

# SAFETY MEMO

March 28<sup>th</sup>, 2022 – Anaphylactic Reaction



Did you know?

## What is an allergic reaction?

“Anaphylactic reaction” is a rapid and widespread allergic reaction (affecting several systems / organs), often unpredictable, which can lead to death without adequate treatment. This is an abnormal reaction of the immune system to a trigger that the body perceives as a health hazard.

It is estimated about 30,000 emergency room visits per year result from food allergens in the United States<sup>1</sup>.

## Causes

Several possible triggers for allergic reactions include:

- Food (majority of anaphylactic reactions)
- Venom from insect bites: wasps and bees
- Medicines
- Latex
- Immunotherapy
- Physical cause: exercise and cold

## Signs and Symptoms

An anaphylactic reaction can cause the following symptoms which can affect one or more systems simultaneously:

- Respiratory system (cough, difficulty breathing / swallowing, wheezing, shortness of breath, tightness in the chest or throat)
- Skin system (hives, swelling of lips / tongue and / or face)
- Cardiovascular system (pale / bluish complexion, cardiac arrest, arrhythmia, dizziness / vertigo)
- Gastrointestinal system (cramps, nausea, vomiting, diarrhea).

## Prevention

- Know the triggering agents and avoid exposure to them and have an epinephrine auto-injector available in good working order and that is not expired
- It is good practice to keep more than one auto-injector at home and to take one (or more) with you during an outing, especially if a second injection is necessary to control the reaction before emergency services can intervene.
- Wear a medical bracelet clearly identifying your allergies.

## In a Working Environment

Inform colleagues of these food allergies and indicate the location of your epinephrine auto-injector(s) (EpiPen®).

## Treatment

Any delay in identifying the symptoms of a severe allergic reaction can be fatal. If you are not sure of the signs of a severe allergic reaction, it is usually best to use the auto-injector.

- Administer intramuscular epinephrine on the outer side of the mid-thigh using an auto-injector
- Call emergency services for immediate transport to the nearest hospital
- Another dose can be given within 5 to 20 minutes if symptoms worsen but only on the advice of a medical professional
  - Do not inject more than 2 consecutive injections

## Methodology

**IMPORTANT:** To avoid the risk of accidental injection, grasp the autoinjector with the orange tip pointing downwards and remove the blue safety cap by pulling it straight up and off:

- Place the orange tip against the middle of the outer thigh and with a swinging motion firmly push the autoinjector into the thigh until you hear a "Click". Autoinjectors will penetrate through clothing
- Hold the autoinjector firmly in place for 3 seconds, counting slowly. The orange needle cover extends automatically after injection to cover the needle and ensure it is never exposed.<sup>2</sup>
- Most autoinjectors (EpiPen®) only contain one dose

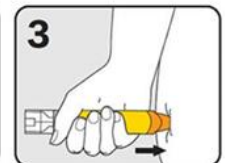
There are three steps to give EpiPen® as shown below:



1 Form fist around EpiPen® and PULL OFF BLUE SAFETY RELEASE



2 Hold leg still and PLACE ORANGE END against outer mid-thigh (with or without clothing)



3 PUSH DOWN HARD until a click is heard or felt and hold in place for 3 seconds REMOVE EpiPen®

<sup>1</sup> IFT. (Jan 1, 2020). Special considerations for allergens testing. <https://www.ift.org/news-and-publications/food-technology-magazine/issues/2020/january/columns/special-considerations-for-allergen-testing>

<sup>2</sup> EpiPen. (2021) How to use an EpiPen. Retrieved from <https://www.epipen.ca/how-to-use-epipen>

