine*, states that 1 in 5 children with food allergies will have a reaction while in school.
- The student with an undiagnosed food allergy may experience his/her first food allergy reaction at school.
- When a physician assesses that a child's food allergy may result in anaphylaxis the child's condition meets the definition of "disability" and is covered under the Federal Americans with Disability Act (ADA), Section 504 of the Rehabilitation Act of 1973, and may be covered under Individuals with Disabilities Education Act (IDEA) if the allergy management affects the students ability to make educational progress.

THE ROLE OF THE SCHOOL IN PREVENTING AND MANAGING LIFE THREATENING ALLERGIES

Adequate plans and staff who are knowledgeable regarding preventative measures and well prepared to handle severe allergic reactions, can save the life of a child. *The only means to prevent allergic reactions is avoidance of the allergen substance by the student.*

- Elmbrook School District should follow policies and protocols regarding the care of students with life-threatening allergies. See Appendix A: *Role of Individuals*, which details the responsibilities of school staff and parents.
- The school nurse or designee should oversee the development of an Individualized Health Care Plan (IHCP) for each student with the diagnosis of a life-threatening allergic condition. The school nurse should be responsible for organizing the process and transmitting the information necessary with the student's parent(s), the student (if appropriate), the classroom teacher, food service manager and other personnel as determined by the student's needs. The IHCP will be developed before the student's entry into school or immediately after the diagnosis of a life-threatening condition and addresses the management of anaphylaxis.
- Schools should ensure that all staff entrusted with the care of students receive basic education concerning allergies, including on the prevention and management of allergic conditions.
- An effective allergy program requires the cooperation of parents, teachers, counselors, food service director, administrators, school nurses, primary care physicians, extracurricular advisors, bus/transportation personnel, and any staff that might be present where children can be exposed to the allergens that can trigger their extreme reaction.
- Schools should be prepared to manage an anaphylactic emergency by:
 - a. Having responsible school personnel designated and trained to respond.
 - b. Identifying clearly the student's needs.
 - c. Having the physician's orders on file.
 - d. The parents or guardians of students identified with life-threatening allergic conditions should provide the school with at least two, non-expired auto-injectors containing epinephrine and authorized medications. It is recommended that these be kept in at least two easily accessible locations and/or carried by the student when appropriate. (*Please note: epinephrine should be kept in an unlocked cabinet while school is in session*). The parents are responsible for providing epinephrine for before or after school activities and informing the appropriate staff members.
 - e. Having an understanding of the municipal emergency response team's preparedness to respond to a 911 call with epinephrine.

REGULATIONS GOVERNING THE ADMINISTRATION OF EPINEPHRINE BY AUTO INJECTOR TO STUDENTS WITH DIAGNOSED LIFE-THREATENING ALLERGIC CONDITIONS

Administration of drugs to pupils and emergency care (Wisconsin Statute 118.29).

(1) DEFINITIONS. In this section:

(a) Administer means the direct application of a drug or prescription drug, whether by injection, ingestion or other means, to the human body.

(b) Drug has the meaning specified in s. 450.01 (10).

(c) Epinephrine auto-injector means a device used for the automatic injection of epinephrine into the human body.

(bm) Health Care professional; means a personal licensed as an emergency medical technician under s. 146.50(8) or any person licensed, certified, permitted or registered under chs. 441. or 446 to 449.

(d) High degree of negligence means criminal negligence, as define in 2.939.25 (1).

(e) Practitioner means any physician, dentist, optometrist, physician assistant, advanced practice nurse prescriber, or podiatrist licensed in any state.

(f) Prescription Drug has the meaning specified in s.450.01(20).

(2) AUTHORITY TO ADMINISTER DRUGS: CIVIL LIABILITY EXEMPTION

(a) Notwithstanding chs. 441, 447, 448, and 450, a school bus operator validly authorized under ss.343.12 and 343.17

(3) to operate the school bus he or she is operating, any school employee or volunteer, county children with disabilities education board employee or volunteer or cooperative educational service agency employee or volunteer authorized in writing by a private school administrator or private school principal:

1. May administer any drug which may lawfully be sold over the counter without a prescription to a pupil in compliance with the written instructions of the pupil's parent or guardian if the pupil's parent or guardian consents in writing.

2. May administer a prescription drug to a pupil in compliance with the written instructions of a practitioner if the pupil's parent or guardian consents in writing.

2m. Except for epinephrine administered under subdivision 2., may use an epinephrine auto-injector to administer epinephrine to any pupil who appears to be experiencing a severe allergic reaction if, as soon as practicable, the school bus operator, employee or volunteer reports the reaction by dialing the telephone number 911 or, in an area in which the telephone number 911 is unavailable, the telephone number for an emergency medical provider.

2r. Except for glucagon administered under subdivision 2., may administer glucagons to any pupil who appears experiencing a severe hypoglycemic event if, as soon as practicable, the school bus operator, employee, or volunteer reports the event to an emergency medical service provider.

3. Is immune for civil liability for his or her acts or omissions in administering a drug or prescription drug to a pupil under

subd. 1., 2., 2m., or 24, unless the act or omission constitutes a high degree of negligence. This subdivision does not apply to health care professions.

constitutes a high degree of negligence. This subdivision does not apply to health care professions.

(b) Any school district administrator, county children with disabilities educational board administrator, cooperative educational service agency administrator, public or private school principal or private school administrator who authorizes an employee or volunteer to administer a drug or prescription drug to a pupil under part (a) is immune from civil liability for the act of authorization unless it constitutes a high degree of negligence.

(3) EMERGENCY CARE: CIVIL LIABILITY EXEMPTION Any school bus operator validly authorized under ss.343.12 and 343.17(3) to operate the school bus he or she is operating and any public or private school employee or volunteer, county children with disabilities education board employee or volunteer or cooperative educational service agency employee or volunteer, other than a health care professional, who in good faith renders emergency care to a pupil of a public or private school is immune from civil liability for his or her acts or omissions in rendering such emergency care. The immunity from civil liability provided under this subsection is in addition to and not in lieu of that provided under s.895.48(1).

(4) WRITTEN POLICIES Any school board, cooperative educational service agency or governing body of a private school whose employees or volunteers may be authorized to administer drugs or prescription drugs to pupils under this section shall adopt a written policy governing the administration of drugs and prescription drugs to pupils. In developing the policy, the school board, board agency or governing body shall seek the assistance of one or more appropriate health care professionals who are employees of the school board, agency, or governing body or are providing services or consultation under s. 121.02(1)(g). The policy shall include procedures for obtaining and filing in the school or other appropriate facility the written instructions and consent required under subdivision (2)(a), for the periodic review of such written instructions, for the storing of drugs and prescription drugs, for record keeping and for the appropriate instruction of persons who may be authorized to administer drugs or prescription drugs to pupils under this section.

(5) EXEMPTION

No employee except a health care professional may be required to administer a drug or prescription drug to a pupil under this section by any means other than ingestion.

History: 1983 a. 334; 1985 a. 146 s. 8; 1985 a. 218; 1987 a. 14, 399; 1989 a. 56, 102, 105; 1991 a. 103; 1997 a. 164; 1999 a. 56, 126; 2001 a. 16, 83.

WHAT IS AN ALLERGY?

The function of the immune system is to recognize foreign invaders of the body and respond defensively. People with allergies have over-reactive immune systems that target otherwise harmless elements of their diet and the environment. For example, during an allergic reaction to food, the immune system recognizes a specific food protein as foreign. This initiates a sequence of events in the cells of the immune system resulting in the release of chemical mediators such as histamine. These chemical mediators trigger inflammatory reactions in the tissues of the skin (itching, hives, rash), the respiratory system (cough, difficulty breathing, wheezing), the gastrointestinal tract (vomiting, diarrhea, abdominal pain), and the cardiovascular system (decreased blood pressure, heartbeat irregularities, shock). When symptoms are widespread and systemic, the reaction is termed **anaphylaxis**, a potentially life threatening event that requires immediate treatment.

Immune system allergies are mediated by the antibody immunoglobulin E (Ig-E). IgE is produced by B-cells, a specialized white blood cell, after the individual is exposed to the allergen. This is called sensitization. The sensitization may not be recognized by the individual. The Ig-E antibody binds to the surface of mast cells or basophils. When the individual is again exposed to the allergen, the Ig-E binds the allergen and activates the mast cells. The mast cells release the mediators of anaphylaxis. The most well known mediator is histamine (Figure 1). This is called the early phase reaction.

The secretion of the inflammatory mediators causes a local inflammatory response as well as attracts other cells. These cells become activated and release more mediators stimulating and enhancing the inflammatory response. This is called the late phase reaction. It is delayed 2-4 hours and can last up to 24 hours after the early phase reaction. The combination of an early phase reaction and late phase reaction is called a biphasic response (Figure 2).

Allergy Facts

1. Allergic diseases affect more than 20% of the U.S. population.
2. Food allergies are increasing in Western countries. Hypersensitivity to foods affects 2-8% of young children and 2% of adults in Westernized countries.
3. Food induced anaphylaxis is the leading cause of anaphylaxis in the U.S.
4. Food allergy affects 2.7-5.4 million Americans.
5. Although many foods have been identified as causes of anaphylaxis, the 8 most common allergens are: peanut, tree nuts, shellfish, fish, dairy (milk and cheese), egg, wheat, and soy. A recent study demonstrated that peanut and tree nuts were responsible for 92% of all food related anaphylaxis.
6. The prevalence of food dependent exercise induced anaphylaxis is increasing. There are two types: reactions following the ingestion of specific foods and reactions following the ingestion of any food. A reaction develops when the individual exercises within 2-4 hours after ingesting the food. The reaction does not occur if the individual ingests the food and does not exercise or exercises several hours after ingesting the food. There is a 2:1 female to male ratio and 60% occurred in individuals less than 30 years old. A recent study of exercise induced anaphylaxis found that 54% of the cases had food as a factor in the development of the reaction.
7. There are approximately 150-200 deaths each year related to food allergies.
8. The vast majority of food induced anaphylaxis occurs outside the individual's home.
9. The only current available treatment for food allergy is elimination of the allergen from the diet and strict avoidance of the allergen.
10. A major source of stress for parents of children with food allergies revolves around school. Schools are generally unprepared for food-allergic children.
11. The frequency of anaphylaxis in people with asthma is the same as the frequency of anaphylaxis in the general population. However, individuals with asthma and allergies to known anaphylaxis causing allergens may have a more severe reaction. One study demonstrated a 14 fold increased risk of anaphylaxis in patients with asthma. Asthma has been a major component of fatal reactions in children and for most fatal reactions to food. Activation of asthma may occur as a component of the anaphylactic reaction.
12. Individuals who have a severe reaction tend to have had a previous severe reaction. However, some individuals with a mild previous reaction can develop fatal or near fatal anaphylaxis. The severity of anaphylaxis is very unpredictable.
13. The incidence of food induced anaphylaxis varies by regions of the world and the population's dietary pattern. In Italy, milk and seafood are most common. In the U.S., peanut and tree nuts are the most common cause of fatal reactions while milk was the most common cause of a reaction in a review of day cares and schools.
14. The incidence of anaphylaxis for all types is experiencing an upward trend in the U.S.
15. The length of time to onset of the symptoms of anaphylaxis is a good indicator of the severity of the reaction. The faster the onset of the symptoms the more severe the reactions.

16. The median interval to fatal collapse from allergen ingestion in food allergic individuals is usually 25-35 minutes (range 10 min. to 6 hrs.). The same interval in drug allergic patients is 5 minutes and in sting allergic patients it is 12 minutes.
17. 25% of students who had a severe food allergy reaction in school had no previous life-threatening food allergy diagnosis.
18. The incidence of latex allergy is on the increase. Between 1988 and 1993, the FDA received 1100 reports of latex anaphylaxis that included 15 deaths. Latex sensitivity has been documented in individuals with spina bifida (67%), congenital urinary tract problems, multiple surgeries (6.5%), and health care workers (8-17%). The incidence of latex sensitivity in the general population is between 1% and 6%.
19. The incidence of anaphylaxis to insect stings in the general population is estimated to be between 0.5% and 5%. That is, between 1.36 million and 13.6 million Americans are affected.
20. Reactions to insect stings occur with the greatest frequency in those who are highly exposed: children, men, outdoors workers, and sportsmen.
21. The estimates of anaphylaxis currently available in the literature are greatly affected by under-reporting.
22. Peanut or tree nut allergy affects about 3 million Americans or 1.1% of the population.
23. A 5-year study of anaphylactic reactions outside the hospital found that food allergy was the most common cause.
24. The majority of fatal reactions in food induced anaphylaxis occurred in individuals between 11 and 21: peanuts and tree nuts accounted for 90%.
25. The food provoking an anaphylactic reaction may be a contaminant (known or unknown) in the food product. The contaminant may be introduced at the time of food product production or preparation.
26. A recent review by the FDA found that 25% of processed foods that were not intended to contain peanuts, milk, or egg produced in plants making other food products containing peanuts, milk, or egg were contaminated with these allergens. The labels did not identify peanuts, milk, or egg as ingredients.

U.S. Population At Risk for Anaphylaxis

Subtype	Estimate* %	Estimate Millions	Revised** Estimate %	Revised Estimate Millions	Annual Deaths
Food	1-2	2.7-5.4	0.76	0.001- 2.07	100
Drugs					
PCN#	0.7-10	1.9-27.2	0.7-10	1.9-27.2	400
RCM##	0.22-1	0.022-0.1	0.22-1	0.022-0.1	900
Latex	1-6	2.7-16.3	NA	0.00022	3
Insect Stings	0.5-5	1.4-13.6	0.32-5	1.36-13.6	40-100

*Based on estimates of people who are allergic not specifically anaphylactic

*Based on epidemiologic studies measuring anaphylaxis in the general population

#PCN = Penicillin, ## RCM = radiocontrast media (xray dye)

What is anaphylaxis?

Anaphylaxis is a life threatening medical condition occurring in allergic individuals after exposure to their specific allergens. It is a medical emergency requiring immediate action to prevent a fatal outcome. Anaphylaxis refers to a collection of symptoms affecting multiple organ systems in the body. These symptoms may include one or more of the following:

Organ System	Signs and Symptoms	Incidence
Skin	Urticaria (hives), angioedema (similar to hives, more difuse swelling)	88%
	Flushed	46%
	Pale skin, cyanosis (blue lips and mouth area)	4.5%
	Pruritis without rash (itching; especially lips, tongue, mouth or throat)	
Respiratory	Dyspnea (shortness of breath), wheezing	47%
	Upper airway edema	56%
	Rhinitis (coughing, headache, itching, runny nose, impaired smell, sneezing, stuffy nose, tearing eyes, sore throat, wheezing)	16%
	Throat tightness or closing	
Gastrointestinal	Nausea, vomiting, diarrhea, cramping abdominal pain	30%
	Difficulty swallowing	
Cardiovascular	Dizziness, syncope (fainting or loss of consciousness), hypotension (low blood pressure)	33%
	Substernal chest pain	6%
Central nervous	Headache	15%
	Seizure	1.5%
	Change in mental status (no longer orientated)	

The onset of symptoms after exposure to the allergen is variable. Symptoms commonly present within seconds or minutes after exposure but can be delayed for several hours. The duration of anaphylaxis may be longer than 24 hours or it may recur after initial resolution. The most dangerous symptoms include difficulty breathing and a dramatic drop in blood pressure (shock). The most common cause of anaphylaxis is food allergens.

Anaphylaxis that has an early and late phase is said to be biphasic. Biphasic anaphylaxis occurs in 5-20% of all anaphylaxis reactions. The biphasic pattern occurs in 25-30% of anaphylaxis caused by food allergens. The individual who has a biphasic pattern may respond quickly to the initial treatment but the delayed response does not respond to epinephrine or steroids. Individuals who experience food related anaphylaxis may have their symptoms resolve after initial treatment but are at the greatest risk to redevelop anaphylaxis if not observed for a biphasic reaction. Biphasic anaphylaxis requires repeated doses of epinephrine and prolonged medical support and observation. **It is imperative that following the administration of epinephrine that the student be transported by the emergency medical services to a hospital familiar with the treatment of children even if the symptoms appear to have resolved.** Individuals experiencing anaphylaxis, especially if related to food, should be observed in a hospital emergency department for a minimum of 4-6 hours after resolution of the initial symptoms to observe for a possible biphasic reaction. If a biphasic reaction does occur, intensive medical care may be required and can easily be provided.

Prevention is the mainstay of treatment of allergen induced anaphylaxis. Elimination and/or strict avoidance are the most effective methods of prevention. This works well if the student's allergies have been previously identified. Unfortunately, an individual's first reaction after sensitization to the allergen may be anaphylaxis and it may occur at school. Education and preparation of school staff is thus required. An understanding of allergen induced anaphylaxis allows prompt recognition of the onset of symptoms and the method of initial treatment.

The response to anaphylaxis no matter what the cause must be immediate. Recognition or suspicion that the student is beginning to have an anaphylactic response requires the immediate administration of epinephrine. The student may lay down with their legs elevated. This helps maintain their blood pressure. The emergency medical response should then be activated. Epinephrine should be re-administered as necessary. Studies have demonstrated that fatalities or bad outcomes are related to not using epinephrine or DELAYING the use of epinephrine. In many instances of fatal anaphylaxis the initial symptoms of anaphylaxis were mistaken for asthma and delayed the administration of epinephrine.

Onsite medical personnel should be available to respond to allergen induced anaphylaxis. A safe school environment can be provided for students with allergen induced anaphylaxis with ongoing training of unlicensed personnel if nursing staff cannot be immediately available.

Children with allergen induced anaphylaxis and their families

Raising a child with allergen induced anaphylaxis is challenging. Parents must ensure strict allergen avoidance and be on constant alert to implement an emergency medical plan at any moment. In the individual with food allergies, this also requires an understanding of food labeling; a challenge in itself. These are only some of the challenges that a family of an individual with allergen induced anaphylaxis faces every day. With time, support, and education, parents become skilled and are well prepared to keep their children safe. Perhaps the greatest challenge that parents face is finding a balance between safe and what is normal when meeting the needs of their children. The balance works well until it is time to share the care of that child with others. It is at this time the balance shifts and parents must work to reestablish it.

Parents of children with allergies have crafted ways to keep their children safe in a world that is not allergic friendly. As their children grow and their world expands, so do the demands for the parents to readjust their own thinking and strategies for maintaining a normal but safe environment for their children. The threat to this balance is never greater than when a child begins school. The responsibility for keeping their child safe is now being shared with unfamiliar people, some knowledgeable about allergen induced anaphylaxis and supportive of families, others not. Some schools may have adequate infrastructure whereas others have little ability to deal with medical emergencies. Some schools are well staffed, while others have limited staffing with school environments containing the very allergens (such as foods) that parents have worked so diligently to avoid.

Parents are faced with the reality that if their child has a severe allergy the child is at greatest risk for a life threatening and potentially fatal allergic reaction outside the home. Students spend 50% of their waking time at school and foods containing allergens are commonly found in schools. Students are at a high risk for developing a life threatening allergic reaction while at school. The only way to provide a safe and healthy learning environment for these children is for schools to partner with parents, tap into their knowledge and expertise and develop a comprehensive approach that will ensure the safety and health of each child with severe allergies.

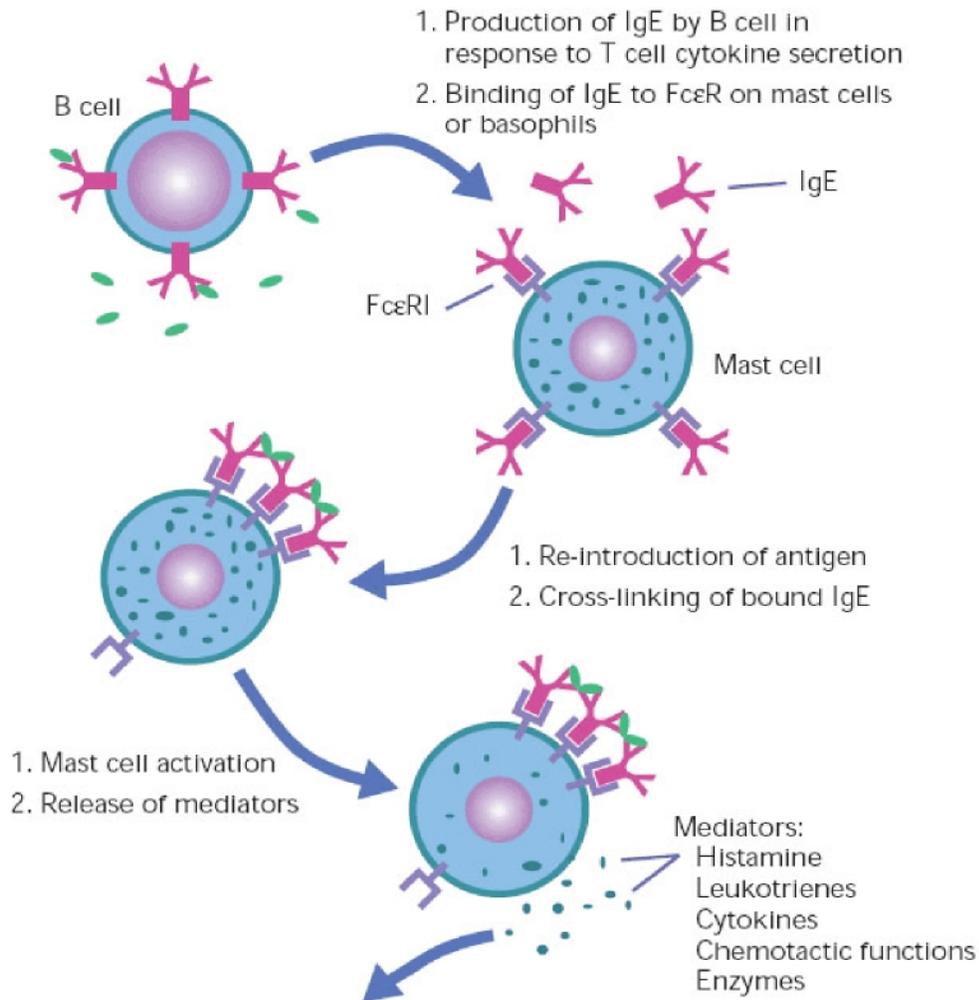
With this approach, schools can help parents and their children make the very necessary transition of moving from the safety of their home environment into the expanding world of a school. When done well, this is one of the greatest lessons a student can learn; they are safe in a world outside of their own home. The psychological impact of this cannot be overemphasized. The mission of the School District of Elmbrook is to educate and inspire every student to think, to learn, and to succeed. A child who feels safe in their school will think, learn, and succeed; one who feels unsafe, will not.

Schools can provide invaluable resources to children with allergies and their families by helping children feel accepted within the school community rather than ostracizing them by making them feel different. It can be as simple as providing them with food that is safe to eat without making them stand out. They can teach children to:

1. Keep themselves safe
2. Ask for help
3. Learn how to trust others
4. Develop healthy and strong friendships
5. Acquire social skills
6. Accept more responsibility
7. Improve their self-esteem
8. Increase their self-confidence

FIGURE 1

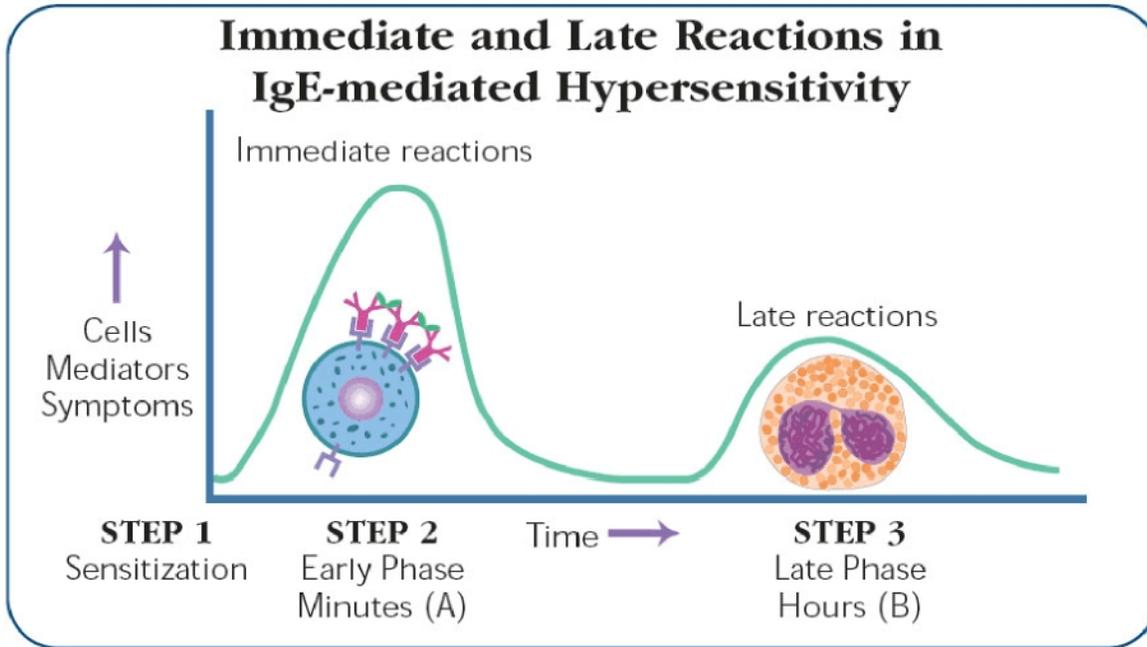
Immediate Hypersensitivity Reaction



Responses of target organs

Bronchi Constriction	Intestines Hypermotility	Blood vessels Vascular leakage (tissue edema)
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FIGURE 2



- A) Immediate hypersensitivity reactions occur within minutes of exposure to allergen in sensitized individuals. With repeat exposure to allergen, multiple IgE-FcεR-complexes are cross-linked, resulting in immediate hypersensitivity reactions (i.e., mast cells degranulate releasing histamine, leukotrienes, cytokines, and proteases).
- B) Late reactions begin 2 to 4 hours after exposure to allergen and can last for 24 hours before subsiding. Inflammatory leukocytes (e.g., neutrophils, basophils, eosinophils) are involved but the late response is primarily mediated by eosinophils in atopic individuals. These inflammatory cells release cytokines and chemokines during the response.

PLANNING FOR THE INDIVIDUAL STUDENT: ENTRY INTO SCHOOL

Prior to entry into school (or, for a student who is already in school, immediately after the diagnosis of a life-threatening allergic condition), the parent/guardian should meet with the school nurse assigned to the student's building to develop an Individualized Health Care Plan (IHCP). The parent/guardian should work with the school to create a strategy for management of a child's allergy.

The parent/guardian shall provide the following:

- Licensed provider documentation of allergic disease with potential anaphylaxis.
- Licensed provider order for epinephrine by auto-injector as well as other medications needed. Medication orders must be renewed at least annually and it is recommended that the order be from an asthma and allergy specialist.
- Parent/guardian's signed consent to administer all medications.
- Parent/guardian's signed consent to share information with other school staff.
- A minimum of two up-to-date EpiPens (More may be necessary based on the student's activities and travel during the school day).
- The type of allergies (e.g., to milk, tree nuts, latex, insect stings).
- Description of the student's triggers and warning signs, including typical responses during previous allergic reactions.
- A description of the student's emotional response to the condition and need for support.
- Name/telephone number of the student's primary care provider and allergist.
- Method to reach parent/parent designee should an emergency occur, e.g., telephone, cell phone, beeper.
- Age-appropriate ways to include a student in planning for care and implementing the plan.
- Assessment for self-administration (It is important that students take more responsibility for their food allergies as they grow older and are developmentally ready to accept responsibility).
- Parent/guardian's interest in participating in the training/orientation in the student's classroom.

The school nurse will:

- Initiate an IHCP based on the information provided by the parent and/or physician. The plan shall include the student's name, method of identifying the student, specific offending allergens, warning signs of reactions and emergency treatment. The IHCP should be signed by the parent.
- Ensure that appropriate adults should know where the IHCP is (e.g., in the classroom, cafeteria, etc.), located.
- Based on the student's age, class, etc., identify who will be informed of the student's IHCP. (These may include, but not limited to, the principal or designee, classroom teacher, student, food services director, counselor, physical education teacher, custodian, etc.).
- Assist the parent in determining the age appropriateness for the student to carry his/her epinephrine.

MULTI-DISCIPLINARY TEAM APPROACH

The school nurse, collaborating with the building principal, and parent/guardian, shall determine the best way to promote a multi-disciplinary approach to plan for the care of the student with a life-threatening allergic condition. The school nurse may meet individually with staff members to assist them in preparing for their responsibilities. If a meeting is scheduled, prior to the meeting the nurse will share those parts of this document that pertains to each staff member, e.g., Introduction, What Is a Food Allergy, Role of Specific Staff, etc.

The team may include but is not limited to:

- Administrative representative
- Food service director/staff
- Teachers and specialists (e.g., art, music, science, computer, family, and consumer sciences)
- School counselor
- Coaches and physical education teachers
- Custodian
- Bus company safety representative
- Local EMS
- Other learning support staff and aides based on the student's curriculum and activities
- Student with an allergy (if age appropriate)
- The school nurse may meet individually with staff members to assist them in preparing for their responsibilities

The school nurse will provide an overview of the allergy, anaphylaxis and the student's Individual Health Care Plan

The following questions should be considered and responsibility for implementation assigned:

Cafeteria protocols/Guidelines

- What is the process for identifying students with life-threatening allergies?
- Is there a need for an allergen free table?
- Which personnel will have the responsibility for cleaning the tables, trays, etc.?
- What type of cleaning solution should be used?
- Who will provide training for cafeteria staff?
- Have the cafeteria monitors been informed?

Classroom Protocols/Guidelines

- Have all teachers, aides, volunteers, substitutes, (via teacher's sub-folders) and students been educated about allergies?
- Have all parents/guardians of students in the class been notified that there is a student with a life-threatening food allergy and what foods must not be brought to school?
- Are there guidelines for allowable foods for lunch, snacks, parties, etc.?
- If not, who shall establish these guidelines?
- Is there an allergen free table/desk in the student's classroom?
- What are the cleaning protocols for this area?
- What type of cleaning solution should be used?
- Is there an understanding that classroom project materials containing the allergen may not be used?
- Have the students been taught hand-washing techniques before and after eating?

Environmental Protocols/Guidelines

- What is the school policy for the presence of animals?
- Is there an awareness of multiple and related allergies, e.g., latex?
- What are the cleaning protocols for various areas of the school where allergens may be found?

Field Trip/School Bus Protocols/Guidelines

- How will the school nurse/health room staff be notified about field trips in a timely manner?

- How will the IHCP be communicated to responsible personnel on field trips, the school bus and after school programs? *(All issues relating to the classroom and environment should be reviewed as appropriate for these situations).*
- Is the location of the field trip assessed to be safe for the student with allergies? Who will be trained to administer the epinephrine should an emergency occur? Is there a need for a registered nurse or aide to accompany the student?
- Should the student with allergies be seated near the driver, teacher or advisor?
- Is there a need for an assistant or parent to accompany the child on the field trip?
- Is there a no-food policy for the bus? Is it enforced?
- Do personnel have a system for communicating (cell phone, walkie-talkies, etc.)?

Custodial Protocols/Guidelines

- What cleaning solution is used?
- How often are the areas cleaned?

Emergency Response Protocols/Guidelines

- Have all school personnel received education on life-threatening allergic conditions?
- What specific personnel will be trained in the administration of epinephrine?
- Who will do the training?
- Will the parents be involved in the training?
- When will this training occur?
- What is the content of the training?
- How often will it be repeated during the school year?
- Have local emergency medical services been informed and has planning occurred to ensure the fastest possible response?
- Does the local EMS carry epinephrine and are they permitted to use it?
- In what unlocked area will epinephrine be stored?
- Where is the back-up supply?
- Is it appropriate for this student to carry his/her EpiPen?

IMPLEMENTING THE PLAN

Protecting a student from exposure to offending allergens is the most important way to prevent life-threatening anaphylaxis. Most anaphylactic reactions occur when a child is accidentally exposed to a substance to which he/she is allergic, such as foods, medicines, insects and latex.

Accidental ingestion of the offending allergen occurs most often at school. This is understandably a high risk setting due to such factors as a large number of students, increased exposure of the food allergic student to food allergens, as well as cross contamination of tables, desks, and other surfaces. Other high risk areas and activities for the student with allergies include: the cafeteria, food sharing, hidden ingredients, craft, art and science projects, bus transportation, fundraisers, bake sales, parties and holiday celebrations, field trips, and substitute teaching staff being unaware of the food allergic student.

Ingestion of the food allergen is the principal route of exposure; however, it is possible for a student to react to tactile (touch) exposure or inhalation exposure. The amount of food needed to trigger a reaction depends on multiple variables. Each food allergic person's level of sensitivity may fluctuate over time. Not every ingestion exposure will result in anaphylaxis, though the potential always exists. Another variable that has been recently investigated is how the food is prepared. Raw egg is more allergenic than cooked egg. Roasted peanuts are more allergenic than boiled or fried. (Virtually all peanut products in the U.S. are roasted). In addition, the symptoms of a food allergy reaction are specific to each individual. Milk may cause hives in one person and anaphylaxis in another.

Success in managing food allergies depends on allergen avoidance techniques. Scrupulous interpretation of ingredient statements on every item with every purchase is vital to prevent accidental exposure. Unfortunately, this is difficult due to manufacturing processes. Accidental exposure occurs due to cross contamination of equipment, omission of ingredients from the ingredient statement, substitution of ingredients, scientific and technical terminology (e.g., sodium caseinate for milk protein), nonspecific food terminology (e.g., natural ingredients) and disregarding precautionary allergen statements, such as "may contain".

Procedures shall be in place at school to address allergy issues in the classrooms and gym, outdoor activity areas, school buses, field trips, and before and after school activities.

CLASSROOMS

- Teachers and other staff who work with students must be familiar with Individual Health Care Plan (IHCP) of students in their classes and respond to emergencies as per the emergency protocol documented in the IHCP.
- In the event of an allergic reaction (where there is no known allergic history), the school nurse should be called and the school's Emergency Response Plan activated. The emergency medical services should be called immediately.
- The classroom should have easy communication with the school nurse by such means as functioning intercom, walkie-talkie or cell phone.
- Information should be kept about students' allergies on the student information software. These allergens should not be used at all for class projects, parties, holidays and celebrations, arts, crafts, science experiments, cooking, snacks, presentations or other purposes.
- All students and their parents, teachers, aides, substitutes, and volunteers should be educated about the risk of allergies.
- For rewards, non-food items should be used instead of candy.
- For birthday parties, consider a once-a-month celebration, with a non-food treat.
- A parent or guardian of a student with allergies is responsible for providing classroom snacks for his/her own child. These snacks should be kept separate from the other students' food items.
- It is the responsibility of groups using school facilities to do their own clean up.
- Sharing or trading food in the class should be discouraged.
- Proper handwashing technique by adults and children should be encouraged before and after the handling/consumption of food.
- If an animal is present in the classroom, special attention must be paid to the ingredients in their food as many animal feeds contain peanuts. (See Board Policy referring to animals in schools).
- In school settings where food is served:
 - a. A "peanut-free" table should be established and maintained as an option for students with peanut allergies, as this is an extremely potent allergen and often a hidden ingredient. These tables should be designated by a sign or a universal symbol and it will be the responsibility of the principal or designee to take reasonable precautions so that these areas are not contaminated.

- b. Other Life Threatening Allergen (LTA)–free tables should be provided and maintained as needed.

SCHOOL FIELD TRIPS

- The school nurse should be consulted regarding field trips and the safety of the student with life-threatening allergies.
- Protocols for field trips should include timely notification to the nurse.
- Medications including epinephrine auto-injector and a copy of the student's IHCP must accompany the student, teacher or field trip organizer.
- A cell phone or other communication device must be available on the trip for emergency calls.
- In the absence of accompanying parents/guardian or nurse, another individual must be trained and assigned the responsibility of caring for and for handling any medical emergency. The adult carrying the epinephrine should be identified and introduced to the student as well as the other chaperones.
- Field trips need to be chosen carefully; no student should be excluded from a field trip due to risk of allergen exposure.

SCHOOL BUS

- Eating food should not be permitted on school buses.
- With parental permission, school bus drivers will be provided with the IHCP of all students with LTAs.
- School bus drivers shall be educated by appropriate personnel about risk reduction procedures, recognition of allergic reaction, and implementation of bus emergency plan procedures.
- The school bus must have a cell phone or other means of communication for emergency calls.

GYM AND RECESS

- Teachers and staff responsible for gym or recess supervision should be educated by appropriate personnel to recognize and respond to exercise-induced anaphylaxis, as well as anaphylaxis caused by other allergens.
- Staff in the gym, playground and other sites used for recess should have a walkie-talkie, cell phone or similar communication device for emergency communication.
- If for safety reasons medical alert identification (i.e. ID bracelet) needs to be removed during specific activities, the student should be reminded to replace this identification immediately after the activity is completed.

BEFORE OR AFTER SCHOOL ACTIVITIES

- Post instructions for accessing Emergency Medical Services (EMS) in all activity areas.
- After school activities sponsored by the school must be consistent with school policies and procedures regarding life-threatening allergies.
- Identify who is responsible for keeping epinephrine by auto injector during sporting events.
- If for safety reasons medical alert identification, (ID bracelet) needs to be removed during specific activities, the student should be reminded to replace this identification immediately after the activity is completed. With written parental permission, the coach or adult staff member in charge will be provided with the IHCP of students who have life-threatening allergies.
- If there is a food distribution, including bake sales held on school grounds, consideration should be given to students with LTA. Food should be tightly wrapped or sealed. The display table should be washed after use.

DISTRICT FOOD SERVICE DIRECTOR

- Be prepared to discuss: menus (breakfast and lunch), a la carte items, recipes, food products and ingredients, food handling practices, cleaning and sanitation practices, and responsibility of various staff.
- Establish communications and training for all school food service staff and related personnel at the student's school.
- Be prepared to make food ingredient lists used in food production and service available.
- Maintain contact information with vendors and purveyors to access food content information.
- Understand and implement the laws protecting students with food allergies as they relate to food services.

Food Label Reading

- Read all food labels for potential food allergens. (Manufacturers can change ingredients).
- All food service staff should be trained how to read product labels and recognize food allergens.

There are eight major food allergens: milk, eggs, peanuts, tree nuts (such as walnuts and almonds), soy, wheat, fish, and shellfish. These eight foods are the most common food allergens and cause more than 90 percent of all food allergic reactions. Peanuts and tree nuts alone account for 92% of severe and fatal reactions. Among children, allergies to milk and eggs are most common. However, individuals can be allergic to any food. Some children may be allergic to more than one food.

Reading food labels to identify these ingredients in the products used by a school's food service department is an essential and ongoing process in prevention. As food manufacturers continuously refine and improve food products, food labels must be read.

In the school cafeteria, personnel should know their products and ingredients by carefully reading labels. Some students may react to a minute trace of these ingredients, so complete elimination is essential.

Many food manufacturers have consumer response departments to provide information about their products. If there are any questions about a product ingredient, call the consumer hot line number listed on most products' food labels. Be specific. (For example, "Does your product include peanuts? Is there a risk of cross-contamination with peanuts in your food manufacturing process?" etc.).

Knowing how to read a food label helps avoid problems caused by ingredients in foods. Refer to Appendix B: *Guidelines on Reading Food Labels*.

Food Handling

- Cross Contamination of a food allergen poses a serious risk to a child with food allergies.
- Training for all food service personnel about cross contamination should be part of the regularity scheduled sanitation program.

Cross Contamination

- Cross contamination is the cooking or serving of different foods with the same utensils and surfaces. When preparing and serving food, it is critical to make sure that food preparation and serving utensils are not exposed to allergens and then used for another food. Food production surface areas should be cleaned before, during, and after food preparation. Some examples of cross contamination would be:
 - a. Lifting peanut butter cookies with a spatula and then using the same spatula to lift sugar cookies.
 - b. Using a knife to make peanut butter sandwiches, wiping the knife and then using the same knife to spread mustard on a peanut allergic child's cheese sandwich.

Cleaning and Sanitation

Any surfaces used for the preparation and service of meals need to be properly cleaned and sanitized. For preparation areas, the work surface and all utensils and pots and pans need to be washed with hot soapy water (soap is used because it deactivates the protein that causes the allergy). The work surface areas, counters and cutting surfaces, need to be cleaned thoroughly between uses. The use of the color-coded cutting board system implemented for food safety can also help minimize risk of cross contamination when preparing foods for children with food allergies.

- After using a food slicer to slice cheese, the slicer must be cleaned thoroughly before being used to slice other foods to prevent contamination with cheese protein.
- Wash trays or cookie sheets after each use as oils can seep through wax paper or other liners and contaminate the next food cooked on the sheet or tray.

In the Cafeteria

- Consider creating a peanut-free table (same practice applies for other allergies).
- Train cafeteria monitors to take note of the situation surrounding a child with allergies and intervene quickly to help prevent trading of food or bullying.
- All students eating meals in the cafeteria should be encouraged to wash their hands.
- After each meal service, tables should be washed with dedicated cleaning supplies.

Food for Field Trips

- Clearly specify any special meals needed before the field trip.
- Avoid meals that may be food allergy related.
- Package meals appropriately to avoid cross-contamination.

RESPONSE TO EMERGENCIES

Every school shall have an IHCP that provides a written outline of emergency procedures for managing life threatening allergic reactions. This plan shall identify personnel who will:

Administer the epinephrine.
Notify the emergency medical services (call 911).
Notify the parent/guardian.
Notify school nurse.
Notify school administration.
Meet emergency medical responders at school entrance.
Direct emergency medical responders to site.
Assess the emergency at hand.
Remain with the student.
Activate the emergency response team (building specific, system-wide).
Refer to the student's IHCP.
Notify student's primary care provider and/or allergy specialist.
Attend to student's classmates.
Manage crowd control.
Accompany student to emergency care facility.
Assist student's re-entry into school.

RETURNING TO SCHOOL AFTER A REACTION

Students who have experienced an allergic reaction at school need special consideration upon their return to school. The approach taken by the school is dependent upon the severity of the reaction, the student's age and whether their classmates witnessed it. A mild reaction may need little or no intervention other than speaking with the student, parents, and/or staff and re-examining the IHCP.

In the event that a student has a moderate to severe reaction, the following actions may be taken.

- Obtain as much accurate information as possible about the allergic reaction.
- Identify those who were involved in the medical intervention and those who witnessed the event.
- Meet with the adults to discuss what was seen and dispel any rumors.
- Provide factual information. Although the school may want to discuss this with the parents, factual information that does not identify the individual student can be provided to the school community without parental permission (e.g., a letter from the principal to parents and teachers that doesn't name names but reassures them the crisis is over, if appropriate).
- If an allergic reaction is thought to be from a food provided by the school food service, request assistance of the Food Service Director to ascertain what potential food item was served/consumed. Review food labels from Food Service Director and staff.
- Agree on a plan to disseminate factual information and review knowledge about food allergies to schoolmates who witnessed or were involved in the allergic reaction, after both parents and the student consent.
- Explanations shall be age appropriate.
- Review the IHCP, or if a student does not have an IHCP then consider initiating one.
- Amend the student's IHCP to address any changes that need to be made.
- Review what changes need to be made to prevent another reaction; do not assign blame.

SPECIAL CONSIDERATON FOR THE STUDENT

The student and parent(s) shall meet with the nurse/staff who were involved in the allergic reaction and be reassured about the student's safety, what happened and what procedural changes will be made to prevent another reaction.

If a student demonstrates anxiety about returning to school, a plan involving appropriate staff would be developed and followed until his/her anxiety is alleviated. If a child has a prolonged response to an anaphylactic event, strategies should be reviewed and clinical intervention may be recommended. Collaboration with the student's medical provider would be indicated to address any medication changes.

It is important to keep in mind that a student will continue to need to access help if another allergic reaction should occur; therefore, make sure a student feels comfortable enough to seek help if needed. You do not want a student to withhold information from staff out of embarrassment or because of perception of intimidation. Other students with food allergies in the school system may be in particular need of support.

IN THE EVENT OF A FATAL ALLERGIC REACTION

In the rare but plausible event of a fatal reaction the school's crisis plan for dealing with the death of a student should be implemented. Adults with knowledge of food allergies should be available to answer questions that may come up about food allergies. Organizations such as Asthma and Allergy Foundation of America (AAFA) and Food Allergy and Anaphylaxis Network (FAAN) may be able to provide resources.

APPENDIX A

RESPONSIBILITIES OF THE STUDENT WITH ALLERGIES/ANAPHYLAXIS

- Take as much responsibility as possible to avoid allergens.
- Do not trade or share foods.
- Wash hands before and after eating.
- Learn to recognize symptoms of an allergic reaction.
- Promptly inform an adult as soon as accidental exposure occurs or symptoms appear.
- Take more responsibility for your allergies as one gets older (refer to parent responsibilities outline).
- Develop a relationship with the school nurse and/or another trusted adult in the school to assist in identifying issues related to the management of the allergy in school.

RESPONSIBILITIES OF THE PARENT/GUARDIANS OF A STUDENT WITH ALLERGIES

- Inform the school nurse of your child's allergies before the child's first day of school (or as soon as possible after a diagnosis).
- Provide the school with a way to contact you (cell phone, beeper, etc.).
- Provide a list of foods and ingredients to avoid.
- Consider providing a medical alert bracelet for your child.
- Provide the school nurse with medication orders from the licensed provider.
- Participate in developing an Individual Health Care Plan with the school nurse.
- Provide the school nurse with at least annual updates on your child's allergy status.
- Provide the school nurse with up-to-date epinephrine auto-injectors and other appropriate medications.
- Discuss with the school nurse the possibility of keeping the epinephrine auto-injector in the classroom with instructions (this can also be taken on field trips).
- Decide if additional epinephrine auto-injectors will be kept in the school, aside from the one in the nurse's office, and if so, where.
- Provide the school nurse with the licensed provider's statement if student no longer has allergies.

Participate in team meetings or communicate with all staff members who will be in contact with the child (preferably before the opening of school) to:

- Discuss implementation of IHCP.
- Establish prevention plan.
- Review prevention and emergency action plans with the team, as needed.
- Determine with child's teacher whether a bag of "safe snacks" should be stored in the classroom so there is always something your child can choose from during an unplanned special event.
- Provide information to your child's classroom teacher that will be shared with parents of the students of the class, so that treats for special occasions are safe for all students.
- Be willing to go on your child's field trips if possible and if requested.

Periodically teach and review with your child to:

- Recognize the first symptoms of an allergic/anaphylactic reaction.
- Know where the epinephrine auto-injector is kept and who has access to the epinephrine.
- Communicate clearly as soon as s/he feels a reaction is starting.
- Carry his/her own epinephrine auto-injector when appropriate.
- Not share snacks, lunches, or drinks.
- Understand the importance of hand-washing before and after eating.
- Report teasing, bullying and threats to an adult authority.
- Take as much responsibility as possible for his/her own safety.

It is important that children take on more responsibility for their food allergies as they grow older and are developmentally ready. Consider teaching them to:

- Communicate the seriousness of the allergy.
- Communicate symptoms as they appear.
- Consider empowering them to refuse foods of which they are unsure.
- Read labels.
- Carry your own epinephrine auto-injector.
- Administer own epinephrine and be able to train others in its use.

Remember, the ultimate goal is that our children eventually learn to help keep themselves safe.

RESPONSIBILITIES OF THE SCHOOL ADMINISTRATION OR DESIGNEE

- Include in the school's emergency response plan a written plan outlining emergency procedures for managing life-threatening allergic reactions. Modify the plan to meet special needs of individual students.
- Facilitate faculty, staff, and parents in implementing all aspects of the LTA program.
- Provide training and education for faculty and staff regarding:
 - Foods, insect stings, medications, latex.
 - Risk reduction procedures.
 - Emergency procedures.
 - How to administer an epinephrine auto-injector in an emergency.
- Provide special training for food service personnel.
- Provide emergency communication devices (two-way radio, intercom, walkie-talkie, cell phone) for all school activities, including transportation, that involve a student with life-threatening allergies.
- Inform parent/guardian if any student experiences an allergic reaction for the first time at school.
- Make sure a contingency plan is in place for the substitute teacher, nurse or food service personnel.
- Have a plan in place when there is no school nurse available.
- Ensure that the student is placed in a classroom where the teacher is trained to administer an epi-pen, if needed.

RESPONSIBILITIES OF THE SCHOOL NURSE OR DESIGNEE

- Prior to entry into school (or, for a student who is already in school, immediately after the knowledge of a diagnosis of a life-threatening allergic condition), meet with the student's parent/guardian and develop an Individual Health Care Plan (IHCP) for the student.
- Assure that the IHCP includes the student's name, photo, allergens, symptoms of allergic reactions, emergency procedures, and signatures.
- Arrange and convene a team meeting (preferably before the opening of school) to develop the plan with staff who come in contact with the student with allergies. This could include, but is not limited to the principal, teachers, specialists, food service personnel, aides, physical education teacher, custodian.
- Familiarize teachers with the IHCPs of their students by the opening of school, or as soon as the plans are written. Other staff members who have contact with students with LTAs should be familiar with their IHCPs on a need-to-know basis.
- After the team meeting remind the parent to review prevention plans, symptoms and emergency procedures with their child.
- Provide information about students with life-threatening allergies and their photos (if consent given by parent) to all staff on a need-to-know basis.
- Conduct inservice training and education for appropriate staff regarding a student's life-threatening allergens, symptoms, risk reduction procedures, emergency procedures, and how to administer an epinephrine auto-injector.
- Educate new personnel as necessary.
- Periodically check medications for expiration dates and arrange for them to be current.
- Discuss with parents the need to keep an epinephrine auto-injector in the classroom containing necessary instructions, and help to arrange if appropriate. This auto-injector can be taken on field trips.
- Arrange periodic follow-up to review effectiveness of the IHCP.

RESPONSIBILITIES OF THE CLASSROOM TEACHER/SPECIALIST

- Receive the IHCP of any student(s) in your classroom with life-threatening allergies.

- Request that the classroom has a functioning intercom, walkie-talkie or other communication device for communication with the school nurse.
- Participate in a team meeting for the student with life-threatening allergies and in-service training regarding:
 - Allergens that cause life-threatening allergies (such as foods, insect stings, medications, latex).
 - Steps to take to prevent life-threatening reactions and accidental exposures to allergens.
 - How to recognize symptoms of the student's life-threatening allergic reaction.
 - Steps to manage an emergency.
 - How to administer an epinephrine auto-injector.
- Keep accessible the student's IHCP with photo in classroom or keep with lesson plan.
- Be sure volunteers, student teachers, aides, specialists and substitute teachers are informed of the student's food allergies and necessary safeguards (see Appendix C).
- Leave information in an organized, prominent and accessible format for substitute teachers.
- Coordinate with parent on providing a lesson plan about food allergies for the class and discuss anaphylaxis in age appropriate terms, with student's permission.
- Educate classmates (consider FAAN.org as a resource) to avoid endangering, isolating, stigmatizing or harassing students with food allergies. Be aware of how the student with food allergies is being treated; enforce school rules about bullying and threats.
- Work with the school nurse to educate other parents about the presence and needs of the child with life-threatening allergies in the classroom. Enlist their help in keeping certain foods out of classroom.
- Never question or hesitate to act if a student reports signs of an allergic reaction.
- Participate with the planning for student's re-entry to school after an anaphylactic reaction.

A. SNACKS/LUNCHTIME

In the classroom, establish procedures to ensure that the student with life-threatening food allergies eats only what s/he brings from home.

Discourage students from sharing or trading snacks.

For the student's safety, encourage the student to take advantage of an eating area in the classroom that is free of the food to which s/he is allergic.

Avoid cross-contamination of foods by wiping down eating surfaces with soap and water before and after eating. Tables should also be washed with soap and water in the morning if an after-school event has been held in the classroom the day before.

Reinforce hand-washing before and after eating.

B. CLASSROOM ACTIVITIES

Avoid use of foods for classroom activities (e.g., arts and crafts, counting, science projects, parties, holidays and celebrations, cooking, or other project(s)).

Welcome parental involvement in organizing class parties and special events. Consider non-food treats.

Use stickers, pencils or other non-food items as rewards instead of food.

C. FIELD TRIPS

Collaborate with the school nurse prior to planning a field trip.

Ensure epinephrine auto-injectors and instructions are taken on field trips.

Ensure that functioning two-way radio, walkie-talkie, cell phone or other communication device is taken on field trip.

Review plans for field trips; avoid high-risk places. Consider eating situations on field trips and plan for prevention of exposure to the student's life-threatening foods.

Know where the closest medical facilities are located, 911 procedures and whether the ambulance carries epinephrine.

Invite parents of a student at risk for anaphylaxis to accompany their child on school trips, in addition to the chaperone. However, the student's safety or attendance must not be conditioned on the parent's presence.

One to two people on the field trip should be trained in recognizing symptoms of life-threatening allergic reactions, trained to use an epinephrine auto-injector, and trained in emergency procedures.

Consider ways to wash hands before and after eating (e.g. provision of hand wipes, etc.).

RESPONSIBILITIES OF THE FOOD SERVICES MANAGER

- Attend the team meeting with appropriate members at the time of the student's registration for entry into school.
- Post the student's IHCP with consent of parent(s).
- Review the legal protections for a student with life threatening allergies.
- Read all food labels and recheck routinely for potential food allergens.
- Train all food service staff and their substitutes to read product food labels and recognize food allergens.
- Maintain contact information for manufacturers of food products (Consumer Hotline).
- Review and follow sound food handling practices to avoid cross contamination with potential food allergens.
- Strictly follow cleaning and sanitation protocol to avoid cross-contamination.
- Set up policies for the cafeteria regarding food allergic students.
- Create specific areas that will be allergen safe.
- Train monitors.
- Enforce hand washing for all students.
- Thoroughly clean all tables, chairs and floors after each meal.
- After receiving a doctor's note, make appropriate substitutions or modifications for meals served to students with food allergies.
- Plan ahead to have safe meals for field trips.
- Avoid the use of latex gloves by food service personnel. Use non-latex gloves instead.
- Provide advance copies of the menu to parents/guardian and notification if menu is changed.
- Have at least two people in the eating area trained to administer epinephrine by auto-injector.
- Have readily accessible epinephrine auto-injector.
- Have a functioning intercom, walkie-talkie or other communication device to support emergencies.
- Take all complaints seriously from any student with a life-threatening allergy.
- Be prepared to take emergency action.

RESPONSIBILITIES OF COACHES AND OTHER ONSITE PERSONS IN CHARGE OF CONDUCTING BEFORE OR AFTER SCHOOL ACTIVITIES

- Participate in team meetings to determine how to implement students Individual Health Care Plan.
- Conduct activities in accordance with all school policies and procedures regarding life-threatening allergies.
- With parent's consent, keep a copy of the IHCP and photo of students with life-threatening allergies.
- Make certain that emergency communication device (e.g. walkie-talkie, intercom, cell phone, etc.) is always present.
- One to two people should be present who have been trained to administer epinephrine auto-injector.
- Maintain a current epinephrine auto-injector provided by parent/guardian in the first aid kit.
- Establish emergency medical procedures with EMS.
- Clearly identify who is responsible for keeping the first aid kit.
- If for safety reasons medical alert identification needs to be removed during specific activities, the student should be reminded to replace this identification immediately after the activity is completed.

APPENDIX B

READING FOOD LABELS

Knowing how to read a food label will help to avoid food allergy problems caused by ingredients in foods. The following terms are “labelese” for common foods. You may find it helpful to keep these lists handy when you order foods. The lists are updated frequently. Contact the Food Allergy Network (www.FAAN.org) for current lists.

Terms that indicate the presence of cow's milk:

Artificial butter flavor
Butter, butter fat, butter oil
Buttermilk
Casein Caseinates (ammonium, calcium, magnesium, potassium, sodium)
Cheese
Cream
Cottage cheese
Curds
Custard
Ghee
Half & Half
Hydrolysates (casein, milk protein, protein, whey, whey protein)
Lactalbumin, lactalbumin phosphate
Lactoglobulin
Lactose
Lactulose
Milk (derivative, powder, protein, solids, malted, condensed, evaporated, dry, whole, low-fat, non-fat, skimmed and goat's milk)
Nougat
Pudding
Rennet casein
Sour cream, sour cream solids
Sour milk solids
Whey (in all forms, including sweet, delactosed, protein concentrate)
Yogurt

The letter “D” on the front label of a product indicates the product may contain cow's milk protein.

Terms that may indicate the presence of milk protein:

Chocolate
High protein flour
Luncheon meat, hot dogs, sausages
Margarine
Natural and artificial flavoring: Simplese®

Terms that indicate the presence of egg protein:

Albumin
Egg (white, yolk, dried, powdered, solids)
Egg substitutes
Egg Nog
Globulin
Livetin
Lysozyme (used in Europe)
Macaroni
Mayonnaise

Meringue
Ovalbumin
Ovomucin
Ovomucoid
Simplese®
Surimi

Terms that indicate the presence of **peanut** protein:

Beer nuts
Cold pressed, expelled, or extruded
Peanut oil
Ground nuts
Mixed nuts
Monkey nuts
Nu-Nuts®
Nut pieces
Peanuts
Peanut butter
Peanut flour

Terms that may indicate the presence of **peanut** protein:

African, Chinese, Indonesian
Thai, and Vietnamese dishes
Marzipan
Natural and artificial flavoring
Egg rolls
Hydrolyzed plant protein
Hydrolyzed vegetable protein
Baked goods
Candy
Chocolate (candies, candy bars)
Nougat
Sunflower seeds

Terms that indicate the presence of **soybean** protein:

Edamame
Hydrolyzed soy protein
Miso
Shoyu sauce
Soy (albumin, flour, grits, milk, nuts, sprouts)
Soy protein (concentrate, isolate)
Soy sauce Soybean (granules, curds)
Tamari
Tempeh
Textured vegetable protein (TVP)
Tofu

Terms that may indicate the presence of **soybean** protein:

Hydrolyzed protein
Natural and artificial flavoring
Vegetable gum
Vegetable starch
Vegetable broth

Terms that indicate the presence of **wheat** protein:

Bran
Bread crumbs
Bulgur
Cereal extract
Couscous
Cracker meal
Durum, durum flour
Farina
Flour (all purpose, enriched graham, high gluten, high protein, pastry, soft wheat)
Gluten
Seitan
Semolina
Spelt
Vital gluten
Wheat (bran, germ, gluten, malt, starch)
Whole wheat berries
Whole wheat flour

Terms that may indicate the presence of **wheat** protein:

Gelatinized starch
Soy sauce
Starch
Hydrolyzed vegetable protein
Modified food starch
Modified starch
Natural and artificial flavoring
Vegetable gum
Vegetable starch

Terms that indicate the presence of **shellfish** protein:

Abalone
Clams (cherrystone, littleneck, pismo, quahog)
Oysters
Prawns
Scallops
Shrimp (crevette)
Snails (escargot)
Squid (calamari)
Mussels
Octopus
Cockle (periwinkle, sea urchin)
Crab
Crawfish (crayfish, ecrevisse)
Mollusks
Lobster (Langouste, langousine, scampo, Coral, tomalley)

Terms that may indicate the presence of **shellfish**:

Bouillabaisse
Fish stock
Natural and artificial flavoring
Seafood flavoring (such as crab or clam extract)

Surimi

Terms that indicate the presence of **corn** protein:

Baking powder
Corn
Corn alcohol
Corn flour
Cornstarch
Corn sweetener
Corn syrup solids
Cornmeal
Grits
Hominy
Maize

Terms that may indicate the presence of **corn** protein:

Food starch
Vegetable gum
Modified food starch
Vegetable starch

APPENDIX C

Checklists for Managing Life Threatening Allergies