

# Guidelines for Allergies in the School Setting

***The West Virginia Department of Education places the highest priority on the health and wellness of our state's youth. These guidelines represent researched findings and recommendations to provide guidance to be used in developing local policies, procedures and plans that focus on research-based best practices while respecting confidentiality and discrimination laws. The guidelines can be implemented by county boards of education, as they deem appropriate, after reviewing individualized allergy cases presented by the student's parents and ordered by a licensed prescriber under the guidance and case management of the certified school nurse's individualized health care plan and/or intervention guide.***

## Background:

Approximately 50 million Americans suffer from some form of allergic disease, and the incidence is increasing. (American Academy of Allergy Asthma & Immunology, January 2013). When one or both parents have allergies, there is a greater likelihood that their child will also. Most allergies first appear during childhood. It is important to have a child properly diagnosed and treated by a health care provider if a parent/guardian suspects any problem.

Adverse reactions to normally harmless substances such as dust, pollen, food or mold may occur. The immune system of people with allergies overreacts to these substances called triggers or allergens. Some reactions included tearing, swelling, congestion, sneezing, anaphylactic shock and other symptoms.

A food allergy is an immune system response to any food or food component that the body's immune system recognizes as foreign to the body and believes is harmful. Food intolerance is an adverse reaction to a certain food that does not include the immune system. Treatment may vary for each condition and it is imperative to consult with a health care provider to ensure the correct diagnosis is made.

Research reported in the June 2010 Journal of Allergy & Clinical Immunology (JACI) estimated that 1% of the population, or close to 3 million Americans, is allergic to peanuts or tree nuts. In a national survey of pediatric allergists, the prevalence rate of soy protein allergy was reported to be 1.1%, compared to the 3.4% prevalence rate of cow milk protein allergy (AllergicChild.com). Eight types of foods cause 90% of food allergy reactions (Center for Disease Control: *Food Allergies in Schools*, 2013):

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

"Allergic reactions that result from direct skin contact with food allergens are generally less severe than reactions due to allergen ingestion. Reactions that result from inhalation of food allergens are generally less frequent and less severe than reactions caused by either direct skin contact or ingestion. Exceptions to these generalizations are more likely in occupational environments and other settings in which food allergen sensitization occurred via either inhalation or skin contact (American College of Allergy, Asthma, & Immunology, 2006)".

"The potential risk of life-threatening allergic reactions to food particles that become airborne during cooking is much lower than with food ingestion, but airborne food allergens and clinical reactions to these allergens have been documented. Thus preparing or cooking the food in the presence of the allergic student are potential causes of allergic reactions (generally with respiratory symptoms) and should be avoided (American Academy of Allergy Asthma and Immunology: Position Statement, 2006)".

## Rationale:

There are four principles for managing allergic disease (American Academy of Allergy Asthma and Immunology: Understanding Allergic Diseases, 2006):

- Environmental control involves avoiding the symptoms (not removing) that cause allergic reactions.
- Pharmacologic therapy involves using medications to control allergies.
- Allergen Immunotherapy (allergy shots) involves allergy shots to reduce the severity of an allergic reaction.
- Education involves educating the parents/guardians, students and school personnel on how to successfully manage a student's allergies within the school environment. It entails empowering the student with knowledge to function in the everyday world.

***Education and planning is the key to establishing and maintaining a safe school environment for all students (NASN, 2012). The management of student allergies is a coordinated and collaborative approach among the parents/guardians, the student and the school.***

## Conclusion:

The school setting is a unique environment consisting of approximately 282,310 students in 730 West Virginia public schools (January 2013). Care must be taken to differentiate between a true allergic response and an adverse reaction. True allergies result from an interaction between the allergen and the immune response; the only way to truly determine this is through allergy testing. Allergy tests are designed to gather the most specific information possible so a doctor can determine the allergen and provide the best treatment.

"There appears to be consensus in the health and education literature that accommodations must reasonably ensure students safety, but not to the extent of total protection and isolation from the real world-neither is total protection achievable, nor is it in the best interests of a child's normal development. For example, Burke and Wheeler (1999) discuss the physician's role in prescribing a child's treatment protocol for school use, emphasizing that schools, health care providers and families can find ways to enable students to avoid allergic reactions yet "participate fully" in school activities" (Gelfman & Schwab, 2001, p. 190).

## Modified School Guidelines

As modified from the *School Guidelines for Managing Students with Food Allergies (Food Allergy and Anaphylaxis Network, 2006)*.

Allergies can be life-threatening. The risk of accidental exposure to foods can be reduced in the school setting if schools work with students, parents, and health care providers to minimize risks and provide a safe educational environment for students with allergies.

### Family's Responsibility

- Notify the school administrator/nurse and child nutrition director (when necessary) of the child's allergies.
- Provide necessary health provider order and/or physician's medical statement concluded from allergy testing.
- Work with the school team to develop a plan that accommodates the individual child's needs throughout the school including in the classroom, in the cafeteria, in afterschool programs, during school-sponsored activities and on the school bus, as well as an Individualized Health Care Plan and Intervention Guide developed by the certified school nurse utilizing resources with these WVDE Guidelines.
- Provide written medical documentation, instructions, and medications as directed by a health care provider, using the Individualized Health Care Plan and Intervention Guide. Include a photo of the child on the written form.
- Provide properly labeled medications and replace medications after use or upon expiration.
- Educate the child in the self-management of his/her food allergy including:
  - *recognizing a safe and unsafe allergens;*
  - *identifying strategies for avoiding exposure to unsafe allergens;*
  - *recognizing symptoms of allergic reactions;*
  - *alerting an adult they may be having an allergy-related reaction;*
  - *reading food labels (age appropriate) and/or be aware of environmental triggers; and*
  - *never sharing personal items including food, eating utensils, medication, etc.*
- Review intervention guides with the school staff, the child's health care provider, and the child (if age appropriate) after a reaction has occurred.
- Provide emergency contact information.

### Student's Responsibility

- Should be proactive in the care and management of their allergies and reactions based on their developmental level.
- Should always LOOK at the food being served.
- Should not trade food with others.
- Should not eat anything with unknown ingredients or known to contain any allergen.
- Should notify an adult immediately if they eat something they believe may contain the food to which they are allergic.
- Should not share food, beverages, personal items, medications, etc.

## School's Responsibility

- Be knowledgeable about and follow applicable federal laws including American Disabilities Act, Individuals with Disabilities Education Act and Section 504 of the Rehabilitation Act of 1973, and Family Educational Rights and Privacy Act and any state laws or district policies that apply.
- Review the health records submitted by parents and health care providers for allergy testing results correlating with proper medical orders and statements addressing the individualized student.
- Include allergic students in school activities. Students should not be excluded from school activities solely based on their allergy nor should students without allergies be discriminated against.
- Identify a core Coordinated School Health team (CSH) of, but not limited to, school nurse, teacher, principal, school food service and nutrition manager/director, and counselor (if available) to work with parents and the student (age appropriate) to establish an individualized prevention plan/ intervention guide in a documented case of serious (life-threatening) allergic reactions.
- Assure that all staff who interact with the student on a regular basis has been educated to allergens and can recognize symptoms, knows what to do in an emergency, and works with other school staff to eliminate the use of food allergens in the allergic student's meals, educational tools, arts and crafts projects, or incentives according to the student's individualized health care plan and intervention guide.
- Coordinate with the school nurse to be sure medications are appropriately stored, and keep student's prescribed epinephrine available. Emergency medications should always be kept in an easily accessible secure location central to designated school personnel. Students should be allowed to carry their own epinephrine, if age appropriate, after approval from the student's health care provider, parent and certified school nurse, in accordance with WVBE Policy 2422.8, Medication Administration.
- Assure the rights of students without allergies are respected.
- Designate school personnel who are properly trained to administer and store medications in accordance with W.Va. Code §18-5-22, WVBE Policy 2422.7, Standards for Basic and Specialized Health Care Procedures and WVBE Policy 2422.8, Medication Administration governing the administration, management and storing of emergency medications.
- Early recognition of symptoms and prompt interventions of the ordered treatment are vital to student survival during anaphylactic shock.
- Ensure that there are 2 to 3 staff members available who are properly trained by the certified school nurse to administer medications during the school day regardless of time or location.
- Review intervention guides with the school staff, the child's health care provider, and the child (if age appropriate) after a reaction has occurred.
- Bus driver and bus aide training includes symptom awareness and what to do if a reaction occurs. The certified school nurse will have an emergency intervention guide in place for the bus driver to follow.
- Recommend that all buses have communication devices in case of an emergency.
- Enforce a "no eating" policy on school buses with exceptions made only to accommodate special needs under federal or similar laws, or school district policy. Discuss appropriate management of food allergy with family.
- Discuss field trips with the family of the allergic child to decide appropriate strategies for managing the allergy. Administrators and teachers should notify the certified school nurse well in advance of scheduled field trips in order to allow adequate time for preparation to address student-specific special needs with respect to severe allergy.
- Follow federal/state/district laws and regulations regarding sharing medical information about the student.
- Take threats or harassment against an allergic child seriously.
- Educate students not to share food, beverages, personal items, medications, etc.

- The county board of education will provide training on anaphylaxis and allergy awareness for food service workers and others in the school system, if easily available locally [W.Va. Code §18-5-22c (2013) and WVBE Policy 2422.8-Medication Administration (2013)].
- Discuss the option of a County Board of Education policy allowing schools to administer stock epinephrine under a standing order and prescription by a physician to be administered to students and school personnel who have an unknown/non-diagnosed severe allergy/anaphylactic shock under the management of the certified school nurse [W.Va. Code §18-5-22c (2013) and WVBE Policy 2422.8-Medication Administration (2013)].

**Education is the solution to a successful allergy management plan.** Remember: environmental control is about avoiding allergens, not removing them from the school setting. Training and supervision in pharmacological therapy is an important piece to prevention of true anaphylactic reactions. Together environmental control, pharmacologic therapy, allergy testing and education will create a safe and healthy environment for all students.

## References and Resources

American Academy of Allergy, Asthma and Immunology (2012). *Fact Sheet from The Allergy Report: Food Allergies and Reactions*. Retrieved on September 2, 2013 from <http://www.acaai.org/press/Pages/allergy-fact-sheet.aspx>

American Academy of Allergy, Asthma and Immunology (1998). *Position Statement: Anaphylaxis in schools and other child-care settings*. Retrieved on September 2, 2013 from <http://www.aaaai.org/Aaaai/media/MediaLibrary/PDF%20Documents/Practice%20and%20Parameters/Anaphylaxis-in-schools-1998.pdf>

American Academy of Allergy, Asthma and Immunology (2012). *Fact Sheet from The Allergy Report: Understanding Allergic Diseases*. Retrieved on September 2, 2013 from <http://www.acaai.org/press/Pages/allergy-fact-sheet.aspx>

American College of Allergy, Asthma, & Immunology (2006). *Food allergy: a practice parameter*. Retrieved September 2, 2013 from <http://www.aaaai.org/Aaaai/media/MediaLibrary/PDF%20Documents/Practice%20and%20Parameters/food-allergy-2006.pdf>

Burke, W. and Wheeler, L. (1999). *Peanut Free or Peanut Smart? Allergy education vital to schools*. AAP News, February 20th.

Center for Disease Control (2013). *Food Allergies in Schools*. Retrieved September 2, 2013 from <http://www.cdc.gov/healthyyouth/foodallergies/index.htm>

Food Allergy and Anaphylaxis Network (2006). *School Guidelines for Managing Students with Food Allergies*. Retrieved September 2, 2013 from <http://www.foodallergy.org/document.doc?id=135>

Gelfman, H.B. & Schwab, Nadine C. (Eds.). (2001). *Legal Issues in School Health Services: A Resource for School Administrators, School Attorneys, and School Nurses*. North Branch, MN: Sun River Press.

Journal of Allergy & Clinical Immunology (2010). *US prevalence of self-reported peanut, tree nut, and sesame allergy: 11-year follow-up*. Retrieved September 2, 2013 from [http://www.jacionline.org/article/S0091-6749\(10\)00575-0/fulltext](http://www.jacionline.org/article/S0091-6749(10)00575-0/fulltext)

National Association of School Nurses (NASN) (2012). *The Role of School Nurses in Allergy/Anaphylaxis Management*. Retrieved on September 2, 2013 from <http://nasnupgrade.winxweb.com/PolicyAdvocacy/PositionPapersandReports/NASNPositionStatementsFullView/tabid/462/ArticleId/9/Allergy-Anaphylaxis-Management-in-the-School-Setting-Revised-June-2012>

National Association of School Nurses (2013) *A comprehensive guidance and resources for food allergy and anaphylaxis management in the school setting*. Retrieved on September 2, 2013 from <http://nasnupgrade.winxweb.com/ToolsResources/FoodAllergyandAnaphylaxis>

National Association of School Nurses (NASN) (2013). *Anaphylaxis Information & Answers to Frequently Asked Questions*. Retrieved on September 2, 2013 from <http://www.nasn.org/portals/0/Anaphylaxis/web/faq.html>

Sicherer, Scott H., Mahr, Todd and the Section on Allergy and Immunology (2010). *Management of Food Allergy in the School Setting*. *Pediatrics*. Retrieved on September 2, 2013 from <http://pediatrics.aappublications.org/content/126/6/1232.full>

Sicherer, Scott H., Muñoz-Furlong, Anne, Murphy, Ramon, Wood, Robert A. and Sampson, Hugh A. (2003). *Symposium: Pediatric Food Allergy*. *Pediatrics*. Retrieved on September 2, 2013 from [http://pediatrics.aappublications.org/content/111/Supplement\\_3/1591.full.pdf](http://pediatrics.aappublications.org/content/111/Supplement_3/1591.full.pdf)