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Manitoba

Emergency Management of Pediatric Anaphylaxis

Identification

Acute onset of illness with involvement of skin, mucosal tissue or both:

- Urticaria
- Erythema/flushing
- Angioedema (swollen lips, tongue)

PLUS

Any respiratory, gastrointestinal symptoms or hypotension/syncope

OR

Acute onset of

- Bronchospasm or
- Upper airway obstruction or
- Hypotension/syncope

after exposure to a known or highly probable allergen, EVEN IF typical skin features are absent

INFANTS may present with irritability, lethargy, drowsiness or appear unwell

Immediate actions *** Perform simultaneously ****

1. **Direct someone to CALL 911 and say that a child is experiencing possible anaphylaxis**
2. **Call for HELP and assess ABCs**
3. **Administer Epinephrine intramuscular (IM) to the anterolateral thigh**

EPINEPHRINE DOSING			
Weight	**Weight-based dose (1 mg/mL)**	**Age-based dose (1 mg/mL)**	**Auto-injector dose**
Up to 10.9 kg	0.1 mg	< 2 years: 0.1 mg	< 26 kg and/or ≤ 7 years: EpiPen Jr® 0.15 mg Allerject® 0.15 mg
11 - 15.9 kg	0.15 mg	2 – 7 years: 0.15 mg	
16 - 25.9 kg	0.2 mg		
26 - 35.9 kg	0.3 mg	8 – 12 years: 0.3 mg	≥ 26 kg and/or ≥ 8 years: EpiPen® 0.3 mg Allerject® 0.3 mg Emerade® 0.3 mg
36 - 45.9 kg	0.4 mg		
≥ 46 kg	0.5 mg	13 years and older: 0.5 mg	Emerade® 0.5 mg or 0.3 mg EpiPen® 0.3 mg Allerject® 0.3 mg

Ongoing assessment & management

- Position patient supine with legs elevated if altered LOC/syncope
- Reassess ABCs q5 min until transfer of care to EMS/Code Blue Team
- Administer epinephrine q5 min prn for ongoing signs of anaphylaxis (other than residual rash or mild swelling). Call Children's Emergency at 204-787-4244 for advice or if transfer is delayed.
- For patients with sudden breathing difficulty, give epinephrine first then consider salbutamol (Ventolin®) MDI 8 puffs q20 min via aerochamber prn AND further epinephrine doses as indicated

Emergency Management of Pediatric Anaphylaxis

Purpose and Scope

This document provides additional practice guidance for the management of suspected anaphylaxis in children and youth in outpatient settings in Manitoba. Providers may include physicians, nurse practitioners, pharmacists, physician assistants, and nurses.

This guidance supplements the provincial anaphylaxis protocol ***Manitoba Provincial Anaphylaxis Protocol: Community Health Immunization*** (March 2021) and includes additional weight-based dosing, symptoms in infants, and information specific to food and medication triggers. The emergency management steps are summarized on the first page of this document, which can be posted and/or kept with anaphylaxis kits.

Clinical Criteria for Diagnosing Anaphylaxis

Identification of suspected anaphylaxis is summarized on page 1. **If a patient presents to your clinic with signs of anaphylaxis after exposure to a food or medication or following immunization, begin treatment immediately with EPINEPHRINE and call 911 for EMS to continue management and transfer the child to an Emergency Department.**

NOTE: Routine use of antihistamines and/or steroids is not recommended, either in community or acute care settings. Antihistamines should not be used as first-line treatment if anaphylaxis is suspected, or as treatment for "early" anaphylaxis.

Additional Anaphylaxis Criteria for Infants - Infants may present with irritability, lethargy or drowsiness, persistent vomiting or inconsolable crying. Persistent crying, flushing, hoarseness, choking, stridor, apnea, increased drooling, profuse vomiting, lethargy, somnolence or seizures may be nonspecific and difficult to interpret but should be considered as possible signs of anaphylaxis, particularly after ingestion of a highly allergenic food or medication.

Adapted from: Greenhawt et al. Guiding Principles for the Recognition, Diagnosis and Management of Infants with Anaphylaxis: An Expert Panel Consensus. J Allergy Clin Immunol Pract 2019;7:1148-56.

NON-ANAPHYLAXIS REACTIONS (usually immediate reactions)		
Condition	**Symptoms**	**Treatment**
Fainting	• Pale, loses consciousness, collapses to ground • May be accompanied by brief, clonic seizure activity (rhythmic jerking of limbs) • Recovery of consciousness usually occurs within 1-2 minutes but may remain pale, diaphoretic, mildly hypotensive	• Place in recumbent position • Reassurance • Monitor vital signs • Consider transfer to Emergency Department
Anxiety	• Fearful, pale, diaphoretic • C/O lightheadness, dizziness, numbness, tingling of face & extremities • Hyperventilation	• Reassurance • Rebreathing using paper bag
Breath-holding	• Occurs in young children who are upset & crying hard • Suddenly silent but obviously agitated • Facial flushing, perioral cyanosis • Spells end with resumption of crying but there may be a brief period of unconsciousness during which time breathing resumes	• Reassurance to parent & child