Adapted from the <u>Ministry of Education</u> <u>website</u>

Elementary School Presentation

ANAPHYLAXIS



Interior Health

August 2023

Why are we here?

- Boards of Education must establish a training strategy according to the Ministry of Education <u>Anaphylaxis Protection Order</u> School Act, amended 2009
- Ministry of Education <u>BC Anaphylactic and Child</u> <u>Safety Framework</u> updated 2013
- Consensus Statement regarding standardized anaphylaxis training : <u>Anaphylaxis in Schools &</u> <u>Other Settings</u> 3rd Edition Revised, 2015

What is an Allergy?

Allergies occur when the immune system becomes unusually sensitive and overreacts to common substances that are normally harmless.

Examples are:

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- Food peanuts, tree nuts, sesame, milk, eggs, seafood, soy, wheat and mustard
- Insect stings bees, wasps, hornets
- Medications antibiotics, sulfa drugs
- Exercise
- Latex gloves/medical devices

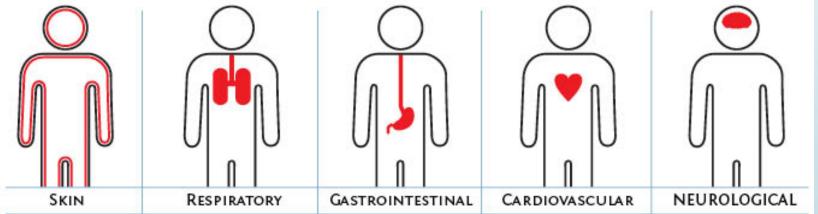
Reference: Food Allergy Canada 2021

What is anaphylaxis?

- Most serious type of allergic reaction
 - Can affect different parts of the body
 - Can happen quickly or can be delayed
 - Can be life-threatening

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Immediate treatment is necessary



Food Allergy Canada 2016

Most dangerous symptoms



Breathing difficulties

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Drop in blood pressure

Food Allergy Canada 2019

Prevention = Having a Plan

- Ensure the medical alert list and epinephrine auto-injectors are current
- Be aware of students who have allergies

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- Review emergency care plans for each student
- Epinephrine must be immediately available, preferably carried by child
- Additional devices should be stored in a central unlocked location
- Know when and how to administer the epinephrine
- Prepare for outdoor and off school grounds activities

Sample awareness and avoidance strategies & checklist

What should I do?

- 1) Administer Epinephrine
- 2) Call 911

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- 3) Administer second dose after 5-15 minutes <u>IF</u> symptoms do not improve or recur
- 4) Have ambulance transport student to hospital
- 5) Notify parent/guardian

Remember:

- Epinephrine is the drug to use for an allergic reaction
- Delay in receiving epinephrine is associated with fatalities
- Individuals must go to the closest emergency department

Remember

When in doubt, administer epinephrine, early use saves lives. Symptoms of anaphylaxis are unpredictable

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- Antihistamines are not appropriate drugs to use during anaphylaxis and must not be given
 - Asthma medication may be given **after** epinephrine
 - Some symptoms of anaphylaxis can be confusing i.e. breathing difficulties

Epinephrine addresses the life threatening symptoms of **breathing difficulty and loss of blood pressure**

Effects of Medication on Anaphylaxis

	Body System	Epinephrine	Antihistamine
	Breathing	Opens airways	
	Circulation	-Raises heart rate and blood pressure -Increases heart contractions	
	Skin	Reduces hives	Reduces hives
	Immune	Stops ongoing reactions	

What are auto-injectors?

A disposable, pre-filled automatic injection device that administers a single dose of epinephrine









Allerject

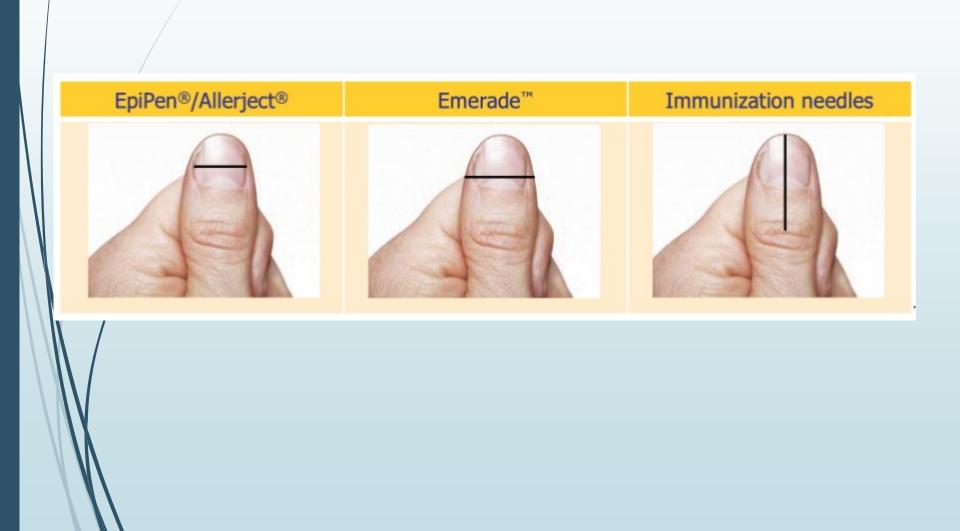
Epinephrine Injection, USP



Reference: EpiPen

<u>Allerject</u> Emerade

How big are the needles?



Using the EpiPen[®]



- ✓ Hold firmly with ORANGE tip pointing downward.
- Remove BLUE safety cap by pulling straight up. Do not bend or twist.
- ✓ Place and push ORANGE tip firmly into midouter thigh until you hear a "click."
- ✓ Hold on thigh for a slow count of 3.
- ✓ EpiPen video link (go to how to use video)

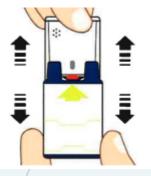
Built-in needle protection

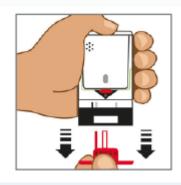
When EpiPen[®] is removed, the **ORANGE** needle cover automatically extends to cover the injection needle, ensuring the needle is never exposed.



Reference: www.epipen.ca

Using Allerject®







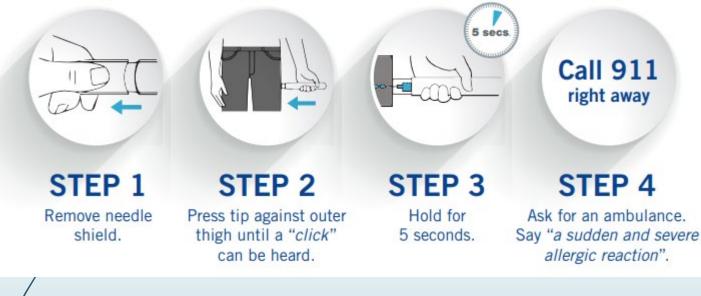
STEP 1/

STEP 2



- Pull Allerject® from the outer case
- Pull red safety guard down and off of Allerject®
- Place black end of Allerject® against the middle of the outer thigh, push firmly until you hear a click and a hiss. Hold in place for 5 seconds.
- ✓ <u>Allerject</u>video Link

Using Emerade[®]



✓ Emerade video link



Reference: Emerade

Body Positioning

When giving epinephrine

Have the child sit or lie down

After giving epinephrine

- ✓ Place the child on their back
- If they feel sick or are vomiting, place them on their side

Important: Do **not** have child sit up or stand suddenly





Food Allergy Canada 2019

Conclusion: Follow the three A's

Awareness

- Know the students affected by allergy
- Know the steps of the emergency plan
- Know the location of the epinephrine auto-injector
- Know how to use an epinephrine auto-injector

Avoidance

- Communication
- Avoid contact with allergens
- Regular cleaning
- Handwashing

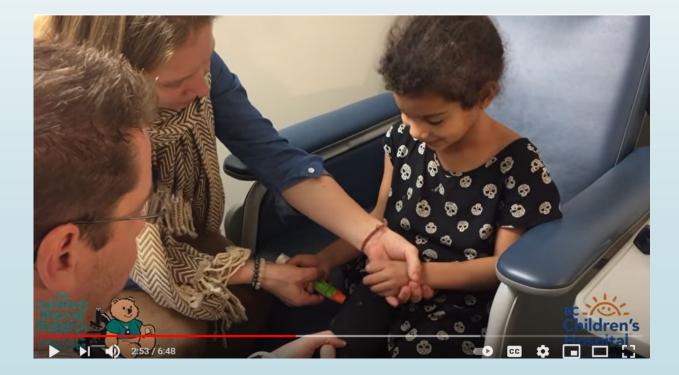
Action

- Give the epinephrine auto-injector and call 911.
- Don't delay!

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Anaphylaxis video

 Watch this 5 year old have anaphylaxis and use her EpiPen® - YouTube Stop at 3:10



Self-learning Module





Anaphylaxis in Schools

For teachers, administrators and other school personnel, our online course will help you understand the basics of anaphylaxis, ways to reduce risks in a school setting, and the recommended emergency treatment.

Duration: About 30 minutes



NOT STARTED

Allergy Aware

Resources

For more information contact your Public Health Nurse and see:

- BC Anaphylactic and Child Safety Framework
- <u>https://www.allergyaware.ca/courses/</u> Allergy Aware
- www.epipen.ca EpiPen®
- <u>https://allerject.ca/</u> Allerject®
- <u>https://www.emerade.ca/</u> Emerade®
- www.foodallergycanada.ca Food Allergy Canada

<u>www.medicalert.ca</u> Medic Alert

www.bchealthguide.org/healthfiles Health files

Anaphylaxis BC Ministry of Education

Anaphylaxis in Schools & Other Settings 3rd edition

<u>**Teens and Young Adults**</u> resources

References

- Anaphylaxis in Schools & Other Settings (Third Edition Revised, 2015) by the Canadian Society of Allergy and Clinical Immunology.
- Food Allergy Canada http://foodallergycanada.ca/
 - Asthma Canada, <u>https://asthma.ca/</u>

🛉 IH public website

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http://www.interiorhealth.ca/YourHealth/SchoolHealth/Scho

Acknowledgments

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Images and/or product shots from:

Pfizer Canada Inc. (EpiPen®), kaleo Inc. (Allerject®), Bausch Health (Emerade®), Food Allergy Canada or purchased by Interior Health

Any Questions?

