



Food Allergy Management & Education

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FAME

WELCOME!

Food allergy is a growing safety and public health concern. Everyone plays a part in helping keep students with food allergies safe. The FAME tool-kit is designed to help school nurses, school administrators, principals, teaching staff, support staff, school nutrition staff, parents/guardians, and students with and without food allergies learn:

- How to create a safer school environment.
- How to recognize and respond to an allergic reaction.
- Steps to avoid food allergens in the school environment.
- Elements to include in a comprehensive school based food allergy program.

How to use the FAME Tool-kit:

Where do I start?

Step 1: Introduction—All users read general food allergy awareness, how to prepare/respond in an emergency, and federal/state laws.

Step 2: Next—Review the section that represents your role in managing students with food allergies. The tool-kit is designed in color coded sections that pertains to the various roles in the school. Each section contains: checklist, forms, education and training resources.

Step 3: Follow Checklist—The checklist outlines items to review and complete based on role specific responsibilities.

Step 4: Use Forms—A variety of sample forms are included that help obtain detailed information on students with food allergies. For example: student health history and emergency action plan.
Note: all forms may be modified or used in their original format.

Step 5: Review Educational/Training Resources—Use materials found in the FAME tool-kit to teach yourself and train others about food allergy management. Each section contains summary pages (print as posters to post around school), such as:

- **Cross-Contact**—reviews some common ways cross-contact can occur.
- **Food Allergies and Social Factors**—reviews the social and emotional effects food allergies can have on students.
- **Alternative Ways to Celebrate & Reward Children without Food**
- **How to Read a Food Label**—reviews how to read a food label for the 8 major food allergens.

Step 6: Evaluate Educational Training—Use the food Allergy Questionnaire, a 10 question pre/post questionnaire that can be used to assess knowledge.

Click on the links below to open the sections:

1. **General Food Allergy Awareness**
2. **How to prepare and respond to an emergency**
3. **Healthcare Professionals** (School nurse)
4. **Administrators, Principals, and Teaching Staff**
5. **Support Staff** (Coaches, Lunch/Recess Monitors, Extended Day Providers, Transportation Providers, Facilities (Custodial) Staff, Administrative Support, Librarians, IS/Media Specialists, Security and Volunteers)

6. **School Nutrition Staff**
7. **Parents/Guardians**
8. **Student/Classmates**
9. **Federal/State Laws**
10. **FAME Manual**
11. **Glossary of Terms**
12. **Food Allergy Resources**



GENERAL FOOD ALLERGY AWARENESS

Estimated to affect 1 in every 13 children under the age of 18.^{1,2}

- Food allergy increased 50% among children age 0–17 years from 1997 through 2011^{3,7}
- 30% of children with food allergies also have asthma which increases risk of anaphylaxis
- 17% to 27% of kids experience anaphylaxis for the first time at school.

THERE IS NO CURE! Strict avoidance is key.

Food Allergy

- Immune system response
- Antibodies are created to certain food(s)
- Symptoms severe and life-threatening
- Symptoms: see potential signs & symptoms table

Food Intolerance

- No immune system response
- Lack certain digestive enzyme (i.e., lactose intolerance)
- Symptoms normally non life-threatening
- Potential symptoms: gas, bloating, abdominal pain, headaches

9 foods account for 90% of all reactions (note: any food can cause an allergic reaction)^{4,5,6:}

- Milk
- Eggs
- Peanuts
- Tree Nuts
- Sesame
- Soy
- Wheat
- Fish
- Shellfish

What is anaphylaxis (pronounced ana-fil-axis)?

This is an allergic EMERGENCY. It is a rapid, severe allergic reaction that occurs when a person is exposed to an allergen (an allergy-causing substance). When the allergen enters the blood stream, the body releases chemicals to “protect” itself from the allergen. This is an adverse immunologic response to food protein. These chemicals can cause dangerous symptoms including breathing difficulty, swelling, dizziness, low blood pressure, shock, and even death.

Potential signs and symptoms of an allergic reaction

Mouth: Itchy, swelling of tongue and/or lips

Throat: Itchy, tightness/closure, hoarseness, trouble breathing/swallowing

Skin: Itchy, hives, redness, swelling, red watery eyes

Gut: Nausea, vomiting, cramps, diarrhea

Lung: Short of breath, wheeze, repetitive cough

Heart: Pale or blue skin color, dizzy/faint, weak pulse

Neurological: Sense of “impending doom,” irritability, change in alertness, mood change, confusion

Other: Itchy, red, watery eyes

Be aware there are other allergens such as insect venom, medication, and latex that can cause anaphylactic reactions. Please see the FAME manual for additional details.



GENERAL GUIDELINES ON MANAGING LIFE-THREATENING FOOD ALLERGIES (LTFA) IN THE SCHOOL SETTING

- The recommendation is that every school with a child at risk for anaphylaxis has a full time registered professional nurse on staff, responsible for the development of the Individual Healthcare Plan (IHP), or Emergency Care Plan (ECP)/Food Allergy Action Plan (FAAP).
- Every child at risk for anaphylaxis will have one or more of the following: Emergency Care Plan (ECP)/Food Allergy Action Plan (FAAP), an Individual Health Plan (IHP) and/or a 504 plan to include a specific classroom plan
- The school will contact local Emergency Medical Service (EMS) to inform them that a student with life-threatening allergy is enrolled (note: not all ambulances carry epinephrine)
- Staff will be trained on food allergy prevalence, symptoms and reaction prevention at least annually and as needed. Drills should also be practiced
- All necessary staff should be trained in epinephrine auto-injector administration
- All necessary staff should be aware of epinephrine auto-injector location (unlocked)
- Develop an emergency shelter-in-place (disaster) plan

Best Practice

- Read food labels every time
- No food sharing or trading
- Practice good hand washing before and after eating (note: hand sanitizer does not remove the food—soap/water and/or hand wipes are okay)
- Prevent cross-contact of foods, utensils, eating areas, classroom surfaces, etc.
- Clean and disinfect all surfaces
- Substitute food items in classroom lesson plans and special events

1. Branum AM, Lukacs SL. Food allergy among U.S. children: trends in prevalence and hospitalizations. *NCHS Data Brief*. 2008 Oct(10):1-8.
2. Liu AH, Jaramillo R, Sicherer SH, Wood RA, Bock SA, Burks AW, Massing M, Cohn RD, Zeldin DC. National prevalence and risk factors for food allergy and relationship to asthma: results from the National Health and Nutrition Examination Survey 2005-2006. *J Allergy Clin Immunol* 2010 Oct;126(4):798-806 e13.
3. Jackson KD, Howle LD, Akinbami LJ. Trends in Allergic Conditions Among Children: United States, 1997-2011. *NCHS Data Brief*. 2013 May(5): 1-8.
4. Sampson H. Food allergy. *J Allergy Clin Immunol* 2003; 111(2):540-547.
5. Sicherer SH, Muñoz-Furlong A, Murphy R, Wood RA, Sampson HA. Symposium: Pediatric Food Allergy. *Pediatrics* 2003; 111(6):1591-1594.
6. U.S. Food and Drug Administration. *Food Allergies: What You Need To Know*. Silver Spring, MD: U.S. Department of Health and Human Services
7. Wood RA, Camargo Jr CA, Lieberman P, Sampson HA, Schwartz LB, Zitt M, Collins C, Tringale M, Wilkinson M, Boyle J, Simons E. Anaphylaxis in America: The Prevalence and Characteristics of Anaphylaxis in the United States. *J Allergy Clin Immunol* 2013.08.016.

This tool-kit is intended as a reference and information source only. The information in this tool-kit is not a substitute for professional care, and must not be used for self-diagnosis or treatment.

BJC HealthCare assumes no liability for the information contained in this reference or for its use.

ACKNOWLEDGEMENTS

FAME supports every school in coordinating the health and education needs of students with life-threatening food allergies by making available comprehensive evidence-based tools and resources to be used by school based teams.

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The FAME toolkit and manual was developed based upon guidance provided by leading allergists/health care professionals, national food allergy advocacy organizations, national school health organizations, national school educator organizations, school nurses, educators, registered dietitians, school nutritionist, attorneys, and parents/guardians of children with food allergies.

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There is no cure for food allergies.
Strict avoidance is the only way
to **PREVENT** life-threatening
food allergies (LTFA) reactions.

After reviewing the FAME tool-kit you will learn the following:

- How to create/provide a safer school environment
- How to recognize and respond to an allergic reaction
- Steps to avoid food allergens in the school environment
- Components of a comprehensive school-based food allergy program

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