

# Severe allergic reaction: Anaphylaxis

Last updated: January 2024

An allergic reaction occurs when a person's immune system treats a protein (an allergen) as harmful. Some children with food allergies are at risk of having a severe allergic reaction called anaphylaxis. It often happens quickly and can cause death if not treated.

# Symptoms of a severe allergic reaction (anaphylaxis)

Symptoms of a severe allergic reaction can start within minutes of eating or being exposed to an allergen. In some cases, the reaction can take up to several hours to start. Symptoms can vary from person to person and can look different each time they have a severe allergic reaction. Symptoms generally include 2 or more of the following body systems:

- Skin: hives, swelling (face, lips, tongue), itching, warmth, redness, rash
- **Respiratory (breathing)**: coughing, wheezing, shortness of breath, chest pain or tightness, throat tightness, hoarse voice, nasal congestion or hay fever-like symptoms (runny, itchy nose and watery eyes, sneezing), trouble swallowing
- Gastrointestinal (stomach): nausea, pain or cramps, vomiting, diarrhea
- Cardiovascular (heart): paler than normal skin colour or blue colour, weak pulse, passing out, dizziness or light-headedness, shock
- **Other**: anxiety, sense of doom (the feeling that something bad is about to happen), headache, uterine cramps, a metallic taste

#### Responding to a severe allergic reaction

Since this kind of allergic reaction can be life threatening, it is important to respond quickly and follow these emergency steps:

- 1. **Give epinephrine auto-injector** (for example, EpiPen® or Allerject™) at the first sign of a known or suspected severe allergic reaction
- 2. Call 9-1-1 or your local emergency service. Tell them someone is having a severe allergic reaction
- 3. **Give a second dose of epinephrine** as early as 5 minutes after the first dose if there is no improvement in their symptoms
- 4. Go to the nearest hospital immediately (by an ambulance if possible) even if symptoms are mild or have stopped. The reaction could get worse or come back, even after proper treatment. Stay in the hospital for observation for as long as the doctor suggests (generally about 4 to 6 hours)
- 5. **Call emergency contact person** (for example, a parent or a guardian)

## Other important information about EpiPen®

- 1. EpiPen® products expire on the last day of the month indicated on the product packaging. For example, if the product is marked as expiring in January, it remains valid (not expired) until January 31
- 2. You are advised to have more than one auto-injector with different expiry dates to avoid only having an expired auto-injector
- 3. If you are experiencing an anaphylactic reaction and only have an expired auto-injector, use the expired product and immediately contact **9-1-1**
- 4. Whether the product is expired or not, go to the nearest hospital as soon as possible after using the product, as instructed in the product labelling

## Managing food allergies

Food can be an allergen for many people. Whether you or someone in your care has a food allergy, making food choices can be challenging. <u>Learn more about managing food allergies</u>.

Our HealthLinkBC Files provide information on recognizing and responding to severe food allergies in children and teens. You will also find tips on how to help your child stay safe:

- HealthLink BC File #100a Severe allergic reactions to food: Children and teens
- HealthLinkBC File #100c Allergy safe child care facilities

For information and resources to reduce a baby's risk of developing food allergy, see:

• Reducing risk of food allergy in your baby

For information about food allergies and adults living in care facilities, see:

• HealthLinkBC File #100b Allergy safe adult care facilities

#### **Useful websites**

## **B.C. Government**

The B.C. Government provides safety planning resources for severe allergic reactions in schools. Learn about promoting awareness, developing policies and creating safety plans in schools.

• Anaphylaxis

#### **Food Allergy Canada**

Food Allergy Canada educates, supports and advocates for the needs of people living with food allergy. They also support and take part in research. Learn more about food allergy and anaphylaxis:

- Allergy Aware
- Food Allergy Canada: Anaphylaxis resources
- Food Allergy Canada: Anaphylaxis Emergency Plan
- Food Allergy Canada: Emergency information
- Food Allergy Canada: A new reality: diagnosed with food allergy

### • Think F.A.S.T. poster

#### Health Canada, Government of Canada

Health Canada provides information on how to avoid allergic reactions and staying prepared. For resources on common allergens, see:

- Government of Canada: Common food allergens
- Government of Canada: Tips for avoiding common allergens in food

### **Canadian Society of Allergy and Clinical Immunology**

The Canadian Society of Allergy and Clinical Immunology supports allergy and clinical immunology research. The Society provides information about common allergies that affect students. You will find sample policies and emergency plans to help individuals, schools and organizations develop effective management strategies:

• Patient and School Resources

The information provided in the Severe Allergic Reaction Health Feature is adapted from the <u>Anaphylaxis in Schools and Other Settings, Copyright 2005-2016</u> Canadian Society of Allergy and Clinical Immunology.