INTRODUCTION

It has been estimated that up to eight percent of children have food allergies, and when exposure occurs, the potential for a life-threatening reaction exists (Jones & Burks, 2013). Anaphylaxis in children is most often caused by foods, and symptoms may affect the integumentary, gastrointestinal, respiratory, and cardiovascular systems (Kim & Fischer, 2011). The major concerns that have been reported in the literature are the lack of ability to recognize when allergic reactions occur and the insufficient treatment of anaphylaxis (Young, Muñoz-Furlong, & Sicherer, 2009). The eight most common foods in the American diet that constitute 90% of food allergy reactions are eggs, milk, peanuts, tree nuts, fish, crustacean shellfish, soy, and wheat (Boyce et al., 2010). The immediate recognition of an allergy exposure and the prompt treatment of reactions are imperative to positive outcomes for students.

Public Laws/Michigan Laws/Regulations:

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<tr>
<th>FDA Food Safety Modernization Act Public Law 111-353</th>
<th>Establishes the development of voluntary guidelines for the management of food allergy and anaphylaxis by the Secretary of Health and Human Services and the Secretary of Education.</th>
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<td>§ 380.1179</td>
<td>With written approval by an authorized health care provider and having an emergency care plan on file, a student may carry an epipen auto-injector or metered dose inhaler during any school sponsored program, activity, event, and during school transportation.</td>
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<tr>
<td>§ 380.1178</td>
<td>Provides immunity against “simple” negligence for administration of medication by a school employee.</td>
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The Michigan Departments of Education (MDE) and Community Health (MDCH) provide resources regarding the legal issues affecting the practice of school nurses (MDE, MDCH, 2013).

Role of the School Nurse

The National Association of School Nurses (NASN) and the National School Board Association (NSBA) recommends a team approach to the management of allergies and anaphylaxis in the schools (Food Allergy Research and Education, n.d.). The school nurse plays a pivotal role in the planning and coordination of care management for students with food allergies and medical histories of anaphylactic reactions. The school nurse has the knowledge, skills, and abilities to effectively plan and implement care for the student, organize a safe environment, provide health education, and ensure prompt appropriate response to emergency situations.

Monitoring/Compliance: Annually, the school nurse needs to review the student’s health information provided, and ensure accurate physician diagnosis, orders for medications, and signatures from the parent and health care provider permitting treatment of the student. The school nurse has a duty to follow district policies, in addition to federal and state laws pertaining to students with food allergies and anaphylaxis. Where policies are lacking, the school nurse may be instrumental in establishing guidelines, especially related to medication storage, accessibility, administration, and expiration monitoring.

Documentation: It is necessary for the school nurse to ensure accurate documentation of a plan of care for students with food allergies. It begins with the complete health information document supplied by the student’s parent/guardian, and followed by the establishment of a health plan. Depending on the individual student and school district, this record may be part of a 504 Plan, an Individualized Health Plan, or an Emergency Care Plan, also known as a Food Allergy Action Plan (samples available at: http://www.nasn.org/ToolsResources/FoodAllergyandAnaphylaxis).
Education: The MASN outlines the many functions of the school nurse (MASN, 2010). The school nurse has a primary role in health education related to the prevention of exposure to allergy triggers and the treatment of allergic reactions. This information needs to be communicated to all members of the school community, such as families, students, administration, and staff including members of the transportation, nutrition, and others that provide supervision and care for the student. The school nurse provides evidence-based information related to the prompt identification of the signs and symptoms of allergic reactions, and the prompt, accurate treatment of these reactions. The school nurse can be a resource to assist in identifying nonfood items utilized in the schools that could produce an unexpected exposure to food allergens. Items such as crayons, finger paints, clay, and soaps can contain some of the most causative food allergens (Young & Mickelson, 2012).

Surveillance: Review of all students’ health information needs to be conducted annually, with plans updated, as needed. Any modifications then need to be disseminated to those individuals involved with the student’s care. Additionally, the NASN (2011) recommends the evaluation of all emergency responses, and include a debriefing with involved participants to survey the effectiveness of the response and provide the opportunity to make necessary revisions to any areas of concern. The school nurse should review the literature to remain current with the evidence-based treatment of food allergies and anaphylaxis.

Resources: The National Institute of Allergy and Infectious Diseases worked in conjunction with federal agencies, professional organizations, and patient advocacy groups to develop guidelines for the clinical management of food allergy (Boyce et al., 2010). The American Academy of Allergy, Asthma and Immunology, the Joint Council of Allergy, Asthma, and Immunology, and the American College of Allergy, Asthma and Immunology utilized a task force to update a practice parameter regarding the diagnosis and management of anaphylaxis (Lieberman, Nicklas, Oppenheimer, Kemp & Lang, 2010). The NASN, NSBA, and the Food Allergy Research and Education groups are examples of national organizations dedicated to the well-being of students with food allergies. In addition, the Michigan Association of School Nurses (MASN) and the Michigan Department of Education can provide information specific to Michigan schools. There is a wealth of material related to food allergies and anaphylaxis, and the school nurse is in the position to act as the foundation for current, accurate information.

REFERENCES


ROLE OF THE SCHOOL NURSE - FOOD ALLERGIES AND ANAPHYLAXIS – Michigan School Nurse Primer


Contributions to the development of this document were made by Darlene Lonergan (2013). Oakland University.