



bullying," "emergencies," "life-threatening allergy," "school nurse," and "food allergy and child care." CDC staff reviewed all recommended documents and eliminated sources that were outdated (earlier than 2000), were superseded by more current data or recommendations, in conflict with current standards of clinical and school-based practice, reflected international recommendations not relevant to U.S. schools or ECE programs, or were limited to adult food allergies.

CDC staff relied heavily on the content and references in the 2010 *Guidelines for the Diagnosis and Management of Food Allergy in the United States*.<sup>13</sup> These 2010 guidelines reflect the most up-to-date, extensive systematic review of the literature and assessment of the body of evidence on the science of food allergies. They met the standards of rigorous systematic search and review methods, and they provide clear recommendations that are based on consensus among researchers, scientists, clinical practitioners, and the public. While the 2010 guidelines did not address the management of patients with food allergies

outside of clinical settings (and thus did not directly address the management of food allergies in schools), they were deemed an important source for informing the clinical practice recommendations for managing risks for children with food allergies in the *Voluntary Guidelines for Managing Food Allergies*.

To ensure that recommendations for managing the risk of food allergies were consistent with those recommended for other chronic conditions, CDC staff added search terms that included "school" and "asthma," "diabetes," "epilepsy," "chronic condition," and "management." In particular, they used information from the following three documents: *Students with Chronic Illness: Guidance for Families, Schools, and Students*,<sup>14</sup> *Managing Asthma: A Guide for Schools*,<sup>15</sup> and *Helping the Student with Diabetes Succeed: A Guide for School Personnel*.<sup>16</sup>

CDC staff analyzed best practice documents, state school food allergy guidelines (n = 14), and relevant health and education organizations' position statements for compatibility with the priorities outlined by experts, common themes, and the accuracy and clarity of recommendations or positions based on clinical standards and scientific evidence.

To ensure that these *Voluntary Guidelines for Managing Food Allergies* were compatible with existing federal laws, federal regulations, and current guidelines for schools and ECE programs, CDC solicited expertise and input from the following sources:

- Office of the General Counsel; Office of Safe and Healthy Students, Office of Elementary and Secondary Education; Office for Civil Rights; and Office of Special Education and Rehabilitative Services, U.S. Department of Education (ED).
- Civil Rights Division, U.S. Department of Justice (DOJ).
- Office of the Deputy Assistant Secretary for Early Childhood, Administration for Children and Families, U.S. Department of Health and Human Services (HHS).



In addition to the input from the experts meeting, the analysis of research and practice documents, and the technical advice and assistance provided by regulatory federal agencies, CDC conducted three formal rounds of expert review and comment. During the first round, CDC staff worked with meeting participants and agency partners to get concurrence with recommendations. Second and third round reviews were used to refine the content. Reviewers included participants from the first meeting and additional reviewers added after each round to ensure input from at least one new person who had not previously reviewed the document. In addition to these formal reviews, CDC staff asked for multiple reviews from select experts in food allergy management, schools, and ECE programs to ensure the accuracy of the information and relevance of the recommendations to professional practice. During the review process, CDC staff reviewed and accepted additional references that supported changes made in draft recommendations.

The resulting *Voluntary Guidelines for Managing Food Allergies* include recommendations for practice in the following five priority areas that should be addressed in each school's or ECE program's Food Allergy Management Prevention Plan:

1. Ensure the daily management of food allergies in individual children.
2. Prepare for food allergy emergencies.
3. Provide professional development on food allergies for staff members.
4. Educate children and family members about food allergies.
5. Create and maintain a healthy and safe educational environment.

## Purpose

The *Voluntary Guidelines for Managing Food Allergies* are intended to support implementation of food allergy management and prevention plans and practices in schools and ECE programs. They provide practical information, planning steps, and strategies for reducing allergic reactions and responding to life-threatening reactions for parents, district administrators, school administrators and staff, and ECE program administrators and staff. They can guide improvements in existing food allergy management plans and practices. They can help schools and ECE programs develop a plan where none currently exists. Schools and ECE programs will not need to change their organization or structure or incorporate burdensome practices to respond effectively. They also should not have to incur significant financial costs where basic health and emergency services are already provided.

Although the practices in these guidelines are voluntary, any actions taken for individual children must be implemented consistent with applicable federal and state laws and local policies. Many of the practices reinforce relevant federal laws and regulations administered or enforced by ED, HHS, DOJ, and USDA. How these laws apply case by case will depend upon the facts in each situation. These guidelines also do not address state and local laws or local school district policies because the requirements of these laws and policies vary from state to state and from school district to school district. References to state guidelines reflect support for and consistency with the recommendations in the *Voluntary Food Allergy Guidelines*, but do not suggest federal endorsement of state guidelines. While these guidelines provide information related to certain applicable laws, they should not be construed as giving legal advice. Schools and ECE programs should consult local legal professionals for such advice. Although schools and ECE programs have some common characteristics, they operate under different laws and regulations and serve children with different developmental and supervisory needs. Different practices are needed in each setting to manage the risk of food allergies. These guidelines include recommendations that apply to both settings, and they identify how the recommendations should be applied differently in each setting when appropriate. These guidelines do not provide specific guidance for unlicensed child care settings, although many recommendations can be used in these settings.

If a school or ECE program participates in the Child Nutrition Programs (CNPs), then USDA Food and Nutrition Service is the federal agency with oversight of the meals served. The CNPs include the National School Lunch and School Breakfast Programs, the Special Milk Program, the Fresh Fruit and Vegetable Program, the Child and Adult Care Food Program, and the Summer Food Service Program. Schools, institutions, and sites participating in the CNPs are required under relevant statutes to make accommodations to program meals for children that are determined to have a food allergy disability. A food related disability can be a food allergy if the allergy is acknowledged to be a disability by a licensed doctor. These guidelines can assist CNP program operators in providing safe meals and a safe environment for this population of children.

Because every recommendation in these guidelines may not be appropriate or feasible for every school or ECE program, users should first determine what must be implemented based on federal and state law and local policies, and implement those recommendations. Because these guidelines are voluntary, users may consider them in determining what actions may be appropriate for an individual child. However, any actions that school districts or ECE programs take for individual children must be implemented consistent with applicable federal and state laws, including regulations.



## About Food Allergies

A *food allergy* is defined as an adverse health effect arising from a specific immune response that occurs reproducibly on exposure to a given food.<sup>13</sup> The immune response can be severe and life-threatening. Although the immune system normally protects people from germs, in people with food allergies, the immune system mistakenly responds to food as if it were harmful. One way that the immune system causes food allergies is by making a protein antibody called immunoglobulin E (IgE) to the food. The substance in foods that cause this reaction is called the *food allergen*. When exposed to the food allergen, the IgE antibodies alert cells to release powerful substances, such as histamine, that cause symptoms that can affect the respiratory system, gastrointestinal tract, skin, or cardiovascular system and lead to a life-threatening reaction called *anaphylaxis*.<sup>17</sup> The *Voluntary Guidelines for Managing Food Allergies* focuses not on all food allergies but on food allergies associated with IgE because those are the food allergies that are associated with the risk of anaphylaxis.

There are other types of food-related conditions and diseases that range from the frequent problem of digesting lactose in milk, resulting in gas, bloating, and diarrhea, to reactions caused by cereal grains (celiac disease) that can result in severe malabsorption and a variety of other serious health problems. These conditions and diseases may be serious but are not immediately life-threatening and are not addressed in these guidelines.<sup>13, 17–19</sup>

More than 170 foods are known to cause IgE mediated food allergies. In the United States, the following eight foods or food groups account for 90% of serious allergic reactions: milk, eggs, fish, crustacean shellfish, wheat, soy, peanuts, and tree nuts.<sup>13</sup> Federal law requires food labels in the United States to clearly identify the food allergen source of all foods and ingredients that are (or contain any protein derived from) these common allergens.<sup>20</sup> Some nonfood products used in schools and ECE programs—such as clay, paste, or finger paints—can also contain allergens that may or may not be identified as ingredients on product labels.<sup>21</sup>



The symptoms of allergic reactions to food vary both in type and severity among individuals and even in one individual over time. Symptoms associated with an allergic reaction to food include the following:

- **Mucous Membrane Symptoms:** red watery eyes or swollen lips, tongue, or eyes.
- **Skin Symptoms:** itchiness, flushing, rash, or hives.
- **Gastrointestinal Symptoms:** nausea, pain, cramping, vomiting, diarrhea, or acid reflux.
- **Upper Respiratory Symptoms:** nasal congestion, sneezing, hoarse voice, trouble swallowing, dry staccato cough, or numbness around mouth.
- **Lower Respiratory Symptoms:** deep cough, wheezing, shortness of breath or difficulty breathing, or chest tightness.
- **Cardiovascular Symptoms:** pale or blue skin color, weak pulse, dizziness or fainting, confusion or shock, hypotension (decrease in blood pressure), or loss of consciousness.
- **Mental or Emotional Symptoms:** sense of “impending doom,” irritability, change in alertness, mood change, or confusion.

### Food Allergy Symptoms in Children

Children with food allergies might communicate their symptoms in the following ways:

- It feels like something is poking my tongue.
- My tongue (or mouth) is tingling (or burning).
- My tongue (or mouth) itches.
- My tongue feels like there is hair on it.
- My mouth feels funny.
- There’s a frog in my throat; there’s something stuck in my throat.
- My tongue feels full (or heavy).
- My lips feel tight.
- It feels like there are bugs in there (to describe itchy ears).
- It (my throat) feels thick.
- It feels like a bump is on the back of my tongue (throat).

*Source: The Food Allergy & Anaphylaxis Network. Food Allergy News. 2003;13(2).*

Children sometimes do not exhibit overt and visible symptoms after ingesting an allergen, making early diagnosis difficult.<sup>13,22</sup> Some children may not be able to communicate their symptoms clearly because of their age or developmental challenges. Complaints such as abdominal pain, itchiness, or other discomforts may be the first signs of an allergic reaction (see Food Allergy Symptoms in Children).

Signs and symptoms can become evident within a few minutes or up to 1–2 hours after ingestion of the allergen, and rarely, several hours after ingestion. Symptoms of breathing difficulty, voice hoarseness, or faintness associated with change in mood or alertness or rapid progression of symptoms that involve a combination of the skin, gastrointestinal tract, or cardiovascular symptoms signal a more severe allergic reaction (anaphylaxis) and require immediate attention.

The severity of reactions to food allergens is difficult to predict and varies depending on the child’s particular sensitivity to the food and on the type and amount of exposure to the food. Ingesting a food allergen triggers most severe reactions, while inhaling or having skin contact with food allergens generally

causes mild reactions.<sup>23,24,25</sup> The severity of reaction from food ingestion also can be influenced by the child's age, how quickly the allergen is absorbed (e.g., absorption is faster if food is taken on an empty stomach or ingestion is associated with exercise), and by co-existing health conditions or factors.<sup>17</sup> For example, a person with asthma might be at greater risk of having a more severe anaphylactic reaction. Exercise and certain medications also can increase the harmful effects of certain food allergens.<sup>13,26,27</sup>

### Allergic Reactions and Anaphylaxis

*Anaphylaxis* is best described as a severe allergic reaction that is rapid in onset and may cause death.<sup>31</sup> Not all allergic reactions will develop into anaphylaxis. In fact, most are mild and resolve without problems. However, early signs of anaphylaxis can resemble a mild allergic reaction. Unless obvious symptoms—such as throat hoarseness or swelling, persistent wheezing, or fainting or low blood pressure—are present, it is not easy to predict whether these initial, mild symptoms will progress to become an anaphylactic reaction that can result in death.<sup>13</sup> Therefore, all children with known or suspected ingestion of a food allergen and the appearance of symptoms consistent with an allergic reaction must be closely monitored and possibly treated for early signs of anaphylaxis.

### Characteristics and Risk Factors

Food allergies account for 35%–50% of all cases of anaphylaxis in emergency care settings.<sup>32</sup> Many different food allergens (e.g., milk, egg, fish, shellfish) can cause anaphylaxis. In the United States, fatal or near fatal reactions are most often caused by peanuts (50%–62%) and tree nuts (15%–30%).<sup>33</sup>

Results of studies of fatal allergic reactions to food found that a delay in administering epinephrine was one of the most significant risk factors associated with fatal outcomes.<sup>13,26</sup> Some population groups, including children with a history of anaphylaxis, are at higher risk of having a severe reaction to food (see Fatal Food Allergy Reactions).

### Food Allergies and Asthma

One-third of children with food allergies also have asthma, which increases their risk of experiencing a severe or fatal reaction.<sup>28</sup> Data also suggest that children with asthma and food allergies have more visits to hospitals and emergency departments than children who don't have asthma.<sup>2,29,30</sup>

Because asthma can pose serious risks to the health of children with food allergies, schools and ECE programs must consider these risks when they develop plans for managing food allergies.

### Fatal Food Allergy Reactions

#### Risk Factors

- Delayed administration of epinephrine.
- Reliance on oral antihistamines alone to treat symptoms.
- Consuming alcohol and the food allergen at the same time.

#### Groups at Higher Risk

- Adolescents and young adults.
- Children with a known food allergy.
- Children with a prior history of anaphylaxis.
- Children with asthma, particularly those with poorly controlled asthma.

## Timing of Symptoms

In general, anaphylaxis caused by a food allergen occurs within minutes to several hours after food ingestion.<sup>13</sup> Death due to food-induced anaphylaxis may occur within 30 minutes to 2 hours of exposure, usually from cardiorespiratory compromise.<sup>13</sup> By the time symptoms of an allergic reaction are recognized, a child is likely to already be experiencing anaphylaxis. Symptoms of anaphylaxis can begin with mild skin symptoms (e.g., hives, flushing) that progress slowly, appear rapidly with more severe symptoms, or appear (in rare circumstances) with shock in the absence of other symptoms. In fact, many fatal anaphylaxis cases caused by food do not follow a predictable pattern that starts with mild skin symptoms.

Even if initial symptoms are successfully treated or resolve completely, up to 20% of anaphylactic reactions recur within 4–8 hours (called *biphasic reaction*). In other cases, symptoms do not completely resolve and require additional emergency care. For these reasons, children with food-induced anaphylaxis must be monitored closely and evaluated as soon as possible in an emergency care setting.

## Treatment of Anaphylaxis and Use of Epinephrine

No treatment exists to prevent reactions to food allergies or anaphylaxis. Strict avoidance of the food allergen is the only way to prevent a reaction. However, avoidance is not always easy or possible, and staff in schools and ECE programs must be prepared to deal with allergic reactions, including anaphylaxis. Early and quick recognition and treatment of allergic reactions that may lead to anaphylaxis can prevent serious health problems or death.

The recommended first line of treatment for anaphylaxis is the prompt use of epinephrine. Early use of epinephrine to treat anaphylaxis improves a person's chance of survival and quick recovery.<sup>13,34</sup>

*Epinephrine*, also called adrenaline, is naturally produced by the body. When given by injection, it rapidly improves breathing, increases heart rate, and reduces swelling of the face, lips, and throat. Epinephrine is typically available in the form of an autoinjector, a spring loaded syringe used to deliver a measured dose of epinephrine, designed for self-administration by patients, or administration by persons untrained in other needle-based forms of epinephrine delivery. In a clinical setting, patients may receive epinephrine through other needle-based delivery methods.

Epinephrine can quickly improve a person's symptoms, but the effects are not long lasting. If symptoms recur (biphasic reaction), additional doses of epinephrine are needed. Even when epinephrine is used, 911 or other emergency medical services (EMS) must be called so the person can be transported quickly in an emergency vehicle to the nearest hospital emergency department for further medical treatment and observation.<sup>13</sup>

It is not possible to set one guideline for when to use epinephrine to treat allergic reactions caused by food. A person needs clinical experience and judgment to recognize the symptoms associated with anaphylaxis, and not all school or ECE program staff have this experience. Clinical guidelines for how to manage food-induced allergic reactions have mainly focused on the health care setting. They emphasize the need to watch patients closely and give the proper treatment, including epinephrine.

### Allergens that May Result in Anaphylaxis that Require Use of Epinephrine

- Foods such as peanuts, tree nuts, milk, eggs, fish, or shellfish.
- Medications such as penicillin or aspirin.
- Bee venom or insect stings, such as from yellow jackets, wasps, hornets, or fire ant).
- Latex, such as from gloves.



Treatment decisions are based on the progression or increased severity of symptoms and whether the patient has a history of risk factors for anaphylaxis (see Fatal Food Allergy Reactions).<sup>13</sup> For example, the clinical guidelines favor quick and early use of epinephrine as soon as even mild symptoms appear for children who have had severe allergic reactions in the past.

Some schools and ECE programs offer clinical services from a doctor or registered nurse. In these cases, the doctor or nurse can use the clinical guidelines to assess children and make decisions about treatment, including if or when to use epinephrine. However, many schools and most ECE programs do not have a doctor or nurse onsite to make such an assessment. In these cases, a staff person at the scene should call 911 or EMS immediately. If staff are trained to recognize symptoms of an allergic reaction or anaphylaxis and are delegated and trained to administer epinephrine, they also should administer epinephrine by auto-injector at the first signs of an allergic reaction, especially if the child's breathing changes. In addition, school or ECE program staff should make sure that the child is transported without delay in an emergency vehicle to the nearest hospital emergency department for further medical treatment and observation.<sup>24,35</sup>

These actions may result in administering epinephrine and activating emergency response systems for a child whose allergic reaction does not progress to life-threatening anaphylaxis. However, the delay or failure to administer epinephrine and the lack of medical attention have contributed to many fatal anaphylaxis cases from food allergies.<sup>25,36–38</sup> The risk of death from untreated anaphylaxis outweighs the risk of adverse side effects from using epinephrine in these cases.

### **Emotional Impact on Children with Food Allergies and Their Parents<sup>d</sup>**

The health of a child with a food allergy can be compromised at any time by an allergic reaction to food that is severe or life threatening. Many studies have shown that food allergies have a significant effect on the psychosocial well-being of children with food allergies and their families.<sup>39–45</sup>

Parents of a child with a food allergy may have constant fear about the possibility of a life-threatening reaction and stress from constant vigilance needed to prevent a reaction. They also have to trust their child to the care of others, make sure their child is safe outside the home, and help their child have a normal sense of identity.

Children with food allergies may also have constant fear and stress about the possibility of a life-threatening reaction. The fear of ingesting a food allergen without knowing it can lead to coping strategies that limit social and other daily activities. Children can carry emotional burdens because they are not accepted by other people, they are socially isolated, or they believe they are a burden to others. They also may have anxiety and distress that is caused by teasing, taunting, harassment, or bullying by peers, teachers, or other adults. School and ECE program staff must consider these factors as they develop plans for managing the risk of food allergy for children with food allergies.

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d. For the purposes of this document, the word *parent* is used to refer to the adult primary caregiver(s) of a child's basic needs (e.g., feeding, safety). This includes biological parents; other biological relatives such as grandparents, aunts, uncles, or siblings; and non-biological parents such as adoptive, foster, or stepparents.



# Section 1.

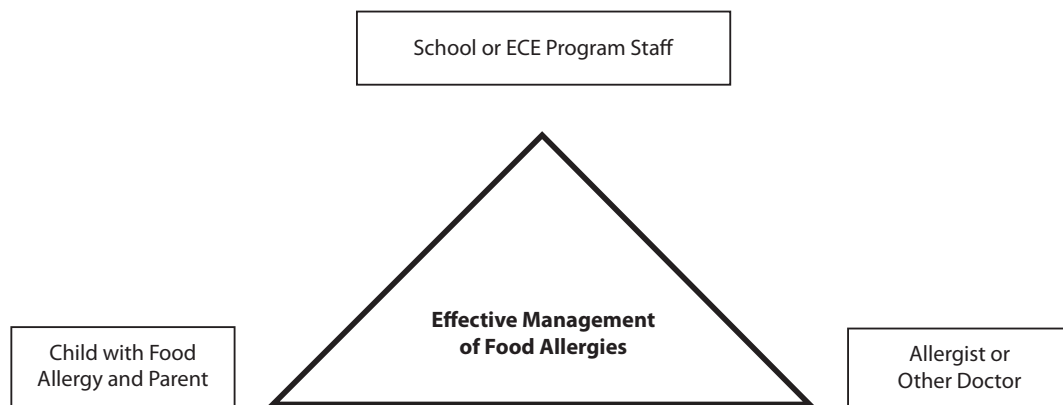
## Food Allergy Management in Schools and Early Care and Education Programs

### Essential First Steps

School and ECE program staff should develop a comprehensive strategy to manage the risk of food allergy reactions in children. This strategy should include (1) a coordinated approach, (2) strong leadership, and (3) a specific and comprehensive plan for managing food allergies.

#### ***1. Use a coordinated approach that is based on effective partnerships.***

The management of any chronic health condition should be based on a partnership among school or ECE program staff, children and their families, and the family's allergist or other doctor.<sup>11,42,46</sup>



The collective knowledge and experience of a licensed doctor, children with food allergies, and their families can guide the most effective management of food allergies in schools or ECE programs for each child. Close working relationships can help ease anxiety among parents, build trust, and improve the knowledge and skill of school or ECE program staff members.<sup>10,14,42</sup>

In schools, all staff members play a part in protecting the health and safety of children with chronic conditions. These staff members include administrators, school nurses or school doctors, food service staff (including food service contract staff), classroom and specialty teachers, athletic coaches, school counselors, bus drivers, custodial and maintenance staff, therapists, paraeducators, special education service providers, librarians and media specialists, security staff, substitute teachers, and volunteers, such as playground monitors and field trip chaperones. In ECE programs, staff members include the center director, health consultants, nutrition and food service staff, Head Start and child care providers, preschool teachers, teaching assistants, aides, volunteers, and transportation staff.

A team structure allows for collective management of food allergies, with coordinated planning and communication to ensure that staff responsibilities are carried out in a clear and consistent manner. Instead of creating a new team to address the food allergy-related needs of a particular student with a food allergy, schools and ECE programs can use an existing team such as the student's Section 504 committee (which addresses Section 504 of the Rehabilitation Act of 1973), the student's Individualized Education Program (IEP) team [which addresses special education and related services under Part B of the Individuals With Disabilities Education Act (IDEA)], the school improvement team, child and learning support team, school health or wellness team, or Head Start Health Services Advisory Committee.

Involving the school doctor (if applicable), an allergist in the community, or the child's doctor can help the school or ECE program reduce the risk of accidental exposure to allergens.<sup>47</sup> A doctor's diagnosis of a food allergy is necessary to accurately inform plans for avoiding food allergens and managing allergic reactions. The doctor can also give advice on the best practices to control or manage food allergies.<sup>24,25</sup> An allergist is a licensed doctor with specialty training in the diagnosis and treatment of allergic diseases, asthma, and diseases of the immune system.

Children with food allergies and their parents have firsthand experience with allergic reactions and are most familiar with a child's unique signs and symptoms. Parents should give the school or ECE program documentation that supports a doctor's diagnosis of food allergy, as well as information about prior history and current risk of anaphylaxis. This information is critical to preventing risk of exposure to allergens and outlining the actions that must be taken if a food allergen exposure occurs. Parents should be continually involved in helping to build a learning environment that is responsive to their child's unique health condition.<sup>47</sup> By working together, parents and school or ECE program staff can communicate better and make sure they have the same expectations. This partnership also shows a shared commitment to the child's well-being and builds parental support and confidence in the ability of school or ECE program staff to manage food allergies.

Many parents give their ECE program an Emergency Care Plan (ECP) developed by the child's allergist or other doctor. This plan may be the only information ECE program staff members have to manage the child's food allergy. When multiple children have food allergies, the result can be multiple approaches for addressing and managing food allergies and reactions. Instead, ECE programs should use a coordinated approach that is built on partnerships among ECE program staff, parents, and doctors. With a coordinated approach, staff can create one consistent plan of action for responding to any child with a food allergy and to any allergic reaction.<sup>10,44,48</sup>

## ***2. Provide clear leadership to guide planning and ensure implementation of food allergy management plans and practices.***

Successful coordination of food allergy planning requires strong school and ECE program leadership. The support of school principals and ECE program administrators is critical, but it may make more sense for the person who provides or coordinates health services for children to lead the food allergy planning process.<sup>49,50</sup> For example, most schools and some ECE programs have a school or district nurse, school doctor, or health consultant or manager. Nationwide, about 85% of schools have either a part-time or full-time nurse to provide health services to students (37% have a full-time nurse).<sup>8</sup> In Head Start programs, health services must be supervised by staff members or consultants with training in health-related fields.<sup>50,51</sup>

School nurses, school doctors, and health consultants or managers should have the expertise to help schools and ECE programs develop plans to manage food allergies. Specifically, these staff members can:

- Work with families and doctors to obtain or create an Emergency Care Plan (ECP) for children with food allergies.
- Make sure that each child’s plan for managing food allergies is consistent with federal laws and regulations, state laws, including regulations, local policies, and standards of professional practices.
- Act as a liaison between school and district policy makers, ECE program administrators, health services staff members, food service staff members, community health service providers, and emergency responders.
- Make sure that education records that include personally-identifiable information about a student’s food allergy are generally not disclosed without the prior written consent of the parent (or eligible student) in compliance with the Family Educational Rights and Privacy Act of 1974 (FERPA), 20 U.S.C. 1232g and its implementing regulations in 34 CFR part 99, and any other applicable federal and state laws that protect the privacy or confidentiality of student information. (FERPA may not require parental consent in all circumstances.) FERPA also includes an emergency exception to the prior consent requirement if there is an articulable and significant threat to the health or safety of the student or others. (See Section 5 for more information about FERPA.)
- Monitor the use of medication in the school or ECE program setting.
- Obtain an epinephrine auto-injector and make sure it is rapidly available to designated and trained staff members to respond to a child’s food allergy emergency.
- Recognize and handle medical emergencies.
- Learn about best practices for managing food allergies.
- Help schools and ECE programs develop a comprehensive approach to managing food allergies. Coordinate a team to put the resulting plan into action.
- Work with food service staff on parts of the plan that involve meal and snack preparation and services.
- Identify internal resources and community partners that can support the planning process.
- Share general information about food allergies with staff members, parents, and others who need it.
- Make sure staff receive the training they need, including how to administer an epinephrine auto-injector. A doctor or registered nurse can provide this training.
- Talk with staff members, doctors, children, and their families about food allergies and how they should be managed. Share concerns from parents and children with the food allergy management team.
- Review the school or ECE program plan on a regular basis to look for ways to reduce exposure to food allergens and better manage allergic reactions. Recommend changes when needed to make the plans better.<sup>49,50,52</sup>

The many responsibilities outlined in this section demonstrate the benefit of having a full- or part-time registered nurse (and a doctor part-time) and ECE programs having a medically trained and knowledgeable health consultant or manager. However, if a registered nurse, doctor, or health consultant or manager is not available, the school or ECE program administrator can develop a comprehensive plan that may include delegating some critical responsibilities to other trained professional staff. This plan should also include seeking advice from the child’s primary doctor or allergist and training guidance and assistance from health services staff at the district level<sup>47</sup> (See Sections 2 and 3.)

### **3. Develop and implement a comprehensive plan for managing food allergies.**

To effectively manage food allergies and the risks associated with these conditions, many people inside and outside the school or ECE program must come together to develop a comprehensive plan, called the Food Allergy Management and Prevention Plan (FAMPP). This plan should include all strategies and actions needed to manage food allergies in the school or ECE program. It also should be compatible with the approach used to address other chronic conditions in each individual setting.<sup>14</sup>

The FAMPP should reinforce the efforts of each school or ECE program to create a safe learning environment for all children. It should address systemwide planning, implementation, and follow-up and include specific actions for each individual child with a food allergy. The FAMPP should:

- Meet the requirements of federal laws and regulations, such as Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) and the Richard B. Russell National School Lunch Act, if applicable. An explanation of how these federal laws could apply to students with food allergies is provided in Section 5. Among other things, these federal laws address individualized assessment of each child's needs and parental participation in the development of any plan or program designed to meet these dietary needs. An effective FAMPP also would need to meet the requirements of state and local laws and regulations and district policies.
- Reflect clear goals, purposes, and expectations for food allergy management that are consistent with the school's or ECE program's mission and policies.
- Be clear and easy to understand and implement.
- Be responsive to the needs of any child with food allergies by taking into account the different and unique needs of each child.
- Be adaptable and updated regularly on the basis of experiences, best practices, current research, and changes in district policy or state or county law.

The FAMPP should address the following five priorities:

1. Ensure the daily management of food allergies for individual children.
2. Prepare for food allergy emergencies.
3. Provide professional development on food allergies for staff members.
4. Educate children and family members about food allergies.
5. Create and maintain a healthy and safe educational environment.

The remainder of this section provides more detail and specific recommendations for each priority. This section concludes with a comprehensive Food Allergy Management and Prevention Plan (FAMPP) Checklist for use in schools and ECE programs. This checklist can help schools and ECE programs improve their ability to manage the risk food allergies and assess whether their plans address all five priorities.



## Priorities for Managing Food Allergies

### 1. *Ensure the daily management of food allergies for individual children.*

To protect the health and safety of an individual child with food allergies, school and ECE program staff must identify children with a history of food allergies and develop or obtain plans to manage their allergies.

#### **a. Identify children with food allergies.**

Schools and ECE programs usually have forms and procedures to identify children with chronic conditions, including food allergies, when they enroll or transfer to the school—or when the condition is not initially reported but becomes evident during the academic year. Examples include health condition forms or parent interviews.

Children or parents may report a food allergy on the required forms, but this information may not be accurate or complete. Schools and ECE program staff must work with parents to obtain, directly from the child's healthcare provider, the medical information necessary to develop plans for managing the individual care and emergency actions.

The USDA requires a doctor's statement that a child has a food allergy disability before food service staff in the Child Nutrition Program can make meal accommodations and provide a safe meal for a child with a food allergy.

#### **b. Develop a plan to manage and reduce the risk of food allergy reactions in individual children.**

Parents and doctors should provide information and recommendations to help schools and ECE programs develop written plans to manage food allergies for children on a daily basis. This information may be provided on health condition forms, medical orders, doctor's statement, or diet orders. There are a variety of names used to label written plans for individual children with food allergies. It is essential for children to have a short, easy to follow plan for emergency care. This is usually a food allergy Emergency Care Plan (ECP). Other names used for the ECP can include a "food allergy action plan," "emergency action plan," or in ECE programs, an "individual care plan". Schools or ECE programs may need to establish additional plans, such as a Section 504 plan or, if appropriate, an Individualized Education Program (IEP), or may establish a nursing assessment and outcome-type Individualized Health Plan (IHP).

The ECP is the basic form used to collect food allergy information and it should be completed for every child identified as having a food allergy.<sup>24,25,48,52-60</sup> (If an ECP form is used by the Child Nutrition Program staff to make meal accommodations, it should include the medical information required by the USDA and must be signed by the doctor). This form should be kept in each child's school health record, and it may include the following:

- A recent photo of the child.
- Information about the food allergen, including a confirmed written diagnosis from the child's doctor or allergist.
- Information about signs and symptoms of the child's possible reactions to known allergens.

- Information about the possible severity of reactions, including any history of prior anaphylaxis (even though anaphylaxis can occur even in children without a history of prior anaphylaxis).
- A treatment plan for responding to a food allergy reaction or emergency, including whether an epinephrine auto-injector should be used.
- Information about other conditions, such as asthma or exercise-induced anaphylaxis that might affect food allergy management.
- Contact information for parents and doctors, including alternate phone numbers for notification in case of emergency.

The ECP should be written by the child’s doctor and confirmed with the parents. In some cases, it can be written by a registered nurse, or school doctor, as long as the child’s doctor is consulted and the parents confirm the plan. The child’s doctor and parents should sign and date the ECP, and schools and ECE programs should not accept a child’s ECP without confirmation and signature from the child’s doctor. If a public elementary or secondary school maintains an ECP on an individual child, the ECP would be covered by FERPA as an “education record.” The ECP should specifically state who may have access to the information in the plan, and should ensure that any such access to this information is permissible under FERPA and any other applicable federal or state laws that protect the privacy or confidentiality of student information. (See Section 5 for more information about FERPA.) Section 6 lists state and organizational resources that include examples of ECPs and suggested processes that schools and ECE programs might use to develop their ECPs.

An IHP is a written document that outlines how children will receive health care services at school and is developed and used by a registered nurse. The IHP documents a specific student’s health needs and outlines specific health outcome expectations and plans for achieving these expectations. The use of an IHP is standard practice for schools with a full-time or part-time registered nurse and it is commonly used to document the progress of children with an identified chronic condition such as food allergies.<sup>39,47,52,61</sup> The IHP helps registered nurses manage the risk of food allergies, prevent allergic reactions, and coordinate care with other staff (such as food service staff) and health service providers outside the school. Federal law does not require the use of an IHP, but its contents can be useful to the nurse in addressing the requirements of federal laws related to school responsibilities for children with food allergies. Section 6 lists state and organizational resources that include examples of an IHP.

If a doctor determines that a child’s food allergy may result in anaphylaxis and if the child’s food allergy constitutes a disability under applicable federal disability laws, school staff can integrate information from the ECP, doctor’s statement, and IHP into a Section 504 plan or, if appropriate, into an IEP. (See Section 5 for more information on applicable federal laws.) Schools should still use an ECP with specific, easy-to-read information about how to respond to a food allergy reaction.

For children that are identified as having a food allergy disability and who attend a school or ECE program that participates in the U.S. Department of Agriculture’s (USDA’s) Child Nutrition Programs, a meal or food substitution or modification must be made when the diagnosis is supported by a doctors’ signed statement. Before Child Nutrition Program food service staff can provide a safe meal accommodation, parents must provide a statement from a licensed doctor that identifies:

- The child's disability (according to pertinent statutes).
- An explanation of why the disability restricts the child's diet.
- The major life activity affected by the disability.
- The food or foods to be omitted from the child's diet.
- The food or choice of foods that must be substituted.<sup>62</sup>

A child recognized by the Child Nutrition Program staff as having a food allergy disability does not have to have a Section 504 plan, ECP, IHP, or IEP in order for a meal accommodation to be provided. A statement signed by a licensed doctor addressing the points above is sufficient. However, the Child Nutrition Program-required doctor's statement can be integrated in any plan a school or ECE develops to meet a child's special dietary needs.

If a Section 504 plan or, if appropriate, an IEP, is developed in connection with the provision of services required under those laws to address the student's food allergy disability, information from the ECP is still useful and can be referenced in, or incorporated into, the Section 504 Plan or IEP. Note that a Section 504 plan or IEP is an education record subject to FERPA. For children not covered by Federal disability laws, schools can use the ECP and IHP to manage each child's food allergy. The IHP can include information about modifications and substitutions for meal and snack planning. An IHP or ECP developed for an individual student is also an education record subject to FERPA.

In ECE programs, every child with a food allergy should have an ECP or individual care plan, even if the child has a Section 504 plan or, if eligible for services under IDEA, has an IEP or, if appropriate, an individualized family service plan (IFSP). (See Section 5 for more information regarding these Federal laws.) Because most ECE programs do not have a registered nurse on staff to develop such a plan, the ECE program's health consultant, health manager, or administrator should review each child's health records and emergency information at enrollment and work with parents to obtain an ECP for each child diagnosed with a food allergy. The ECP should be updated at least once a year. Health consultants or managers can share information about any allergic reactions, changes in the child's health status, and exposure to allergens with parents and doctors (with the parents' permission). Working with parents and the child's healthcare provider is essential to make sure that children get the medical services and accommodations they need. Staff should consider referring children without access to health care to health services, when possible.

ECPs used by ECE programs should be signed and dated by the child's doctor and parents. The plan should specifically state who has access to the plan. The plan also should state which staff members are responsible for the care, transportation, and feeding of children with food allergies.<sup>12,50</sup> (See Section 5 for more information about applicable Federal laws.)

### **c. Help students manage their own food allergies.**

Young children in ECE programs and early elementary grades in schools generally cannot manage their own food allergies. However, some students, especially adolescents, can take responsibility for managing their own food allergies, including carrying and using epinephrine when needed. When medication is required by students who have chronic health conditions, especially when medication may be lifesaving, it is best practice to encourage and assist students to become educated and competent in their own care.<sup>48,54,63,64</sup>

Students who can manage their own food allergies should have quick (within a few minutes) access to an epinephrine auto-injector, both at school and during school-related events.<sup>13</sup> Some schools allow students to carry prescribed epinephrine auto-injectors (e.g., in their pocket, backpack, or purse) at school. Some state laws, allow students to carry auto-injectors during activities on school property and during transportation to and from school or school-related events.<sup>63</sup> Federal law requires reasonable modifications of school policies when necessary to avoid disability discrimination, and in some cases, this may require allowing a student to carry an epinephrine auto-injector. School officials should check state and federal laws before setting their policies and practices. See Section 5 for more information about applicable Federal laws.

Before students are allowed to carry and use medication, school staff should assess students' knowledge, attitudes, behaviors, and skills to determine their ability to handle this responsibility.<sup>64</sup> This decision should be reassessed periodically, and the school nurse or another assigned staff member should randomly check to make sure students are carrying their epinephrine auto-injector. Some students with food allergies may choose to wear medical alert bracelets, which can aid emergency response.<sup>13</sup> School officials can encourage students to wear these bracelets, but they should not require them. Some students will not want to wear such jewelry because they fear being stigmatized.

School nurses and other school staff members should reinforce self-management skills for students with food allergies. These skills include reading labels, asking questions about foods in the school meal and snack programs, avoiding unlabeled or unknown foods, using epinephrine auto-injectors when needed, and recognizing and reporting an allergic reaction to an adult.

Even when students are able to manage their own food allergies, school staff need to know which students have allergies so they can have plans in place to monitor each student's condition and be able to respond in an emergency. Because some symptoms of anaphylaxis may continue after a dose of epinephrine is administered and because students might not always have their medication with them, schools should also keep a second epinephrine auto-injector (provided by parent or student) in a secure but rapidly accessible location.<sup>63,65,66</sup> (See the textbox on page 31 related to the justification for more than one dose of epinephrine.)

## **2. Prepare for food allergy emergencies.**

All schools and ECE programs should anticipate and prepare for food allergy emergencies in the same ways they approach emergency preparedness for other hazards. Comprehensive emergency planning includes prevention, preparedness, response, and recovery for any type of emergency. This "all-hazards" model is often used to plan for natural disasters, weather-related emergencies, and pandemic influenza. A school's all-hazards emergency plan also should address potential crises caused by violence or food allergy emergencies.<sup>67</sup> This plan should go beyond each child's ECP to include building-level planning, communication, training, and emergency response procedures.<sup>68</sup>



**a. Set up communication systems that are easy to use.**

Communication devices, such as intercoms, walkie-talkies, or cell phones, should be available at all times in case of an emergency. School and ECE program staff in classrooms, gymnasiums, cafeterias, playgrounds, and transportation vehicles should be able to communicate easily and quickly with the school nurse, school authorities, health consultants or managers, emergency responders and parents. Communication devices should be checked regularly to make sure they work.

**b. Make sure staff can get to epinephrine auto-injectors quickly and easily.**

Quick access to and immediate availability of epinephrine to respond to anaphylaxis emergencies is essential.<sup>13</sup> It is the parent's responsibility to provide at least one or two epinephrine auto-injectors for a child with food allergies if they are prescribed by a doctor. It is the school's or ECE program's responsibility to store epinephrine auto-injectors in a place that can be reached quickly and easily and to delegate and train staff to give epinephrine in response to allergic reactions.

Studies have shown that quick access to epinephrine is critical to saving lives in episodes of anaphylaxis.<sup>24,25,37</sup> To ensure quick access to epinephrine, auto-injectors should be kept in a safe and secure place that trained staff members can get to quickly during school or ECE program hours.<sup>63,68-70</sup> At the same time, staff must also follow federal and state laws, including regulations, and local policies that may require medications to be locked in a secure place. For example, federal Head Start regulations require that all "grantee and delegate agencies establish and maintain written procedures regarding the administration, handling, and storage of medication for every child," including "labeling and storing, under lock and key, and refrigerating, if necessary, all medications, including those required for staff and volunteers."<sup>51</sup> State regulations and local policies may similarly require locking medications in a secure location. School and ECE program staff should seek guidance from federal and state regulatory agencies and local policy makers when deciding how to store epinephrine auto-injectors.

These decisions also must take into account the needs of each student and the specific characteristics of the school district, the staff, and the school building. Decisions on where to store medication, such as in a central location (office or health room), in the classroom, or in several locations (on a large school campus) may vary among school districts and schools. These decisions should be based on state and local laws and regulations and school policies. They also must ensure the safety of children with food allergies. *The Guidelines for Managing Life-threatening Food Allergies in Connecticut Schools* list some issues to consider, including the general safety standards for handling and storage of medication, developmental stage and competence of the student, size of the building, availability of a full-time school nurse in the building, availability of communication devices between teachers and paraprofessionals who are inside the building or on the playground and the school nurse, school nurse response time from the health office to the classroom, preferences and other responsibilities of the teacher, preferences of the parent, preferences of the student (as applicable), and movement of the student within the building.<sup>54</sup>

The location(s) of medications should be listed in the school's overall emergency plan and in each child's ECP (and IHP, Section 504 plan, or IEP, if appropriate). Schools and ECE programs should also identify which staff members will be responsible for reviewing expiration dates and replacing outdated epinephrine auto-injectors and for carrying medication during field trips and other school events.<sup>70</sup>

**c. Make sure that epinephrine is used when needed and someone immediately contacts emergency medical services.**

Delays in using epinephrine have resulted in near fatal and fatal food allergy reactions in schools and ECE programs.<sup>25,36,37</sup> In a food allergy emergency, trained staff should give epinephrine immediately. Early and appropriate administration of epinephrine can temporarily stop allergic reactions and provide the critical time needed to get medical help.

State laws, state nursing regulations, and local school board policies direct the medication administration in school and ECE programs. They often define which medications nonhealth professionals are allowed to administer in schools, including who may administer epinephrine by auto-injector. If nonhealth staff members are permitted to administer epinephrine, training should be required.<sup>39,71</sup>

When epinephrine is used, school or ECE program staff must call 911 or emergency medical services (EMS). EMS should be informed that the emergency is due to an allergic reaction, if epinephrine has been administered, when it was administered, and that an additional dose of epinephrine may be needed. The child should be transported quickly in an emergency vehicle to the nearest hospital emergency department for further medical treatment and observation.<sup>13</sup> Staff also should contact the child's parents to inform them of their child's food allergy emergency and tell them where the child is being transported. Because medical attention is needed urgently in this situation, staff must not wait for parents to come and pick up their children before calling EMS.

### **Justification for More Than One Dose of Epinephrine**

Schools and ECE programs should consider keeping multiple doses of epinephrine onsite so they can respond quickly to a food allergy emergency. Although some schools allow students to carry their own auto-injectors, a second auto-injector should be available at school in case a student does not have one at the time of the emergency. School and ECE program staff may also decide that having more than one auto-injector at different locations (especially for a large building or campus) will best meet a child's needs. In addition, some symptoms of anaphylaxis may continue after one dose of epinephrine, so a second dose may be needed at school if EMS does not arrive quickly.

Some state laws allow for the prescribing of stock supply of non-patient specific epinephrine auto-injectors for use in schools, which may allow schools or ECE programs to acquire the needed additional doses of epinephrine. When allowed by state law and local policy, schools and ECE programs that have a doctor or nurse onsite can stock their emergency medical kits with epinephrine auto-injectors to be used for anaphylaxis emergencies.<sup>63,65,66,72</sup>

In states where legislation does not exist or does not allow schools or ECE programs to stock epinephrine, staff will need to work with parents and their doctors to get additional epinephrine auto-injectors for students who need them.

**d. Identify the role of each staff member in an emergency.**

Any plan for managing food allergies should state specifically what each staff member should do in an emergency. This information should be simple and easy to follow, particularly when a staff member who is not a licensed health professional is delegated to administer epinephrine.<sup>24,68</sup> Ideally, a registered nurse or doctor would be available to assess a food allergy emergency and decide

if epinephrine is needed. When a nurse or doctor is not onsite, trained unlicensed assistive personnel or nonhealth professionals can recognize the signs and symptoms of an allergic reaction, have quick access to an epinephrine auto-injector, and administer epinephrine.<sup>70,71</sup> Examples of these staff members may include health aides and assistants, teachers, athletic coaches, food service staff, administrators, and parent or adult chaperones. A licensed health care professional such as a registered nurse, doctor, or allergist should train, evaluate, and supervise unlicensed assistive personnel or delegated nonhealth professionals. This training should teach staff how to recognize the signs and symptoms of a reaction, administer epinephrine, contact EMS, and understand state and local laws and regulations related to giving medication to students.

ECE programs that care for children with chronic conditions such as food allergies should seek the services of a trained health advocate or consultant to help staff develop emergency plans, write policies, and train staff. ECE programs are required to have a certified first aider present at all times.<sup>50</sup> All ECE program staff should get annual first aid training that teaches them how to recognize and respond to pediatric emergencies.<sup>49</sup> This training should include how to recognize the signs and symptoms of an allergic reaction and how to give epinephrine through an auto-injector.<sup>23</sup> ECE programs should keep records of all staff training.

**e. Prepare for food allergy reactions in children without a prior history of food allergies.**

Schools and ECE programs should be ready to respond to severe allergic reactions in children with no history of anaphylaxis or no previously diagnosed food allergies. At a minimum, schools and ECE programs should establish a protocol for contacting emergency services when an allergic reaction is suspected and follow this protocol immediately when a child exhibits signs of anaphylaxis. If allowed by state law, the school doctor or nurse may stock their emergency medical kits with epinephrine auto-injectors to be used for anaphylaxis emergencies. If the school or ECE program has a FAMPP, written protocol, and licensed or delegated trained staff, an epinephrine auto-injector may be used for anaphylaxis regardless of previous allergy history.

**f. Document the response to a food allergy emergency.**

Emergency response should include a protocol for documenting or recording each emergency incident and use of epinephrine.<sup>12,65,68</sup> Documentation should include the following:

- Time and location of the incident.
- Food allergen that triggered the reaction (if known).
- If epinephrine was used and the time it was used.
- Notification of parents and EMS.
- Staff members who responded to the emergency.

Section 6 lists state and organizational resources that include examples of epinephrine administration reports.

Corrective actions and lessons learned from an incident should be used to revise the child’s individual plan and the school’s or ECE program’s FAMPP, if needed. School and ECE program administrators also should review the emergency response with the child’s parents, the staff members involved in the response, local EMS responders, and the child.<sup>63,70</sup> See the Example Checklist for an example of steps to follow after a nonfatal food allergy emergency.

**Example Checklist:  
Steps to Take Within 24 Hours  
of a Nonfatal Food Allergy Reaction**

- Call parent or guardian to follow up on student condition.
- Review anaphylactic or allergic episode with parent or guardian and student.
  - Identify allergen and route of exposure—discuss signs and symptoms with parent or guardian.
  - Review actions taken.
  - Discuss positive and negative outcomes.
  - Discuss any needed revision to care plan based on experience or outcome.
- Discuss family role with parent or guardian to improve outcomes.
- Discuss school, ECE program, and home concerns to improve prevention, response, and student outcomes.
- Ask parent or guardian to replace epinephrine dose that was given, if needed.
- Ask parent or guardian to follow up with health care provider.

*Source: National Association of School Nurses, 2011.*



### **3. Provide professional development on food allergies for staff.**

Schools and ECE programs should provide training to all staff members to increase their knowledge about food allergies and how to respond to food allergy emergencies. This training should focus on how to reduce the risk of an allergic reaction, respond to allergic reactions, and support the social and academic development of children with food allergies.<sup>25,38,73</sup> Schools and ECE programs should coordinate training activities with a licensed health care professional, such as a school nurse, public health nurse, public health educator, or school or community doctor. Training can include use of existing materials that provide general information about food allergies, as well as information and resources to help staff meet the specific needs of individual children.<sup>23,24,39,49,54–60,73,74</sup> Administrators should allow enough time for proper training, and all training should be evaluated to make sure it is effective.

In 2010, the National Diabetes Education Program updated their guidance to help students manage their diabetes in schools.<sup>16</sup> This updated guide outlines three levels of training that include basic training for all staff and specialized training for specific staff members. This approach provides a useful framework that has been adapted here to guide training on food allergy management in schools and ECE programs.

#### **a. Provide general training on food allergies for all staff.**

Any staff member who might interact with children with food allergies or be asked to help respond to a food allergy emergency should be trained. Examples include administrators, nutrition and food service staff (including contract staff), classroom and specialty teachers, athletic coaches, school counselors, bus drivers, custodial and maintenance staff, therapists, paraeducators, special education service providers, librarians and media specialists, security staff, substitute teachers, and volunteers such as playground monitors and field trip chaperones. General training content should include the following:

- School or ECE program policies and practices.
- An overview of food allergies.
- Definitions of key terms, including *food allergy*, *major allergens*, *epinephrine*, and *anaphylaxis*.
- The difference between potentially life-threatening food allergy and other food-related problems.
- Signs and symptoms of a food allergy reaction and anaphylaxis and information on common emergency medications.
- General strategies for reducing and preventing exposure to allergens (in food and nonfood items).
- Policies on bullying and harassment and how they apply to children with food allergies.
- The school's or ECE program's emergency plans, including who will be contacted in the case of an emergency, how staff will communicate during a medical emergency, and what essential information they will communicate.

**b. Provide in-depth training for staff who have frequent contact with children with food allergies.**

In addition to general food allergy training, in-depth training is needed for staff who are responsible for a specific child with food allergies during the day. Examples include specifically identified classroom and specialty teachers; paraeducators; athletic coaches; bus drivers; food service managers; other staff members who prepare, handle, or serve food; and all ECE program staff. This training should include the following:

- How to respond to a food allergy emergency.
- Information about federal laws that could apply, such as the ADA, Section 504, and FERPA. (See Section 5 for more information about applicable federal laws.) Information about any state laws, including regulations, or district policies that apply.
- How to administer epinephrine with an auto-injector (for those formally delegated to do so).
- How to help children treat their own food allergy episodes.
- Effects of food allergies on children's behavior and ability to learn.
- Importance of giving emotional support to children with food allergies and to other children who might witness a severe food allergy reaction (anaphylaxis).
- Common risk factors, triggers, and areas of exposure to food allergens in schools or ECE programs.
- Specific strategies for fully integrating children with food allergies into school and class activities while reducing the risk of exposure to allergens in classrooms, during meals, during nonacademic outings, on field trips, during official activities before and after school or ECE programs, and during events sponsored by schools or ECE programs that are held outside of regular hours. These strategies could address (but are not limited to) the following:
  - Special seating arrangements when age and circumstance appropriate (e.g., during meal times, birthday parties).
  - Plans for keeping foods with allergens separated from foods provided to children with food allergies.
  - Rules on how staff and students should wash their hands and clean surfaces to reduce the risk of exposure to food allergens.
  - The importance of not sharing food.
  - How to read food labels to identify food allergens.

**c. Provide specialized training for staff who are responsible for managing the health of children with food allergies on a daily basis.**

This training should be required for district nurses, school nurses, school doctors, and professionally qualified health coordinators or managers. In addition to the general and in-depth content described previously, this training should include information about how to:

- Create ECPs and review or develop other individual care plans as needed.
- Manage and store medication.
- Delegate and train unlicensed assistive personnel to administer epinephrine.
- Help children manage their own food allergies.
- Document the tasks performed as part of food allergy management.
- Evaluate emergency responses and staff members' ability to respond to food allergy emergencies.

Training should be conducted at least once a year, and should be reviewed after a food allergy reaction or anaphylaxis emergency for the purpose of improving prevention and response.

Schools and ECE programs should consult with parents of children with food allergies when they design staff training. These parents have knowledge and experience on how to manage their child's food allergies, as well as information from their child's doctor. Parents do not need to participate in the delivery of training sessions or attend staff training.

## **4. Educate children and family members about food allergies.**

### **a. Teach all children about food allergies.**

All children need to learn about food allergies, but teaching methods will differ on the basis of their age and the setting. For example, schools can provide food allergy education as part of the health education or other curriculum topic, such as family and consumer sciences, general science, physical education, and character education.<sup>41,45,67,69,75,76</sup> ECE programs can provide food allergy education with help from certified health education specialists.

Food allergy education should be appropriate for the developmental level and culture of the children in a particular school or ECE program. It should focus on increasing awareness and understanding of food allergies and building support and acceptance of people with food allergies.<sup>59,76</sup>

At a minimum, all children should be able to:

- Identify signs and symptoms of anaphylaxis.
- Know and understand why it is wrong to tease or bully others, including people with food allergies.
- Know and understand the importance of finding a staff member who can help respond to suspected food allergy emergencies.
- Understand rules on hand washing, food sharing, allergen-safe zones, and personal conduct.

Food allergy awareness is reinforced when staff members model behaviors and attitudes that comply with rules that reduce exposure to food allergens.<sup>48</sup>

**b. Teach all parents and families about food allergies.**

A successful FAMPP needs support and participation from parents of children with food allergies and from parents of children without food allergies. All parents should get information to increase their awareness and understanding of food allergies, the policies and practices that protect children with food allergies, the roles of all staff members in protecting children with food allergies, and the measures parents of children with and without food allergies can take to help ensure this protection.<sup>45,76</sup> School and ECE program administrators, working with school or district nurses or health consultants or managers, should educate families on food allergy policies and practices. Classroom teachers should provide information to all parents about what is being done to prevent food allergy reactions in the classroom. Food service staff should provide information to families about federal regulations of the U.S. Department of Agriculture's Food and Nutrition Service and practices that protect children, and manage food allergies during meals served under USDA meal programs. District and school policies and protocols to prevent bullying, respond to food allergy emergencies, and create a safe environment for all children should be shared with all families.

Schools and ECE programs can share information in many ways, including through letters or e-mails to parents; updates on school Web sites; and announcements at parent-teacher association meetings, school nights, health fairs, and community events.

## ***5. Create and maintain a healthy and safe educational environment.***

Schools, ECE programs, and communities have a shared responsibility to promote a safe physical environment that protects children with food allergies and climate that supports their positive psychological and social development.<sup>77,78</sup>

**a. Create an environment that is as safe as possible from exposure to food allergens.**

Schools and ECE programs can create a safer learning environment by reducing children's exposure to potential allergens.<sup>24,39,54–59,74</sup> When a child has a documented food allergy, staff should take active steps to reduce the risk of exposure in all common areas, such as classrooms and cafeterias.<sup>12</sup>

Some schools or ECE programs have considered banning or have banned specific food across the entire school or ECE program setting in an attempt to eliminate exposing a child with a food allergy to that food. But, such an option cannot guarantee a totally safe environment because there is no reasonable or fail-safe way to prevent an allergen from inadvertently entering into a building. Even with such a ban in place, a school or ECE program still has a responsibility to properly plan for children with any life-threatening food allergies, to educate all school personnel accordingly, and ensure that school staff are trained and prepared to prevent and respond to a food allergy emergency.

Schools or ECE programs may choose other alternatives to banning allergens including the designation of allergen-safe zones, such as an individual classroom or eating area in the cafeteria, or designation of food-free zones, such as a library, classroom, or buses.<sup>45</sup>

Table 1 (page 41–43) presents recommended practices for classrooms, cafeteria and food service areas, school events, transportation, physical education, and recess. The accommodations provided for a child with food allergies can be documented in the child's IHP, Section 504 plan, or IEP, if appropriate.

**b. Develop food-handling policies and procedures to prevent food allergens from unintentionally contacting another food.**

State and local health regulations, generally based on the FDA Model Food Code,<sup>79</sup> provide school districts, schools, and ECE programs with requirements governing the cleaning and sanitizing of surfaces and other practices that can protect against the unintentional transfer of residue or trace amount of an allergic food into another food. Some practices to reduce this cross-contact include the following:

- Clean and sanitize with soap and water or all-purpose cleaning agents and sanitizers that meet state and local food safety regulations, all surfaces that come into contact with food in kitchens, classrooms, and other locations where food is prepared or eaten. Cleaning with water alone will not remove food allergens.
- Clean and sanitize food preparation equipment, such as food slicers, and utensils before and after use to prevent cross-contact.
- Clean and sanitize trays and baking sheets after each use. Oils can seep through wax paper or other liners and cause cross-contact.
- Prepare food separately for children with food allergies. Strategies should include preparing items without allergens first, using a separate work space and equipment, and labeling and storing items before preparing other foods.
- Train all staff who prepare, handle, or serve food how to read labels to identify food allergens. Make sure that staff members are knowledgeable about current labeling laws. Because food labels often change, they should be read every time the food is purchased. Ingredient lists posted on Web sites are not reliable. The manufacturer of the food should be contacted if clarification is needed.
- Use appropriate hand-washing procedures that emphasize the use of soap and water. Hand sanitizers are not effective in removing food allergens.

Nutrition and food service staff in schools and ECE programs are required to follow local food safety and sanitation laws and be trained in practices that prevent food, surface-to-food, and food-to-food contamination that also serve to help prevent cross-contact of food allergens. Meals and snacks may be served in locations other than cafeterias, handled by staff members other than the food service staff, or provided outside of a USDA Child Nutrition Program. When developing policies and procedures for food handling, consider all possible situations where food might be prepared or served, any staff members who might be involved, and the state and local food safety regulations that might be appropriate to help prevent the transfer of food allergens in these situations.

In ECE programs, additional precautions are recommended to reduce the risk of food allergy reactions, especially among children with a history of anaphylaxis. Many of these recommendations are consistent with common practices for managing any child in an ECE program.

- Make sure that all staff members can read product labels and identify food allergens.
- Recommend, but do not require, that children with known food allergies wear a medical alert bracelet.