



New Jersey State School Nurses Association Position Statement

Issue: Anaphylaxis Management in the School Setting

Adopted NJSSNA Position: *In light of the potential for anaphylaxis without previous allergy history, the NJSSNA supports proposed federal and state legislation which require schools to maintain stock epinephrine autoinjectors to be used for any student presenting with anaphylaxis.*

SUMMARY

The New Jersey State School Nurses Association (NJSSNA) supports the certified school nurse (CSN) in having the lead role in the prevention, care and management of students with anaphylaxis. The CSN is the leader in a comprehensive management approach which includes: educating the student, family, staff, and volunteer delegates; developing an Individualized Healthcare Plan (IHP) and Emergency Care Plan (ECP) to ascertain prompt emergency response to anaphylaxis.

Boards of education shall adopt a clear all-inclusive policy to address the management of anaphylaxis in the school setting and for all school-sponsored activities. The CSN is instrumental in developing policy to ensure consistency with federal and New Jersey State laws, nursing practice standards and established safe practices in accordance with evidence-based information.

NJSSNA supports proposed federal legislation, *The School Access to Emergency Epinephrine Act*. This bill encourages states to adopt laws in which schools maintain stock epinephrine to promptly treat anaphylaxis.

BACKGROUND

According to the Centers for Disease Control and Prevention (2012):

- An estimated 4 percent to 6 percent of U.S. children under age 18 have food allergies, half of which suffer severe reactions.
- The prevalence of food allergies and associated anaphylaxis has increased among school age children.
- Studies show that 16–18 percent of children with food allergies have had allergic reactions to accidental ingestion of food allergens while in school.
- Twenty-five percent of anaphylaxis reactions in schools occur among students without a previous food allergy diagnosis.
- School personnel should be ready to effectively manage students with known food allergies and should also be vigilant and prepared to respond effectively to emergency needs of students who are not known to have food allergies but who exhibit allergy-related signs and symptoms.
- Anaphylactic reactions require epinephrine.

Anaphylaxis is a severe, potentially fatal, systemic allergic reaction that occurs suddenly after contact with an allergy-causing substance (American Academy of Allergy, Asthma and Immunology (AAAAI), 2006). Serious anaphylactic reactions involve the cardiovascular and respiratory systems and may include hypotension and symptoms of upper or lower airway obstruction. Laryngeal edema and circulatory failure are the most common causes of death from anaphylaxis (Golden, Moffitt & Nicklas, 2011).

The eight most common food allergies that account for 90 percent of food allergy reactions are milk, eggs, peanuts, tree nuts, fish, shellfish, soy, and wheat (National Institute of Allergy and Infectious Diseases, 2010). Food is the most common source of anaphylaxis. Other potential causes include medications, stinging insects, natural rubber latex, exposure to cold, exercise and unknown etiology (Davis & Norris, 2007).

RATIONAL

Federal laws including the American Disabilities Act of 1990, Individual with Disabilities Education Act, and Section 504 of the Rehabilitation Act of 1973 protect the legal rights of students with allergies. The Food Safety Modernization Act (FSMA) was signed into law January 4, 2011 by President Obama. Part of this law, the Food Allergy and Anaphylaxis Management Act (FAAMA), 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 an anaphylactic reaction. The legislation also provides for incentive grants to local educational agencies to assist with adoption and implementation of food allergy guidelines in public schools (FSMA, 2011).

The CSN coordinates the care of the student with life-threatening allergies during the school day and all school related activities. The CSN collaborates with the student, the student's family, healthcare provider, teachers, and school staff. The CSN ascertains the receipt of the student's medical order regarding the student's life-threatening allergy. NJSA 18A:40-12.3 1. A (5) states the medical order is effective for the school year for which it is granted and is renewed for each subsequent year. Requiring annual medical orders ensures the student's medical condition is closely monitored by the appropriate healthcare provider and any changes in symptoms or care are communicated to the CSN.

The CSN incorporates the medical orders into the Individualized Healthcare Plan (IHP) and Emergency Care Plan (ECP). The IHP and ECP are updated annually. The IHP and ECP map out a plan of action for the CSN, delegate, or student regarding anaphylaxis management. National Association of School Nurses (NASN, 2012), National School Boards Association (NSBA, 2011), and The Food and Allergy Anaphylaxis Network (FAAN, 2012) support the use of the IHP and ECP.

The CSN is the expert educator in the school community. Reviewing anaphylaxis information with the student, parent/guardian and delegate allows for clarification and the opportunity for demonstration of administration of epinephrine autoinjector. Reinforcement of anaphylaxis education is critical for the student, guardian, and delegate to ensure a correct response in the event of anaphylaxis (Pouessel, Deschildre, Castelain, Sardet, Sagot-Bevenot, de Sauve-Boeuf, Thumerelle, & Santos, 2006).

Intramuscular injection of epinephrine is the first line treatment for anaphylaxis as per *The Guidelines for the Diagnosis and Management for Food Allergies in the United States, a Summary of the National Institute of Allergy and Infectious Disease Sponsored Expert Panel Report* (2010). Key factors regarding the administration of epinephrine include immediate availability, prompt and correct administration, and accessibility to subsequent doses.

Immediate accessibility of epinephrine autoinjector for the treatment of anaphylaxis is critical. Almost 50 percent of children in school with known peanut allergy might experience a delay in anaphylaxis treatment due to limited access to their epinephrine autoinjector (Ben-Shoshan, Kagan, Primeau, Alizadehfar, Ven, Yu, Nicolas, Joseph, Turnbull, Dufresne, Pierre, & Clark, 2007). Deaths continue to occur, with adolescents being at high risk (Bock, Munoz-Furlong & Sampson, 2007; Stoloff, 2010) due to delayed administration of epinephrine or inaccessibility to treatment. Affected students need to self-carry epinephrine (NSBA, 2011) or plans for the quick accessibility shall be clearly delineated in the student's IHP/ECP.

Epinephrine autoinjector needs to be administered correctly. The CSN an expert educator reviews allergens, signs and symptoms of anaphylaxis, and the proper administration of the epinephrine autoinjector with the student, the student's parent/guardian and delegate. Volunteer delegates, identified as non-medical staff employed by their district, agree to administer the epinephrine autoinjector for a student with anaphylaxis.

It is critical for programs to be in place to train staff on the recognition and treatment of anaphylaxis (Young Munoz-Furlong & Sicherer, 2009). *Training Protocols for the Emergency Administration of Epinephrine* was developed by the New Jersey Department of Education (NJDOE) in 2008. This comprehensive document presents the legal references and training standards and educational information, and outlines the role of local boards of education, building and district administrators and the school nurse.

In light of the potential for anaphylaxis without previous allergy history, NJSSNA supports proposed federal and state legislation which requires schools to have stock epinephrine autoinjectors to be used for any student presenting with anaphylaxis. This position is in alignment with the National School Nurses Association Position Statement, Allergy/Anaphylaxis Management in the School Setting (2012), Dr. Phil Lieberman of the American Academy of Asthma, Allergy & Immunology, Ask the Expert (2012), and NSBA (2011). In addition, proposed federal legislation, School Access to Emergency Epinephrine Act (S. 1884), has been endorsed by: American Academy of Allergy, Asthma and Immunology; American Academy of Emergency Medicine; American Academy of Pediatrics; American College of Allergy, Asthma and Immunology; National Association of Elementary School Principals; and National Association of School Nurses.

Anaphylaxis education involves students, parents/guardians, and the school community. The CSN provides education and coordinates the care of the student with life-threatening allergies. Schools employing school nurses are more likely to provide immediate treatment for anaphylaxis as well as have ECPs (Greenhawt, McMorris & Furlough, 2008). Prompt treatment is necessary for positive outcomes (Young, Munoz-Furlong & Sicherer, 2009). The CSN is viewed as the medical expert in the school and is essential in developing prudent district policies regarding management of students with life-threatening allergies.

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