



Health Training:

Part I – Asthma

Part II – Allergic Reactions

Lyndhurst School District

2014

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# Part I - Asthma

- Asthma is a chronic lung condition with ongoing airway inflammation that results in recurring acute episodes of breathing problems.
- Asthma cannot be cured but it can be controlled.

# Asthma Statistics

- An estimated 20 million people are diagnosed with Asthma in the United States
- Asthma is the most common chronic childhood disease
- 15% of NJ children have asthma
- Asthma causes 5,500 deaths each year nationwide
- 2 million ER visits per year are due to asthma
- Asthma is the leading reason for school absenteeism

# Asthma Management in School

- Each student will have an Asthma treatment plan which:
  - Indicates asthma medication and route of administration
  - Time to administer medication (before gym, recess, or when needed)
  - Includes medications that are administered at home that may or may not be administered in school
  - Medical authorization for self-administration if applicable
  - Emergency treatment for symptoms that are not responding to medication
  - Promotes communication between teachers, parents, child, physician and school nurse

# Strategies for Treating Asthma

- Increase awareness of early warning signs of asthma
- Use of controller medication to decrease inflammation
- Pre-medicate before exercise and/or gym
- Reduce environmental triggers
- Promote regular physical activity

# Asthma Triggers

- Exercise – running or playing, especially in cold weather
- Upper respiratory infections (cold or flu)
- Laughing or crying hard
- Allergens and food allergies
- History of a food allergy
- Pollens – from trees, plants, grasses, including freshly cut grass
- Animal dander – from pets with fur or feathers
- Dust mites – in carpeting, pillows, upholstery
- Cockroach droppings
- Mold
- Irritants
- Cold air
- Strong smells and chemical sprays, including perfumes, paint, cleaning solutions, chalk dust, lawn and turf treatments
- Weather changes
- Cigarette and tobacco smoke

# Signs and Symptoms of an Asthma Episode

- **Observable changes**

- Coughing
- Wheezing
- Mouth breathing
- Shortness of breath
- Sighing
- Fatigue
- Rapid breathing, difficulty talking, short and choppy sentences

# Signs and Symptoms of an Asthma Episode

- **Verbal Complaints**

- Chest tightness and/or chest discomfort
- Stomach discomfort
- Cannot catch breath
- Dry mouth
- Funny feeling in neck



# Role of teacher/staff in Asthma Management

- Know the students in your class who have asthma
- Reduce exposure to asthma triggers in the classroom
- Observe students who are coughing or showing signs of discomfort
- Ask student if he/she has asthma (if you are unsure)
- Stay calm
  
- Notify the nurse
  - If nurse is not available:
    - Walk student through controlled breathing through puckered lips
    - Call 911 if:
      - Breathing gets harder or does not improve
      - Student has trouble walking or talking
      - Lips or fingertips are blue

## Part II - Management of Life-Threatening Allergic Reactions

- To comply with the New Jersey Department of Education standards for the administration of epinephrine via auto-injector in accordance with New Jersey P.L.2007, c.57
- Educate staff to recognize symptoms related to anaphylaxis
- Instruct delegates in the proper method of administering epinephrine auto-injector in the event of a life-threatening allergic reaction
- To seek volunteers to become delegates to ensure the safety of our students.

# How are you affected by this law?

- Delegates must be trained for students who may require the emergency administration of epinephrine by auto-injector for anaphylaxis when the school nurse is not available.
- Epinephrine must be in a secure but unlocked location that is easily accessible to the school nurse or delegate in the event of an allergic emergency at school or at a school sponsored function.

# Rationale

- All staff members should be aware of students, under their supervision, who may require administration of epinephrine, and be prepared to take action.

# Definitions:

- Anaphylaxis – A life threatening allergic reaction
- Epinephrine/Adrenaline – Medication used to treat anaphylaxis
- Auto-injector – Automatic syringe that contains epinephrine/adrenaline
- Designee/delegate – a staff member who volunteers to learn how to administer epinephrine in an emergency

# Common Foods that can Cause an Allergic Reaction

- Milk
- Eggs
- Peanuts
- Tree nuts (walnuts, pecans)
- Soy
- Fish
- Shellfish
- Wheat
- Sesame seeds/other seeds

# What else can cause an allergic reaction?

- Common causes of anaphylaxis include:
  - Medications
  - Insect Stings
  - Latex

## Less common causes of anaphylaxis include:

- Exercise
- Food-dependent exercise induced anaphylaxis ( when a person eats a specific food and exercises with three to four hours after eating)
- Idiopathic anaphylaxis: anaphylaxis with no apparent cause



# Symptoms that may occur during an allergic reaction/anaphylaxis

- Respiratory tract:
  - Itchy/watery eyes, runny or stuffy nose, sneezing, coughing, itching or swelling of the lips, tongue and mouth, wheezing
- Gastrointestinal tract
  - Abdominal cramps, nausea, vomiting, diarrhea
- Skin
  - Hives, eczema, itchy red rash, swelling on face or extremities
- General
  - Panic, sudden fatigue, chills, feeling of impending doom

# Symptoms of a Severe Food Allergic Reaction

- Respiratory
  - Shortness of breath, wheezing, difficulty swallowing, chest tightness, tingling of the mouth, itching or swelling of the mouth or throat, change in voice, hoarseness, hacking cough
- Cardiovascular
  - Drop in blood pressure, loss of consciousness/fainting, shock
- Gastro-intestinal
  - Nausea/vomiting
  - **Symptoms sometimes progress rapidly to severe reactions.**
  - **There is no way to know how serious a reaction will become so it is important to treat all reactions quickly.**

# Avoid Accidental Exposure

- Read all ingredient labels to be sure food is allergen-free
- Clean utensils and table surfaces to avoid contamination from other foods
- No food trading

# How to help someone having a severe allergic reaction

- Act quickly
- Administer Epinephrine if you are a designee (if not, contact your school nurse or known designee)
- Remain with student
- Call 9-1-1 – notify them that epi-pen has been given
  - Student must always be transported to the Emergency Room, even if the symptoms subside
- Give used epi-pen to medical personnel
- Notify parent/guardian

# Bi-Phasic Reaction

- A Bi-Phasic reaction is a second anaphylactic reaction that may occur in a person who was treated for anaphylaxis. It is imperative for a person who has been treated for an anaphylactic reaction to remain under medical observation.

# How to become a designee

- Please contact your nurse and/or principal if you are interested in becoming an epi-pen designee!

# Important Links

- <http://www.lyndhurstschools.net/userfiles/4/My%20Files/BOE%20-%20Policies/5141-21A2.pdf?id=445883>
- <http://policies.lyndhurstschools.net/5000/5141-21B.pdf>
- <http://snacksafely.com>



Quiz Time...

GOOD LUCK