Anaphylaxis Management in the School Setting

Keeping Children Safe

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Learning Objectives

The learner will be able to:

- Explain the 5 key elements in the development of a Food Allergy Management Plan
- Develop training that helps school staff identify and treat anaphylaxis.
- Develop a food allergy action plan for use by school staff.
• 1-in-13 to 1-in-25 children have food allergy
• Children spend up to 50% of time in school
• 25% of anaphylaxis in schools are in children with no known allergy

• Increasing prevalence over the past two decades
• 170 foods identified to cause IgE mediated food allergies
• 8 most common foods
  – Milk, eggs, fish, crustacean shellfish, wheat, soy, peanuts and tree nuts
• Section 112-US Secretaries of Health and Education “to develop voluntary guidelines for schools and early childhood institutions”.

• CDC has now developed these (released in 2013)

• Texas guidelines align with them (released in 2012).
• Federal Legislation- HR 2094 Entitled- “School Access to Emergency Epinephrine Act”

  – What does HR 2094 actually require or do?
    • Related to grants awarded to states for asthma-related programming
    • Increase preference given to states that require stock epinephrine and school staff to be trained and authorized to administer
Local school boards

- shall adopt and administer a policy for the care of students with a diagnosed food allergy at risk for anaphylaxis based on guidelines developed by the commissioner
- shall review existing policy and revise the policy as necessary to ensure the policy is consistent with the guidelines.
DSHS shall:

- **appoint members** to an ad hoc committee to consult with the commissioner of state health services on developing guidelines.
- commissioner of state health services shall, **develop guidelines** for the care of students with a diagnosed food allergy at risk for anaphylaxis.

DSHS Shall Not:

- **require** a school district or open-enrollment charter school to **purchase** prescription anaphylaxis medication.
- **require** the personnel of a district or charter school to **administer** anaphylaxis medication, such as epinephrine, to a student unless the anaphylaxis medication is prescribed for that student.
• One representative from each:
  – DSHS
  – Food Allergy Initiative
  – Food Allergy and Anaphylaxis Network
  – Texas School Nurses Organization
  – One Principal
  – One classroom teacher
  – One member of school board or
governing body of school
  – One superintendent
  – One physician that is member of
AAAAI
  – At least two parents (We had 3, one
which represented rural areas)
Literature Shows 5 Key Elements

5
- Identification of Students
- Development of Individual Plan

Key
- Reducing the Risk for Students
- Training for School Staff

Items
- Post Anaphylaxis Reaction Review of Procedures
Identification of Students With Food Allergies
HB 742, 82nd Legislative Session

- TEC, Section 25.0022
  - Request upon enrollment, on form or otherwise,
    1. Identify if child has food allergy
    2. Identify the food that the child is allergic
How does your school comply with TEC?

- What form is utilized?
- What process is in place?
- Who is involved in helping to identify students?
- How do you follow up with parents if they indicate a food allergy?
Algorithm in Planning for Students-NASN

Anaphylaxis Management Algorithm I

Planning Phase

1. Student is enrolled at school. Parent provides health information at registration and informs school of any health issues.

2. Allergy is confirmed by healthcare provider. Medical orders, including medication orders, are provided to the school. School administration is notified of allergy.

3. Parent/Guardian indicates that the student has a history of food allergy.

   - Yes
   - No

   - School nurse follows school district policies or assists in development of policies in conjunction with state laws and guidelines.

   - Preparation: School nurse begins planning for care of student at school utilizing NASN Tool Kit resources:
     - Family Allergy Health History
     - NASN Guidelines for Health Personnel in Allergy Management
     - Fact Sheet: What School Nurses Need to Know About Parents of Children with Food Allergies
     - Develop Individualized Healthcare Plan

4. The Student is exposed to an allergen.

   - No, a reaction does not occur.
   - Yes, an allergic reaction occurs.

   - See NASN Food Allergy Anaphylaxis Management Algorithm II: Provision of Care

5. Maintain plans in place. Follow up with faculty and staff on a regular basis to reinforce training and prescribed emergency response.
Food Allergy Action Plan and Emergency Action Plans
Key Elements on FAAP/EAP

- Name
- Date of Birth
- Grade Level
- A picture of the child
- List of foods allergic to
- Indication of asthma
- Description of past reactions
- Triggers
- Warning signs to watch for
- Clear instructions on when to use epinephrine
- Clear instructions on how epinephrine is to be used
- Name of all medications and dosage
- Instructions regarding monitoring
- Emergency Contacts and phone numbers
- Signature block for all involved
Anaphylaxis Plan and Emergency Action Plan

**FOOD ALLERGY & ANAPHYLAXIS EMERGENCY CARE PLAN**

**Name:**

**DOB:**

**Place Student's Picture Here**

**Allergy:**

**Weight:** 

**Asthma:** [ ] Yes, higher risk for a severe reaction [ ] No

**For a suspected or active food allergy reaction:**

**SEVERE SYMPTOMS**

[ ] If checked, give epinephrine immediately if the allergen was definitely eaten, even if there are no symptoms.

- **LUNG:** Short of breath, wheezing, repeated cough
- **HEART:** Pale blue, faint, weak pulse, dizzy trouble breathing
- **THROAT:** Tight, hoarse, weak voice
- **MOUTH:** Swelling of the tongue and/or lips
- **SKIN:** Rash or hives, rash on body
- **OTHER:** Feeling something bad is about to happen, anxiety, fainting

**MILD SYMPTOMS**

[ ] If checked, give epinephrine immediately for ANY symptoms if the allergen was likely eaten.

- **NOSE:** Itchy runny nose, sneezing
- **MOUTH:** Itchy mouth

**OR A COMBINATION of mild or severe symptoms from different body areas.

**NOTE:** Do not depend on antihistamines or inhalers (bronchodilators) to treat a severe reaction. Use Epinephrine.

**1. INJECT EPINEPHRINE IMMEDIATELY.**

2. Call 911. Request ambulance with epinephrine.

- Consider giving additional medications (following or with the epinephrine):
  - Antihistamine
  - Inhales (bronchodilators) if asthma
  - Lay the student flat and raise legs. If breathing is difficult or they are vomiting, let them sit up or lie on their side.
  - If symptoms do not improve, or symptoms return, more doses of epinephrine can be given about 5 minutes or more after the last dose.
  - Alert emergency contacts.
  - Transport student to ER even if symptoms resolve. Student should remain in LR for 4-6 hours because symptoms may return.

**MEDICATIONS/DOSES**

- **Epinephrine Brand:**
  - [ ] 0.15 mg/mL | 0.3 mg/mL

- **Antihistamine Brand:**
  - [ ] 25 mg/mL

- Other (eg., inhaled bronchodilator if asthma)

**FOOD ALLERGY & ANAPHYLAXIS EMERGENCY CARE PLAN**

**EPINEP* (EPINEPHRINE) AUTO-INJECTOR DIRECTIONS**

1. Remove the Epinep Auto-Injector from the plastic carrying case.
2. Pull off the blue safety release cap.
3. Swing and firmly push orange tip against mid-outter thigh.
4. Hold for approximately 10 seconds.
5. Remove and massage the area for 10 seconds.

**AUVI-Q™ (EPINEPHRINE INJECTION, USP) DIRECTIONS**

1. Remove the outer case of AUVI-Q. This will automatically activate the voice instructions.
2. Pull off red safety guard.
3. Place black end against mid-outter thigh.
4. Press firmly and hold for 5 seconds.
5. Remove from thigh.

**ADRENALCLICK®/ADRENALCLICK® GENERIC DIRECTIONS**

1. Remove the outer case.
2. Remove grey caps labeled “1” and “2”.
3. Place red rounded tip against mid-outter thigh.
4. Press down hard until needle penetrates.
5. Hold for 10 seconds. Remove from thigh.

**OTHER DIRECTIONS/INFORMATION** (may self-carry epinephrine, may self-administer epinephrine, etc.)

**EMERGENCY CONTACTS — CALL 911**

**MD/PHYSICIAN**

**FAMILY/RELATIONSHIP**

**PHONE**

**OTHER EMERGENCY CONTACTS**

**MD/PHYSICIAN**

**FAMILY/RELATIONSHIP**

**PHONE**

**PHONE**
Algorithm for Provision of Care/Post Exposure

Anaphylaxis Management Algorithm II

Provision of Care and Post Exposure Phases

- Planning for student with confirmed food allergy has been completed as outlined in NASN’s Anaphylaxis Management Algorithm I: Planning Phase.

Provision of Care: School nurse will plan for care for the student based on evidence-based guidance for best practice. The nurse will develop care plans for the student and direct care using the following resources:

- Notification of Food Allergy in Classroom
- District Policies & Support Checklist
- Staff Training Checklist
- Food Allergy Individualized Healthcare Plan
- Food Allergy Action/Emergency Care Plan

The nurse will design care around locally appropriate policies related to documentation, medication administration, and nursing practice.

The Student is exposed to an allergen.

- Maintain plans in place. Follow up with faculty and staff on a regular basis to reinforce training and prescribed emergency response.
- Yes, an allergic reaction occurs.
- Initiate prescribed emergency response as outlined in the Food Allergy Action/Emergency Care Plan. The nurse will provide leadership and care in responding to the emergent health event. Following the emergency response, the school nurse should complete documentation of the care provided and lead a debriefing meeting with parents, faculty, and staff utilizing:
  - Report of Epinephrine Administration

No, a reaction does not occur.

- No. Revise plans as needed to address all stakeholder concerns.

Student, Parent/Guardian, Faculty and staff report feeling confident in food allergy management process.

Yes.

- Yes. Reinforce training as needed.
Reducing the Risk of Exposure
Where can exposure occur?

• Take a moment to write down all the places in your school that children could come in contact with food?

• Compare your list to the person sitting next to you.

• How many locations were listed on your combined sheets?
Staff Training Elements

Key Training Components

- Identifying Students
- Signs and Symptoms of Anaphylaxis
- Implementing FAAP/EAP’s
- IHPs and 504 plans
- Communication procedures
- Environmental controls
- Working with EMS
- Post Anaphylaxis Debriefing
1. General Training  
   (for all staff)  
2. First Responder  
   (for staff in high risk areas)  
3. Healthcare Professionals  
   (for Health Services staff)
Training Resources Abound

- **National Association of School Nurses**
  - An entire packet on food allergies and anaphylaxis (algorithms in this presentation)

- **Food Allergy Research and Education (FARE)**
  - [http://allergyready.com/](http://allergyready.com/)
    - Training module for school district personnel

- **Allergy Home**
  - [www.allergyhome.org](http://www.allergyhome.org)
    - Training module for school district personnel

- **Center for Disease Control and Prevention**
  - [http://www.cdc.gov/healthyyouth/foodallergies/publications.htm](http://www.cdc.gov/healthyyouth/foodallergies/publications.htm)
    - Voluntary Guidelines for schools and links to resources
Food Allergy and Anaphylaxis

An NASN Tool Kit

The Centers for Disease Control has worked with NASN, the Food Allergy & Anaphylaxis Network and the National School Boards Association to develop comprehensive guidance and resources for food allergy and anaphylaxis management in the school setting.

Clinical Conversations for the School Nurse – Food Allergy Management in the School Setting

The Clinical Conversation Guide for Food Allergy Management in the School Setting provides the school nursing professional with access to recently published articles in the school health literature to provide a framework for leading a meeting with other school nurses or school health staff, a professional development workshop or an interactive nursing conference presentation based on prepared discussion questions.

Access the Guide.

Saving Lives at School: Anaphylaxis and Epinephrine

Initiate meaningful conversations with students and parents on topics related to anaphylaxis and epinephrine using NASN’s Connections Cards with School Nurse Handbook.

Learn more.

Algorithms
It’s Back-to-school time – make sure your school is Allergy Ready.

Our online course is designed to help teachers, administrators and other school personnel prevent and manage potentially life-threatening allergic reactions.

Register  Or  Learn More
School Staff Training Module

Food Allergies & Anaphylaxis in School: What School Staff Need to Know

School Staff Quiz

Food Allergy Quiz

This multiple choice exam can be taken by school staff after completion of “Management of Food Allergies in School: What School Staff Need to Know.” A certificate of completion is available to be printed or emailed after passing the exam.

The training module, quiz, and certificate of completion are free to use and share by all.

We Thank the Following Organizations for Review and Support of the School Staff Training Module.
Post Anaphylaxis Reaction Review of Procedures
Suggested Post-Exposure Check-List

– Call parent to follow-up on student condition
– Review anaphylactic episode with parent/student
– Review actions taken
– Discuss positive and negative outcomes
– Discuss any need for revising care plan
– Discuss family role to improve outcomes
– Discuss school role to prevent, respond and improve student outcomes
– Replace the epinephrine that was administered
– Ask parent to follow up with healthcare provider

Source: NASN, 2011
Thank You.

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