# FLORIDA SCHOOL DISTRICT FOOD ALLERGY POLICIES

Florida Department of Education Commissioner Eric Smith

## Report to Governor Crist and the Florida Legislature

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This report was developed by the State of Florida, Department of Education, Food and Nutrition Management Section.

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## EXECUTIVE SUMMARY

The 2009 Florida Legislature directed the Florida Department of Education (FLDOE) to prepare a report of the various Florida school district policies related to childhood food allergies.<sup>1</sup> The increasing number of students with reported food allergies has led to a greater concern for their safety in schools. The number of children with reported food allergies has increased 18% over the past decade and an estimated 4 out of every 100 children in the United States are diagnosed with a food allergy.

Current federal and state laws do not require Florida school districts to adopt a policy specifically addressing student food allergies; however, Florida districts accommodate students with food allergies by adhering to the following existing federal and state laws and regulations:

- Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA), and the Individuals with Disabilities Education Act of 2004 (IDEA 2004) state that a life-threatening food allergy is considered a "disability" and an Individual Health Care Plan must be written to address the student's needs in the school environment.
- United States Department of Agriculture's (USDA) regulation 7 CFR Part 15b, governing Child Nutrition Programs, requires School Food Service Departments to provide meal substitutions or modifications for children whose disabilities restrict their diets, with written notification from the child's physician.
- The School Health Services Program, s. 381.0056, F.S., mandates that basic school health services be provided to all students. This includes a plan that addresses medical emergencies at schools.
- The 2005 Florida Legislature passed the Kelsey Ryan Act by amending s. 1002.20(3)(i), F.S., giving students the right to self-administer epinephrine on school grounds, and students with life-threatening food allergies are given prescriptions for an epinephrine auto-injector to self-administer in case of an emergency.

As part of this study, FLDOE requested that all school districts submit their food allergy policy and procedures for review. The results of this study revealed that all 67 Florida school districts follow current federal and state laws and regulations regarding students with life-threatening allergies. Many districts have proactively adopted policies and procedures beyond the basic requirements to address the needs of students with food allergies. These policies and procedures range from simple to comprehensive.

<sup>&</sup>lt;sup>1</sup> Specific Appropriation 118, Chapter 2009-81, Laws of Florida

## INTRODUCTION

## Food Allergies and Anaphylaxis

The increasing number of children diagnosed with life-threatening food allergies is a growing national public health concern. From 1997 to 2007, the prevalence of reported food allergy increased 18% among children.<sup>2</sup> Approximately 3 million children in the United States (3.9%) were reported to have a food or digestive allergy in 2007, according to the Centers for Disease Control and Prevention.

Key findings from the National Center for Health Statistics, United States Department of Health and Human Services:

- Children with food allergies are two to four times more likely to have other related conditions such as asthma and other allergies.
- From 2004 to 2006, there were approximately 9,500 hospital discharges per year with a diagnosis related to food allergy among children under age 18 years compared to 2,615 hospital discharges from 1998-2000.
- Hispanic children had lower rates of reported food allergies than non-Hispanic white or non-Hispanic black children.<sup>3</sup>
- Food allergies are more prevalent in children under 5 years old compared to children ages 5-17.
- There is no significant difference in the percentage of children with food allergies between males and females.

Food allergy reactions can range from mild to severe. The most severe cases are considered "life-threatening" anaphylactic reactions that must be treated promptly with epinephrine and require emergency medical attention.

**Food Allergy**: defined as an immune system response to a particular food or food ingredient or additive. In allergic individuals, the immune system identifies a food as a germ or antigen and produces antibodies (Immunoglobulin E or IgE), and this reaction stimulates the release of histamine and other chemicals.

Studies have found 40-50% of individuals diagnosed with a food allergy are considered to be at high-risk for anaphylaxis.<sup>4</sup> As with any type of emergency,

<sup>&</sup>lt;sup>2</sup> Branum AM, Lukacs SL. *Food Allergy Among U.S. Children: Trends in Prevalence and Hospitalizations.* NCHS data brief. No.10. Hyattsville, MD. National Center for Health Statistics. 2008.

<sup>&</sup>lt;sup>3</sup> Ibid., p. 5

<sup>&</sup>lt;sup>4</sup> Sampson, HA, *Food Allergy*, Biology Toward Therapy, Hospital Practice, 2000: May.

schools need to be prepared to meet the needs of students with life-threatening food allergies in the event the student has a severe allergic reaction at school.

Individuals who experience a negative reaction to a food, beverage, or food additive that does not involve the immune system, have a "food intolerance," not a food allergy. Food intolerances most often affect the digestive tract, and may affect the skin or respiratory tract. Unlike food allergies, food intolerances are not associated with anaphylaxis.

**Food Intolerance or Non-Allergic Food Hypersensitivity:** defined as an abnormal physiological response to food that does not involve the immune system. Food intolerance reactions include pharmacologic, metabolic, and toxic responses to foods or food components. Examples of food intolerance are lactose intolerance, celiac disease, and phenylketonuria (PKU).

Food allergy reactions vary among children. The severity of a reaction is not predictable and all precautions should be taken to prevent an anaphylactic reaction. In some sensitive cases, a reaction can occur by touching or inhaling the allergen. In severe cases, the consumption of only a trace of an allergenic food can lead to an anaphylactic reaction. Anaphylaxis typically occurs immediately following exposure to the allergen, but can occur up to four hours later.

In the case of a life-threatening food allergy reaction, more than one system in the body is involved and emergency medical attention is required. Listed below are common symptoms of food allergy reactions.

Recognizing and Responding to Food Allergy Symptoms				
Mouth: Gut: Lung: Throat: Skin: Heart:	tingling, itching, or swelling of tongue, lips, and mouth nausea, vomiting, diarrhea, abdominal cramps repetitive cough, wheezing, shortness of breath tightening of throat, hacking cough, hoarseness itchy rash, hives, swelling of the face or extremities low blood pressure; thin, weak pulse; fainting; blueness; paleness			
Source: National Food Service Management Institute, University of Mississippi				

There eight major food allergens that cause 90% of allergic reactions:

- 1. Peanuts
- 2. Tree Nuts
- 3. Milk
- 4. Egg
- 5. Wheat
- 6. Soy
- 7. Fish
- 8. Shellfish

Most children with food allergies to milk, eggs, wheat, and soy will outgrow their allergies. Food allergies to peanuts, tree nuts, and fish usually persist into adulthood.

There is no cure for food allergies. Protecting a child from exposure to offending allergens is the most important way to prevent a food allergy reaction or a life-threatening anaphylactic reaction.

## Role of Schools in Managing Food Allergies

Schools play an important role in managing student food allergies. The increasing number of students with food allergies has led to a greater concern for the safety of these children in schools. A recent study from the journal, *Archives of Pediatrics and Adolescent Medicine,* found that 1 in 5 children with food allergies had a reaction during the past two years while in school.<sup>5</sup>

Contrary to the idea that food allergy reactions occur most often in the cafeteria, the risk involves all areas of the school environment and may extend to areas beyond the school campus, which include bus transportation, school-sponsored sports events, and school-sponsored field trips.

Recent data collected by the Massachusetts Department of Public Health and the New York Statewide School Health Services Center supports the need for comprehensive policies. This study examined 650 cases involving students' allergic reactions at school involving the administration of epinephrine. In only 15% of the cases did the allergic reaction occur in the school cafeteria. Nearly one-half (48%) of the allergic reactions happened in the classroom; 10% occurred outside on the playground or sports field; 10% occurred in the health

<sup>&</sup>lt;sup>5</sup> Nowak-Wegrzyn, Anna., MD; Conover-Walker, Mary Kay, MSN, RN, CRNP; Wood, Robert A., MD. Food-Allergic Reactions in Schools and Preschools; *Archives of Pediatrics and Adolescent Medicine*. 2001;155:790-795

office/clinic; and the remaining percentage of allergic reactions happened in various locations on the school campus or on a school bus.<sup>6</sup>

## C.S. Mott Children's Hospital National Poll on Children's Health

A recent national opinion poll conducted by the C.S. Mott Children's Hospital measured how well schools are accommodating students with food allergies.<sup>7</sup> The survey included parents who have children with food allergies and parents whose children have not been diagnosed with food allergies.

Key findings from the survey:

- 79% of parents reported their children's elementary schools provide accommodations for students with food allergies.
- 50% of parents believe schools accommodate their child's life-threatening food allergy "very well."
- 44% of parents believe schools "somewhat" accommodate their child's life-threatening food allergy.
- 47% of parents without food allergic children say it is "not at all inconvenient" to make accommodations with food or the handling of food at the request of a school or food allergic family.

## Statewide Guidelines for District Food Allergy Policies

Current federal and state laws do not require Florida school districts to adopt a student food allergy policy. Statewide guidelines for school district food allergy policies have not been published; however, many districts in Florida have adopted policies and procedures to address the needs of students with food allergies. These policies range from simple to comprehensive.

In other states across the nation, the requirements for school district food allergy policies and procedures vary extensively. Since 2002, 11 states have published statewide guidelines for school districts and schools to develop student food allergy policies, procedures, and plans. In 5 of the states, the guidelines were published through a joint effort between the Department of Education and the Department of Health, and in 4 states the guidelines were published by the Department of Education.

<sup>&</sup>lt;sup>6</sup> Getz, L. *Proper Planning* – Schools Need Food Allergy Strategies to Keep Students Safe, Today's Dietitian Vol. 11 No. 8, p. 44-47.

<sup>&</sup>lt;sup>7</sup> C.S. Mott Children's Hospital, the University of Michigan Department of Pediatrics and Communicable Diseases, and the University of Michigan Child Health Evaluation and Research (CHEAR) Unit; *Are Schools Doing Enough for Food Allergic Kids?* Vol. 6 Issue 3; May 11, 2009

Listed below are the 11 states that have published guidelines for school districts, including the year the guidelines were published and the state departments that were responsible for developing the guidelines:

## Statewide Guidelines Massachusetts: 2002, DOE/DOH Connecticut: 2006, DOE/DOH Mississippi: 2008, DOE New Jersey: 2008, DOE/DOH New York: 2008, DOE/DOH Tennessee: 2007, DOE/DOH Vermont: 2008, DOE Washington: 2008, DOE Washington: 2008, DOE Arizona: Date unknown, DOH West Virginia: Date unknown, DOE Maryland: no access to document

In some states, guidelines were published to assist districts with developing food allergy polices required by state law. In other states, guidelines were published as recommendations to assist school districts in developing policies and procedures designed to meet the local needs.

A review of other state guidelines revealed 5 common components to a welldeveloped and comprehensive district food allergy policy. These 5 components are presented below:

## 1. Procedures for Emergency Treatment

This component includes developing an individual medical emergency plan or a Food Allergy Action Plan for students with life-threatening food allergies.

## 2. Roles and Responsibilities

The management of student allergies requires a coordinated and collaborative approach between home and the school. Policies should include clearly defined roles and responsibilities for school staff, parents, and students with food allergies.

#### 3. Training and Prevention Education

Training opportunities for school staff is an effective strategy for reducing the risk of a food allergy reaction and managing a medical emergency, if a student has a severe allergic reaction.

## 4. Communication and Awareness

This component includes the procedures for parents to follow to notify the school of their child's food allergy and the method to be used to disseminate the information to school staff. Many state guidelines also included a reference to anti-bullying policies to ensure students were not harassed, intimidated, or bullied by others due to their food allergy.

## 5. Monitoring Effectiveness and Evaluation

To monitor the effectiveness of district policies, recommended guidelines suggest reporting requirements regarding the number of students enrolled with life-threatening food allergies in schools and record-keeping of incidence reports. Evaluation of the policy and procedures followed after an occurrence is also important.

Food allergy policies should include the roles and responsibilities for the following individuals working in the school environment, along with responsibilities of the parents and students.

School Administrators	School Nurses	Food Service Managers
Teachers	Coaches	Substitute Teachers
Volunteers	Bus Drivers	Janitors

Policies should also include procedures to prevent and treat food allergy reactions in the classroom and gym; in food service areas/cafeteria; in art, music, science, and computer labs; in outdoor activity areas; on school buses; during field trips; during activities before and after school; and at athletic events.

## BACKGROUND

#### Federal Laws

In states without recommended guidelines or laws regarding students with lifethreatening food allergies, school districts and schools address the needs of these students according to federal laws and regulations that ensure all children have equal opportunities to receive an education and education-related benefits. School meals are considered an education-related benefit. School food service departments follow the policy and guidelines established by the United States Department of Agriculture and provide meal substitutions for students with documented life-threatening food allergies.

Under Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act (ADA), individuals with a disability shall not be denied the benefits of, or be subjected to discrimination, under any program or activity receiving federal financial assistance. Generally, all public schools receive federal funds through the School Nutrition Program and children with life-threatening food allergies are considered to have a disability.

The Individuals with Disabilities Education Act (IDEA) requires that every child receive a "free appropriate public education." If a child's disability affects his or her educational progress in schools, an Individual Education Plan (IEP) is written and it includes input from parents. In cases when a student's food allergy is severe enough to cause acute health problems that affect the student's educational performance, an Individual Education Plan may be an appropriate document to address a student's food allergy.

Florida school districts follow these procedures, in compliance with federal laws, to address the needs of students with life-threatening food allergies:

- The school district determines whether students with life-threatening allergies should receive services under Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA), or the Individuals with Disabilities Education Act (IDEA).
- If it is determined that the student is eligible for services under Section 504, the school staff develops a Section 504 plan to document the related aids and services the school district will provide, and an Individual Health Care Plan (IHCP) is developed to address the student's life-threatening allergies.
- 3. If the district determines that the student should receive services under IDEA, the school staff documents the related aids and services needed in the student's IEP. Districts are given further guidance under Rule 6A-6.03028, F.A.C., in the development of IEPs.

## Proposed Federal Legislation

At the federal level, Senator Christopher Dodd and Representative Nita Lowey sponsored legislation regarding school district food allergy policies. Senate Bill 456 and House Bill 1378 propose the Food Allergy and Anaphylaxis Management Act of 2009. These two bills were introduced and assigned to committees in February of 2009, but no further action has been taken since that time. This proposed legislation directs the Secretary of Health and Human Services, in consultation with the Secretary of Education, to develop voluntary food allergy guidelines to prevent exposure to food allergens and assure a prompt response when a child suffers a potentially fatal anaphylactic reaction. Guidelines would be developed and made available within one year of enactment of the law. The legislation also provides for incentive grants to local educational agencies to assist with adoption and implementation of food allergy guidelines in public schools.

## Federal Regulations

The USDA governs the Child Nutrition Program in schools. The USDA's nondiscrimination regulation, 7 CFR Part 15b, requires substitutions or modifications in school meals for children whose disabilities restrict their diets. Substitute meals are prepared for the students at no extra charge. A child with a disability must be provided substitutions in foods when school food service departments receive a statement signed by a licensed physician supporting that need.

The regulations in 7 CFR Part 15b specify the components of the physician's statement, which must identify:

- The child's disability;
- 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; and
- The food or choice of foods that must be substituted.

School food service personnel follow the USDA's regulations published in the document entitled "Accommodating Children with Special Dietary Needs in the School Nutrition Programs" and FNS Instruction 783-2, Revision 2, Meal Substitutions for Medical or Other Special Dietary Reasons.

## Florida Statutes

School districts and schools in Florida address the needs of students with lifethreatening food allergies according to state laws. The School Health Services Program, s. 381.0056, F.S., specifies that basic school health services are to be provided to all students, including emergency health services. The Florida Department of Health (FLDOH), in cooperation with the FLDOE, is responsible for supervising the administration of the school health services program at the state level, and the principals have supervisory authority over the health personnel working in the schools.

At the district level, county health departments are required to work with the district school board and the local school health advisory committee (SHAC), to develop a school health services plan, in accordance with s. 381.0056(5), F.S. This plan must include provisions for meeting emergency health needs in each school. Each district school board is also required to provide in-service health training for school personnel, according to s. 381.0056(7)(b), F.S.

Students who are diagnosed with any type of life-threatening allergy, which includes allergies to food, insect stings, latex, or medications, are at risk of needing emergency health care. Other state laws address the care and treatment of students if a life-threatening allergic reaction occurs at school that requires emergency medical attention.

- Chapter 464, F.S., the Nurse Practice Act, addresses nursing services in Florida schools and guidelines for the use of health aides or unlicensed assistive personnel in care provision.
- Section 1006.062, F.S., mandates assistance with medication and special procedures.
- Section 743.064, F.S., allows for emergency medical care or treatment to minors without parental consent.
- Section 381.0056, F.S., specifies that, in the absence of negligence, no person shall be liable for any injury caused by an act or omission in the administration of school health services.

In 2005, the Florida Legislature enacted the Kelsey Ryan Act and amended the school health services statute, s. 1002.20(3)(i), F.S. This legislation gave students the right to carry and self-administer epinephrine on school grounds if exposed to their specific life-threatening allergens. Students with life-threatening food allergies are given prescriptions for epinephrine by their physicians and this law provides care and treatment in case of an emergency.

## Florida Guidelines (Florida Administrative Code)

## School Health Services Plan

The School Health Services Program, s. 381.0056(8), F.S., directs FLDOH and FLDOE to adopt rules regarding implementation of a school health services plan.

• Chapter 64F-6, F.A.C., defines the components of a School Health Services Plan at the state and local level.

The state plan for school health, developed by the FLDOH in cooperation with the FLDOE, includes, at a minimum, a plan for the delivery of school services; accountability and outcome indicators; strategies for assessing and blending financial resources (both public and private); and establishment of a data system. School districts are also required to develop a School Health Services Plan.

Policies or procedures regarding students with life-threatening food allergies are not a specifically required component of a School Health Services Plan, but may be included.

## Kelsey Ryan Act

The Kelsey Ryan Act, passed by the Florida Legislature in 2005, requires the State Board of Education, in cooperation with the FLDOH, to adopt rules to protect the safety of all students from the misuse or abuse of auto-injectors.

• Chapter 6A-6.0251, F.A.C., addresses the use of Epinephrine Auto-Injectors.

The FLDOE, working in conjunction with the FLDOH and public and private partners, developed technical assistance (TA) FY 2006-7, Technical Assistance Paper (TAP) 312738 to assist schools with implementation of policies and procedures for the care of students with life-threatening allergies in compliance with the Kelsey Ryan Act. The guidelines:

- 1. Ensure the student's rights as well as the safety of other students.
- 2. Clearly identify roles and responsibilities of school districts, schools, school health staff, and parents to ensure that the student with life-threatening allergies has consistent and immediate access to emergency injectable medication.
- 3. Ensure that emergency medical services (EMS) are engaged immediately in the sequence that puts the safety of the students first.

4. Ensure services are safe and performed in accordance with nursing practice standards through nursing care planning, delegation, training, and monitoring of direct service providers.

TA FY 2006-7, TAP 312738 requires that district policies:

- Enable students with a history of life-threatening allergies to carry and self-administer epinephrine in accordance with the Kelsey Ryan Act.
- Require a support system that ensures administration of medication immediately after exposure.
- Ensure that EMS response and transport is activated with each episode.
- Be sure that staff understands that the notification sequence places EMS notification first—before principals and parents.
- Ensure that all staff, affected students, and parents of students with allergies are aware that they have specific roles that must be fulfilled to ensure student safety.
- Include procedures to evaluate the success of the policy in promoting safe care of students with life-threatening allergies.

Nursing delegation policies are a component of the district policies and must:

- Ensure the role of the nurse in development of the IHCP.
- Ensure that staff cooperates with the nurse who provides nursing assessment, care planning, training, and monitoring of personnel delegated to provide direct services in an emergency.
- Include a procedure for school administrators to mediate role-related problems between school district staff, parents, and nurses.

TA FY 2006-7, TAP 312738 also addresses student needs at the school level. At the beginning of each school year and at other times during the school year, the school nurse should organize and facilitate a planning and implementation meeting to develop the IHCP for newly diagnosed students. The meeting participants should include all individuals who may have a role in the student's care. Care planning topics should include:

- The current medical and emergency management plans, including responsibility for payment for emergency transportation.
- Any special requirements or restrictions relating to nutrition or environmental factors.
- The student's level of knowledge and skills related to self-management.
- Student-specific signs and symptoms of exposure to allergens.
- The plan for the student's care in the event of a disaster.

- Expectations of the parent/guardian regarding the provision of health services to be provided by the school-based staff.
- Expectations of the school staff regarding what equipment and health services must be provided by the parent/guardian.
- A discussion involving all relevant factors in the selection of school-based staff willing and able to take on the responsibility of safely providing care.
- Student's status under IDEA 2004 or 29 USC Chapter 794 (Section 504).

## Florida Guidelines for School Food Service Programs

The FLDOE's Food and Nutrition Management Section published a document entitled "Supplemental Guidance to Accommodating Students with Special Dietary Needs." This document was distributed to all food service directors describing the federal law requirements regarding the provision of food substitutions or modifications for students with disabilities based on a diet order from a student's physician. The Florida supplemental guidance document encourages, but does not require, food substitutions or modifications be provided to students without disabilities, when a student has medically certified special dietary needs based on a statement recognized from a medical authority. Special dietary needs include students with diabetes, Phenylketonuria (PKU), Celiac Disease, other diet-related food intolerances, and various religious and ethnic dietary needs.

The supplemental guidance document provides background information about food allergies, describes the symptoms of a food allergy reaction, and lists tips for managing food allergies in the cafeteria. This publication also provides numerous Web sites for food service personnel to reference for further information.

## FLORIDA SCHOOL DISTRICT FOOD ALLERGY POLICY STUDY

## Methodology

As directed by the Florida Legislature, FLDOE conducted a study of the status of school district food allergy policies in Florida. The methodology included the following:

- 1. Background research to identify applicable federal and state laws and regulations regarding student food allergies.
- Notification to school superintendents of the legislative requirement for FLDOE to review all district policies regarding student food allergies and submit a report.
- 3. Communication with food service directors regarding their district's food allergy policy or confirmation that their district did not have a specific food allergy policy.
- 4. Review of recommendations for food allergy policies from national organizations and identification of resources for districts wanting to implement food allergy policies.
- 5. Analysis and summary of the content of Florida school district food allergy policies and procedures.
- 6. Surveys of district food service directors, school principals, and school food service managers to examine the procedures used to manage the needs of students with food allergies.

## Overview of Florida School District Food Allergy Policies

In September of 2009, school superintendents were notified of the legislative requirement for FLDOE to submit a report regarding student food allergy policies. To fulfill this requirement, FLDOE conducted a study to determine the status of food allergy policies among the school districts.

All Florida school districts responded to the request for food allergy policies. Three different types of responses were received:

- **1. Required Policy and Procedures:** The district's policies and procedures are in compliance with existing federal and state laws and regulations.
- 2. Basic Food Allergy Policy: The district's policies and procedures extend beyond existing federal and state laws to address the roles and responsibilities of school food service personnel.
- **3. Comprehensive Food Allergy Policy:** The district's policies and procedures include recommended components of a comprehensive food allergy policy and focus on a school-wide approach to managing the needs of students with life-threatening food allergies.

The results of this study show that all 67 Florida school districts have policies and procedures addressing student food allergies that are consistent with current federal and state laws and regulations. Table 1 displays the number of districts in each of the three categories of responses.

- Fifty school districts responded with policies required by current federal and state laws.
- Ten districts were categorized as having a "basic food allergy policy." These policies contained at least two of the five components of a comprehensive food allergy policy.
- Seven district policies included at least four of the five recommended components of a comprehensive food allergy policy.

Table 1 Categories of School District Policies		
Types of Policies	# of Districts	
Required Policy and Procedures	50	
Basic Food Allergy Policy	10	
Comprehensive Food Allergy Policy	7	
Total	67	

Table 2 displays results from an in-depth review of the 17 basic and comprehensive district food allergy polices. The results show 15 districts in Florida include the roles and responsibilities of school staff, parents, and students in their district food allergy policy. Procedures for treatment in an emergency situation are included in 11 district policies. Training and prevention protocol procedures were included in 13 district policies. Districts with basic or comprehensive policies are the least likely to include procedures for school-wide communication or for monitoring effectiveness.

Table 2 Number of Districts with Recommended Components of a Comprehensive Food Allergy Policy	
	# of Districts
Five Recommended Components	
1. Procedures for Emergency Treatment	11
2. Roles and Responsibilities	15
3. Training and Prevention	13
4. Communication and Awareness	9
5. Monitoring Effectiveness and Evaluation	7

Additional key findings from the District Policy Review:

- Three of the large school districts have published guidelines and requirements for their schools to establish policies and procedures to meet the needs of students with life-threatening food allergies.
- Six districts indicated that they are currently drafting food allergy policies.

## Findings from Food Allergy Surveys

As part of the food allergy policy study, the Food and Nutrition Management Section was interested in collecting data about the prevalence of students with life-threatening food allergies and the efforts of school-level personnel to accommodate these students in Florida districts.

Three surveys were developed to collect additional data regarding how districts and schools manage students with life-threatening food allergies. (See Appendix C for survey questions.) The surveys examined the prevalence of students with food allergies, the incidence rate of severe reactions, and the extent to which staff received training regarding the prevention and management of student food allergies.

## 1. District Food Service Directors

To gather information at the district level, a survey was sent to all district food service directors. The survey questions were designed to collect information regarding policies and procedures used at the district level to manage student food allergies.

#### 2. School Principals

To gather information at the school level, a survey was sent to all school principals. The purpose of the survey was to examine the scope of students with food allergies and the procedures used at the school level.

#### 3. School Food Service Managers

A survey was also sent to all food service managers. This survey was designed to collect data regarding the participation of students with lifethreatening food allergies in the National School Breakfast and Lunch programs. The survey also asked managers about procedures used in the cafeteria to address the needs of students with food allergies.

#### Survey Response Data

Table 3 provides the participation levels and response rate for all three surveys. Responses from district food service directors were received from all large and medium-sized districts. Seven small districts did not respond to the survey.

Table 3 Survey Population and Respondents				
	Total	Number of	Percent of	
	Population	Respondents	Respondents	
District Food Service				
Directors	67	60	90%	
School				
Principals	2,954	1,341	45%	
School Food Service				
Managers	2,954	606	21%	

Table 4 lists the percentages of survey respondents by the grade levels of students enrolled in their schools. Some schools in Florida combine grade levels beyond the traditional elementary, middle, or high schools grade levels, and the percentages of respondents in each category reflect the combination schools.

Table 4 Survey Respondents by School Grade Levels				
	Elementary	Middle	High	
School Principals	66%	27%	20%	
School Food Service				
Managers	70%	26%	16%	
* Percentages add up to more than 100% due to overlap in combination schools (K-8, 6-12, or K-12).				

## Student Food Allergy Data

Data on the number of students with food allergies is not collected on a statewide basis. The surveys provided an opportunity to collect "informal" figures of the percentage of schools that have students with life-threatening food allergies.

Table 5 shows that 62% of principals and 52% of school food service managers who responded to the survey indicated that they have students with life-threatening food allergies.

Table 5 Students Currently Enrolled in Your School with Life-Threatening Food Allergies				
	Yes	No	Don't Know	
School Principals	62%	30%	8%	
School Food Service52%32%16%				

Data on the number of food allergy medical emergencies occurring at schools is not collected on a statewide basis. Survey results in Table 6 show the majority of school principals (78%) and food service managers (70%) report no medical emergencies related to food allergies had ever occurred at their school; however, 156 School Principals, or 12% of the 1,341 who responded to the survey, reported a medical emergency had occurred at their school. Also, 27 food service managers, or 4% of the 606 who responded, reported that a medical emergency related to a food allergy reaction had occurred at their schools.

Table 6   Medical Emergency Occurred at Your School   Related to Student Food Allergies			
	Yes	No	Don't Know
School Principals	12%	78%	10%
School Food Service Managers	4%	70%	26%

#### Food Service Director Survey Responses

Food service director survey responses reflect all three categories of district food allergy policies, ranging from required policies and procedures, to basic food allergy policies, to comprehensive policies. In some districts, the required policies and procedures (based on existing laws and regulations) are viewed as the "district food allergy policy." In other districts, the policies address other areas in the school environment beyond the school cafeteria and include components of comprehensive food allergy policies.

The food service director responses regarding methods used to adopt food allergy policies showed variation between districts.

- In six districts the school board had formally adopted a policy.
- In nine districts the food service department established the policy.
- In seven districts the policy was established jointly by more than one entity within the district, usually involving the food service department and school health services.
- One district reported that "Risk Management" established the policy.
- One district reported that the School Wellness Advisory Council determined the policy.

Food service directors were also asked about specific components of their district food allergy policy. Table 7 shows that the responses from 43% of the food service directors indicated that their district policies included components that required a school food allergy response plan and 50% reported having a "no food" policy on school buses. These percentages are higher than the results found during the review of district policies. This difference may demonstrate how the perception and actual procedures are different from written policy.

Table 7 District Policies and Procedures Regarding Student Food Allergies			
	Yes	No	Don't Know
Does your district require schools to have a food			
allergy emergency response plan?	43%	30%	27%
Does your district have a "no food" policy on			
school buses?	50%	20%	30%

Food service directors indicated which school staff roles and responsibilities were included in their district's food allergy policy and whether or not the district policy included communication with the local emergency team. Survey results showed the cafeteria staff at the school were notified in every district policy (100%). These results demonstrate how all districts are meeting the required laws and regulations to provide meal substitutions. In almost all districts (86%), the policy included notification of classroom teachers. Staff in other areas of the school were included less frequently. A food allergy policy that includes notification of local emergency teams is recommended, but only 25% of the respondents indicated that they were included in the policy.

Table 8 Staff Roles and Responsibilities Included in District Policies		
Cafeteria Staff	100%	
Classroom Teachers	86%	
After School Programs	60%	
Transportation Personnel	37%	
Athletic Events	37%	
Weekend School-Sponsored Events	23%	
Local Emergency Teams	25%	

#### **Training for School Personnel**

Food service directors in 22 out of 60 districts (37%) responding to the survey reported that their district requires training for food service personnel in methods to manage and prevent student food allergy reactions. The review of district policies showed that only 13 out of 67 districts required training, perhaps reflecting a difference in procedures and policy. Survey results showed that some districts work with the local health department or school nurses to provide training to school personnel when a student in their school has a life-threatening food allergy.

When asked about the option of receiving training from the FLDOE, 62% of food service directors responded positively to receiving training from the department.

Survey results from food service managers showed that the same percentage (37%) of respondents reported that food service personnel had received training regarding student food allergies.

## Epinephrine Auto-Injector Survey Data

Training involving the use of an epinephrine auto-injector was reported by 85% of school principals responding to the survey. In 25% of the schools, food service managers reported food service staff had been trained to administer an epinephrine auto-injector in case of a medical emergency. When respondents were asked about the location of a reserve supply of auto-injectors, 37% of school principals reported that the injectors were stored in the school clinic and 4% of food service managers reported that the epinephrine auto-injectors were stored in the school clinic and the school cafeteria.

## Accommodating Students in the School Cafeteria

Although students with food allergies are at risk anywhere in the school setting, the cafeteria setting is a high-risk environment compared to other areas in the school. The survey results showed that food service personnel use several recommended strategies to address the needs of students with food allergies. A large majority (86%) of food service managers reported having a point-of-sale system that allows the cashier to identify students with food allergies. This procedure was also observed in many of the district policies and procedures reviewed during this study.

Other findings regarding methods used by food service programs to accommodate students include:

- In 47% of the responding schools, meals are provided for students with life-threatening food allergies when those students leave the school campus on a field trip.
- In 20% of the responding schools, a designated allergen-free table is used in the cafeteria for students with food allergies.
- In 70% of the responding schools, students with <u>non</u>-life-threatening food allergies were provided with meal substitutions.
- In 24% of the responding schools, food service managers reported that students with life-threatening food allergies did not participate in the National School Breakfast or Lunch Program.

Food service managers were asked to indicate the types of common food allergies for which they currently make accommodations for students and provide those students with meal substitutions. Table 9 shows the frequency of common food allergy categories for which food service managers provide meal substitutions to students. Milk (83%) was the most frequent substitution and products with peanuts were the second most frequent substitution with 78% of food service managers reporting meal substitutions are made for students with peanut allergies. The large number of meal substitutions for peanut allergies is significant because this type of food allergy can often be life-threatening.

Table 9 Meal Substitutions Provided for Common Food Allergies in School Cafeterias						
Milk	83%					
Peanuts	78%					
Egg	46%					
Fish/Shellfish	45%					
Tree Nuts (i.e., walnuts/pecans)	36%					
Wheat/Gluten	27%					
Other	26%					
Soy	17%					

## **Conclusions from Food Allergy Policy Study**

All Florida school districts are complying with existing state and federal laws and regulations to accommodate the needs of students with life-threatening food allergies. By complying with existing state and federal laws and regulations, districts meet the minimum standards for managing food allergies in the school environment. The results from this study revealed that in 50 of Florida's school districts (75%), the minimum requirements are being followed to address the needs of students with life-threatening food allergies. In 17 of the districts (25%), policies and procedures have been adopted that extend beyond the existing requirements and specifically address food allergies in the school environment by incorporating two or more of the five recommended components of comprehensive food allergies. (See Appendix D for each district's type of policy.)

Current Florida laws do not require school districts to adopt specific food allergy policies. The Kelsey Ryan Act, passed in 2005, addresses students with all types of life-threatening allergies and allows them to carry epinephrine autoinjectors on school campuses. This law effectively addresses the treatment of a student in case of a medical emergency involving a life-threatening food allergy reaction. Florida laws do not address the other components of a comprehensive food allergy policy, which include establishing the roles and responsibilities of families, students, and school staff; training; school-wide communication; and monitoring of policies.

The review of district policies and the survey results show that district food allergy policies are not consistent across the state and only six districts have comprehensive policies. Although 11 districts have at least two of the recommended components of a comprehensive policy, most districts would benefit from a greater understanding of all the recommended components to prevent food allergy reactions from occurring and to effectively manage an emergency if one occurs.

Based on survey results, food service directors, school principals, and food service managers requested further guidance in two areas:

- 1. Food allergy policy development
- 2. Training for school staff

National data show increasing numbers of students are being diagnosed with lifethreatening food allergies. State legislatures across the U.S., along with state departments of education and departments of health, have begun to address the need for comprehensive food allergy policies in schools, and have published guidelines for school districts to follow. Results from this study demonstrate the value of developing statewide guidelines addressing student food allergies.

## Appendix A: Food Allergy Definitions

**Allergen:** A food or other substance that triggers an allergic reaction in individuals who are sensitive to it. Allergens can cause allergic reactions when they are swallowed, touched, or even inhaled.

Allergic Reaction: A damaging immune response by the body to a particular substance that is wrongly perceived as a threat to the body. It may vary in severity from mild to life-threatening.

**Anaphylaxis:** A severe allergic reaction, the extreme end of the allergic spectrum, which may be fatal if not treated quickly with Epinephrine. The entire body is affected often within minutes of exposure to the allergen, but sometimes hours later.

**Epinephrine (Adrenaline):** The drug of choice in emergency treatment of acute anaphylaxis. It relaxes bronchial smooth muscle by stimulating alpha and beta receptors in the sympathetic nervous system. It must be administered as soon as anaphylaxis is suspected.

**EpiPen:** An adrenaline injection prescribed by many doctors, the EpiPen, an easy-to-use device with a concealed needle. Epinephrine auto-injectors, single or twinject, are available by prescription.

**Food Allergy:** An immune system response to a particular food or food ingredient or additive. In allergic individuals, the immune system identifies a food as a germ or antigen and produces antibodies (Immunoglobulin E or IgE) and this reaction stimulates the release of histamine and other chemicals.

**Food Allergy Action Plan (FAAP):** A written emergency care plan for students who have a life-threatening food allergy. It provides specific directions about what to do in a medical emergency, such as an accidental exposure to the allergen. It is part of the Individual Health Care Plan (IHCP).

**Food Intolerance:** An abnormal physiological response to food that does not involve the immune system. Food intolerance reactions include pharmacologic, metabolic, and toxic responses to foods or food components. Examples of food intolerance are lactose intolerance, celiac disease, and phenylketonuria (PKU).

**Individual Education Plan (IEP):** A written statement for a child with a disability that is developed and implemented. It is developed through a collaborative process with the child parents and a multi-disciplinary team in the child's school.

**Individual Health Care Plan (IHCP):** A health care plan developed by a registered nurse for children with acute or chronic health issues. Parents and other health care providers involved with the child participate in the development of the plan. The plan is to be used to guide health care professionals in the school setting as they care for that child's health issues.

#### **Appendix B: Information Resources**

American Academy of Allergy, Asthma, & Immunology <u>http://www.aaaai.org/patients/gallery/foodallergy.asp</u>

American Academy of Pediatrics http://www.aap.org/sections/allergy/child.cfm

The Asthma and Allergy Foundation of America <a href="http://www.aafa.org/display.cfm?id=9&cont=79">http://www.aafa.org/display.cfm?id=9&cont=79</a>

EpiPen® Training and Instructions http://www.epipen.com/page/how-to-use-epipen-auto-injector-index

Food Allergy Initiative <a href="http://faiusa.org/section\_home.cfm?section\_id=4">http://faiusa.org/section\_home.cfm?section\_id=4</a>

The Food Allergy & Anaphylaxis Network <a href="http://www.foodallergy.org">http://www.foodallergy.org</a>

International Food Information Council Foundation <a href="http://www.ific.org/food/allergy/index.cfm">http://www.ific.org/food/allergy/index.cfm</a>

Mayo Clinic <a href="http://www.mayoclinic.com/health/food-allergy/DS00082">http://www.mayoclinic.com/health/food-allergy/DS00082</a>

National Center for Chronic Disease Prevention and Health Promotion, Healthy Youth! Health Topics Food Safety Links <u>http://www.cdc.gov/HealthyYouth/foodsafety/links.htm</u>

National Institute of Allergy and Infectious Diseases, National Institute of Health, U.S. Department of Health and Human Services <u>http://www3.niaid.nih.gov/topics/foodallergy/default.htm</u>

School Nutrition Association http://www.schoolnutrition.org/foodallergy

Twinject Training and Instructions <u>http://twinject.com/injector.allergy.treatment/twinject\_injector\_training.html</u>

U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition <u>http://www.fda.gov/Food/FoodSafety/FoodAllergens/default.htm</u>

## Appendix C: School Food Allergy Survey Questions

## Survey 1: For Food Service Directors

1. School District: \_\_\_\_\_

2. How many students with food allergies are enrolled in schools in your district?

- 1-25
- 26-50
- 51-100
- 101 or more
- Don't Know

3. Does your school district have a formal policy to address the needs of students with <u>life-threatening</u> food allergies?

- Yes
- No

4. If yes, what authority established this policy?

- School Board
- District's Food and Nutrition Management Office
- Other (please describe)

5. Is the district food allergy policy provided on the school district's Web site?

- Yes
- No
- District doesn't have a food allergy policy.

6. Does your school district require schools to have a food allergy emergency response plan?

- Yes
- No
- Don't Know

7. Does your district have a "no food" policy on school buses?

- Yes
- No
- Don't Know

8. When a parent or caregiver notifies a school that their child has a food allergy, does your district require an individual health plan be written for the student?

- Yes
- No
- Don't Know

9. Does your school district require schools to notify staff about students with food allergies in the following areas/programs? Check all that apply.

- Classrooms
- Cafeteria
- After-school programs
- Weekend school-sponsored events/activities
- Athletic events (home and away)
- School bus
- Local emergency response team

10. Does your district require school food service staff to participate in training to manage student food allergies and prevent student food allergy reactions?

- Yes
- No
- Don't Know

11. Please provide any additional questions or comments you may have regarding food allergy policies in schools.

## Survey 2: For School Principals

- 1. School District: \_\_\_\_\_
- 2. School Name: \_\_\_\_\_

3. Please indicate the grade levels of students in your school.

- Elementary School
- Middle School
- High School

4. Do you currently have any students with life-threatening food allergies enrolled in your school?

- Yes
- No

5. During the past year did school staff receive any training to be able to recognize the signs of a food allergy reaction or symptoms of anaphylaxis?

- Yes
- No

6. Has there ever been a medical emergency related to student food allergies at your school?

- Yes
- No
- Don't know or may have happened before I became the school principal.

7. Has any staff at your school been trained to administer an epinephrine autoinjector in case of a medical emergency?

- Yes
- No
- Don't Know

8. Does the school clinic have a reserve supply of epinephrine auto-injectors to accommodate severe food allergy reactions in students?

- Yes
- No

9. Does your school have a procedure in place to identify students with a lifethreatening food allergy for teachers, substitute teachers, and student teacher interns?

- Yes
- No

10. Please provide any additional questions you may have regarding food allergy policies in schools.

## Survey 3: For Food Service Managers

- 1. School District: \_\_\_\_\_
- 2. School Name: \_\_\_\_\_

3. Please indicate the grade levels of students in your school.

- Elementary School
- Middle School
- High School

4. Do you currently have any students with life-threatening food allergies enrolled in your school?

- Yes
- No

5. If yes, how many students with life-threatening food allergies are enrolled?

- 1
- 2
- 3 or more

6. Although it is not required by law, does your food service staff prepare food for students with food allergies or intolerances that are not considered life-threatening?

- Yes
- No

7. Please indicate which type of common food allergies your staff makes accommodations for by providing substitute meals to students. (Check all that apply.)

- Peanuts
- Tree Nuts
- Milk
- Egg
- Wheat
- Fish
- Shellfish
- Soy

8. Are there students in your school with food allergies who do not participate in the school breakfast or lunch program?

- Yes
- No
- Don't Know

9. Are there students in your school with food allergies or food intolerances that are not considered life-threatening who do not participate in the school breakfast or lunch program?

- Yes
- No
- Don't Know

10. During the past year, has food service staff at your school been trained to prepare food for students with food allergies?

- Yes
- No

11. Has there ever been a medical emergency related to student food allergies at your school?

- Yes
- No
- Don't know

12. Do you currently have food service staff who have been trained to administer an epinephrine auto-injector in case of a medical emergency?

- Yes
- No
- Don't Know

13. Does the school cafeteria have a reserve supply of epinephrine auto-injectors to accommodate severe food allergy reactions in students?

- Yes
- No

14. Does your school cafeteria have a designated allergen-free table in the cafeteria?

- Yes
- No

15. Does your staff provide meals for students with life-threatening food allergies when those students leave the school campus on a field trip?

- Yes
- No

16. Does your point-of-sale system allow you to identify students with food allergies?

- Yes
- No

17. Are you interested in receiving training from the Department of Education for meeting the needs of students with food allergies?

- Yes
- No
- Undecided

18. Please provide any additional questions or comments you may have regarding food allergy policies in schools.

Appendix D										
		Florida School	District Policy	Review						
	Five Components of Recommended Food Allergy Policies									
School Districts *	Minimum Existing Standards	Procedures for Treatment	Roles and Responsi- bilities	Training and Prevention Education	Communi- cation	Monitoring and Evaluation				
Alachua	x	x	x							
Baker	X	X	Λ							
Bay	X									
Bradford	X									
Brevard										
Broward	X									
	X									
Calhoun Charlotte	X									
	X									
Citrus	X									
Clay	X		Х	X	Х					
Collier	Х	X		X	X					
Columbia	Х									
Dade	Х		Х	X						
Desoto	Х									
Dixie	Х									
Duval	Х									
Escambia	Х	Х	Х	Х	Х	Х				
Flagler	Х									
Franklin	Х									
Gadsden	Х									
Gilchrist	Х									
Glades	х									
Gulf	Х									
Hamilton	Х									
Hardee	Х									
Hendry	Х									
Hernando	х									
Highlands	х									
Hillsborough	х	Х	х	х	x	х				
Holmes	X									
Indian River	х		x	x						
Jackson	X									
Jefferson	X									
Lafayette	x									
Lake	x									
Lee	X									
Leon	X	x		Х	х					
LEUII	X	Ä		Ä	Ä					

Appendix D Florida School District Policy Review										
<u></u>	Five Components of Recommended Food Allergy Policies									
School Districts *	Minimum Existing Standards	Procedures for Treatment	Roles and Responsi- bilities	Training and Prevention Education	Communi- cation	Monitoring and Evaluation				
Levy	x									
Liberty	X									
Madison	x									
Manatee	X	x	x	x		x				
Marion	X	X	~	~		X				
Martin	X									
Monroe	x									
Nassau	x									
Okaloosa	x									
Okeechobee	x									
Orange	x		x			x				
Osceola	X		~~~~							
Palm Beach	X									
Pasco	X	X	x	x	x	x				
Pinellas	Х	х	x	x	x					
Polk	x	х	x	x						
Putnam	х									
St. Johns	х		х	х	х					
St. Lucie	х									
Santa Rosa	Х	х	х							
Sarasota	Х	Х	х	х	х					
Seminole	Х									
Sumter	Х									
Suwannee	Х									
Taylor	Х									
Union	Х									
Volusia	Х		х			Х				
Wakulla	Х									
Walton	Х									
Washington	Х									

\* Districts in bold letters have a basic or comprehensive food allergy policy.