

# **ALLERGIC REACTION**

**An allergic reaction is an exaggerated response by the immune system to a foreign substance**

**Anaphylaxis is an unusual or exaggerated allergic reaction; is a life threatening emergency**

# TWO TYPES OF ALLERGIC REACTIONS

- ❖ **Localized Reaction:** when the state of shock is confined to the area of the introduction of the allergen
- ❖ **Generalized Reaction:** When the reaction extends beyond the area of introduction of the allergen

# ALLERGIES CAN BE TO:

- ❖ Food
  - ❖ Peanut, seeds, egg, shellfish, milk
- ❖ Medication
- ❖ Chemical
- ❖ Environmental
- ❖ Insect Bites
- ❖ Animal Dander
- ❖ X-ray contrast
- ❖ Latex
- ❖ Plant Protein



# EXPECTED SYMPTOMS

## **Mouth:**

- Itching, swelling of lips/tongue

## **Throat:**

- Itching, tightness, closure, hoarseness

## **Skin:**

- Itching, hives, redness, swelling

## **Lungs:**

- Shortness of breath, cough, wheeze

## **Gut:**

- Vomiting, diarrhea, cramps

## **Heart:**

- Weak pulse, dizziness, fainting

# SYMPTOMS OF A MILD ALLERGIC REACTION

- ❖ Hives
- ❖ Itching
- ❖ Nasal Congestion
- ❖ Rashes
- ❖ Water Eyes



# **SYMPTOMS OF AN MODERATE TO SEVERE ALLERGIC REACTION**

- ❖ Abdominal pain
- ❖ High pitched breathing sounds
- ❖ Difficulty breathing
- ❖ Vomiting or Diarrhea
- ❖ Swelling (face, lips, tongue, eyes)
- ❖ Anxiety
- ❖ Chest discomfort or tightness
- ❖ Cough
- ❖ Difficulty swallowing
- ❖ Dizziness or light headedness
- ❖ Flushing or redness to the face
- ❖ Wheezing
- ❖ Palpitations
- ❖ Unconsciousness

# WHAT A CHILD MIGHT TELL YOU

- ❖ I think I am going to throw up
- ❖ My mouth/tongue itches
- ❖ My chest feels tight
- ❖ I feel itchy
- ❖ There is something in my throat
- ❖ My lips feel tight
- ❖ My tongue feels like there is hair on it
- ❖ Feel like bugs are in my ears



# WHAT IS A FOOD ALLERGY

- ❖ Immunological response to food which causes an allergic reaction
- ❖ Body releases histamines to protect itself
- ❖ Affects body systems: GI, Respiratory, Skin, Cardiovascular
- ❖ Exposure can cause serious problems or death
- ❖ Food allergy is the leading cause of serious allergic reaction (anaphylaxis) outside the hospital setting
- ❖ For some people a small amount of allergen can have the same effect as eating a large quantity
- ❖ For some people, skin contact with the allergy can cause a reaction

- ❖ For some people, inhalation of the allergen can cause discomfort or a reaction to occur
- ❖ Sensitivity is unknown
- ❖ Affected systems can vary between individuals and reactions
- ❖ There is no cure
- ❖ Severity of a reaction can vary from mild to serious and potentially fatal
- ❖ Previous reactions DO NOT indicate future reactions (an un predictable physiological change occurs after each exposure)
- ❖ Reaction can occur within seconds to 2 hours after exposure (sometimes longer)
- ❖ Anaphylaxis can occur within seconds of exposure (death can occur within as few as 6 Minutes)
- ❖ Pattern varies with individual

# TRYING TO PREVENT AN ALLERGIC REACTION

- ❖ Hand washing
- ❖ Teeth brushing
- ❖ Clean eating and working area carefully
- ❖ “Peanut/ Nut free” area for eating
- ❖ Discourage food sharing
- ❖ Have “safe” snacks and treats from family
- ❖ Do not allow homemade food items
- ❖ Read labels carefully, especially what food contains
- ❖ Read warning labels
- ❖ Know child’s medication
- ❖ If Doctor ordered an Epi Pen, nurse/school staff must know where it is at all times

# EPI PEN

## What is Epinephrine?

- ❖ It is the medication given as an emergency treatment for severe allergic reactions. It is given via the Epi Pen

**\*\*It is to be administered ANY time the symptoms are exhibited\*\***

# IF AN ALLERGIC REACTION OCCURS

- ❖ Follow Doctor's orders
- ❖ Administer Epi Pen (if prescribed by physician)
- ❖ Call 911 and state child is having an anaphylactic reaction
- ❖ Monitor child's airway (do not put anything in child's mouth)



# WHAT TO DO?!?

- ❖ Remove blue safety cap by pulling straight down DO NOT bend or twist
- ❖ Hold firmly with orange tip pointing downward
- ❖ Place orange tip firmly onto thigh
- ❖ Press down until you hear a click
- ❖ Hold on thigh for a count of 10 second
- ❖ Have office call 911
- ❖ Stay with student and reassure until rescue arrives
- ❖ Give used Epi Pen to rescue

# Anaphylaxis:

Any delay in treatment could be fatal.<sup>1,2</sup>

## Know what it is.

Anaphylaxis is a severe, life-threatening allergic reaction. It can be triggered by certain types of food (like peanuts and shellfish), insect stings, medicine, latex, exercise and unknown causes.

The following symptoms of anaphylaxis can occur within minutes or several hours after exposure to an allergy trigger:

<b>MOUTH:</b> itching, swelling of the lips and/or tongue	<b>THROAT*</b> : itching, tightness, closure, hoarseness
<b>SKIN:</b> itching, hives, redness, swelling	<b>GUT:</b> vomiting, diarrhea, cramps
<b>LUNG*:</b> shortness of breath, cough, wheeze	<b>HEART*:</b> weak pulse, dizziness, fainting

Only a few of these symptoms may be present.

\*Some symptoms can be life-threatening. ACT FAST!

## Know what to do.

Epinephrine (the active ingredient in the EpiPen® Auto-Injector) is the medication recognized by healthcare professionals as the emergency treatment of choice for severe allergic reactions.

If any of the symptoms listed above are exhibited, administer the EpiPen® Auto-Injector immediately.

1



- Hold firmly with orange tip pointing downward.
- Remove blue safety cap by pulling straight up. Do not bend or twist.

2



- Swing and push orange tip firmly into mid-outer thigh until you hear a 'click'.
- Hold on thigh for several seconds.



### Built-in needle protection

- When the EpiPen® Auto-Injector is removed, the orange needle cover automatically extends to cover the injection needle, ensuring the needle is never exposed.



*After administration, patients should seek medical attention immediately or go to the emergency room. For the next 48 hours, patients must stay within close proximity to a healthcare facility or where they can call 911.*

For more information, or to order more posters, go to [EpiPen.ca](http://EpiPen.ca)

EpiPen® and EpiPen® Auto-Injector are indicated for the emergency treatment of anaphylactic reactions in patients who are determined to be at increased risk for anaphylaxis, including individuals with a history of anaphylactic reactions.

To learn more, visit [www.EpiPen.ca](http://www.EpiPen.ca).

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