

	Policies and Procedures Title: <b>ANAPHYLAXIS - INITIAL MANAGEMENT</b> <b>RNSP: RN Clinical Protocol: Health Condition in an Emergency</b> Number: <b>1243</b>
Authorization: <input checked="" type="checkbox"/> SHR Nursing Practice Committee	Source: Nursing Date Effective: September, 2017 Scope: <b>SHR LTC and Rural Acute Care  Wakaw Primary Health and  Collaborative Emergency Center</b>

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**For the purpose of this policy, client will be used when referring to clients, patients, and residents.**

**INTRODUCTION**

Anaphylaxis is a serious, potentially life-threatening allergic reaction to foreign antigens. Anaphylaxis is preventable in many cases and treatable in all. It may be associated with immunizations as well as exposure to an allergen (e.g. Bee stings, pollen, food, latex). Anaphylaxis is a medical emergency. Quick recognition and treatment can be life-saving.

**DEFINITIONS:**

**Health Care Professional (HCP)** – Health Care Professional (HCP) will be used to refer to Registered Nurse (RN), Registered Psychiatric Nurse (RPN) and Licensed Practical Nurse (LPN).

**ROLES:**

**Licensed Practical Nurses (LPNs)** - as assigned, LPNs provide Anaphylaxis – Initial management as outlined in this policy and medical directive (Appendix A). LPNs provide this care as part of their program’s team response to medical emergencies.

**Registered Psychiatric Nurses (RPNs)** – as assigned, RPNs will provide Anaphylaxis – Initial management as outlined in this policy and medical directive (Appendix A). RPNs provide this care as part of their program’s team response to medical emergencies.

**Registered Nurses (RNs)** - RNs identified by their manager in targeted practice settings will be certified in the RN Specialty Practice: RN Clinical Protocol: Health Condition in an Emergency: Anaphylaxis – Initial Management. RNs will provide care as outlined in this policy and medical directive (Appendix A), as part of their program’s team response to medical emergencies.

## 1. PURPOSE

- 1.1 To ensure clients receive immediate attention and treatment in the event of an anaphylactic reaction.

## 2. POLICY

- 2.1 The Health Care Professional will:
  - Follow the Medical Directive: “ Anaphylaxis: Initial Management in Long Term Care and Rural Acute Care Settings” (Appendix A) in targeted areas.
  - Receive Education/Certification to Anaphylaxis - Initial Management in Saskatoon Health Region including:
    - Successfully complete the required learning module: Anaphylaxis: Initial Management including an assessment of knowledge (i.e. quiz) (NOTE: teaching and learning methods may vary e.g. classroom and/or self- study using paper module or e-learning).
    - Provide documentation of learning module and quiz to clinical nurse educator/supervisor.
    - Annual certification/review of anaphylaxis initial management is required.
  - Have immediate access to Anaphylaxis Management medications (EPINEPHrine, DiphenhydrAMINE, corticosteroid, ranitidine). This may be in the form of an Anaphylaxis Kit if one is provided in your area.

## 3. PROCEDURES

- 3.1 Identify severe allergic reaction or potential anaphylaxis.
- 3.2 Stop or remove the causative agent.
- 3.3 Determine appropriate dose of EPINEPHrine as per the chart in the medical directive (appendix A).

**NOTE: for pediatric clients, determine appropriate dose of EPINEPHrine based on weight (preferred). If weight is not known, determine dose based on Broselow tape (if available) or client age.**

- 3.4 Administer first dose of EPINEPHrine intramuscularly (IM) into the vastus lateralis as per the chart in the medical directive (Appendix A).
- 3.5 Position the client on their back or in a comfortable position if there is difficulty breathing or respiratory distress. Elevate the lower extremities if possible.
- 3.6 Call 911/Code Blue/ Outreach/Practitioner as soon as possible.
- 3.7 Monitor the pulse, level of consciousness and respiratory effort continuously.
- 3.8 EPINEPHrine may be repeated intramuscularly every 5 minutes for continued, worsening or progression of signs and symptoms to a maximum of 3 doses.
- 3.9 Document the time of onset of symptoms and time(s) EPINEPHrine was administered on the Anaphylaxis Treatment Worksheet form #104201 (Appendix B).

- 3.10 If client becomes unresponsive with no palpable pulse, initiate CPR as per SHR Regional Policy: Resuscitation Policy #7311-60-016, and SHR Nursing Policy: Cardiopulmonary Resuscitation Standards – Nursing #1123.
- 3.11 Client may be transferred to a higher level of care for follow up as directed by Practitioner.
- 3.12 Update Allergy/Intolerance Record if necessary. Refer to Allergy/Intolerance Documentation Policy 7311-60-029 <https://www.saskatoonhealthregion.ca/about/RWPolicies/7311-60-029.pdf>

#### 4. REFERENCES

Saskatchewan Immunization Manual <http://www.ehealthsask.ca/services/manuals/Documents/sim-chapter12.pdf>

Simons, F.E. Arduoso, L.R, Bilo, M.B. et.al World Allergy Organization Guidelines for the Assessment and Management of Anaphylaxis, WAO Journal 2011:4:13-37

Health Canada: Canadian Center for Occupational Health and Safety:  
<https://www.ccohs.ca/oshanswers/hsprograms/epinephrine.html?=&wbdisable=true>

Canadian Immunization Guide: <http://www.phac-aspc.gc.ca/publicat/cig-gci/p02-03-eng.php>

Medical Management of Vaccine Reactions in Child: <http://www.immunize.org/catg.d/p3082a.pdf>

| IMSP Acute Care IMSP Medication Safety Alert; [February](#) 26, 2015. Volume 20 Issue 4.



RUH     SCH     SPH  
 OTHER: \_\_\_\_\_

PATIENT IDENTIFICATION

Anaphylaxis: Initial Management in Long Term Care and Rural Acute Care Settings			ACTION																																																				
			MAR	ICP	REG	RN																																																	
<p>MD-043                      Based on an individual assessment of each client, registered nurses, registered psychiatric nurses, and licensed practical nurses who have successfully completed 'Anaphylaxis Training' may administer medications as directed for all persons who display signs and symptoms of anaphylaxis that include at least two body systems (see reverse).</p>																																																							
<p><b>Contraindications to EPINEPHrine</b></p> <p><input checked="" type="checkbox"/> There are no contraindications to administering EPINEPHrine in treating an anaphylactic reaction</p>																																																							
<p><b>Medical Directive Orders</b></p> <p><input checked="" type="checkbox"/> STOP causative agent  <input checked="" type="checkbox"/> Give first dose of EPINEPHrine intramuscularly  <input checked="" type="checkbox"/> Position client on back with lower extremities elevated or in a position of comfort if there is respiratory distress and/or vomiting  <input checked="" type="checkbox"/> Call 911/Code Blue/Outreach/Practitioner as soon as possible  <input checked="" type="checkbox"/> Monitor pulse, level of consciousness and respiratory effort continuously  <input checked="" type="checkbox"/> Repeat EPINEPHrine intramuscularly every 5 minutes as needed (maximum 3 doses total)  <input checked="" type="checkbox"/> Document on Anaphylaxis Treatment Worksheet (form #104201)</p>																																																							
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<p><i>This Medical Directive has been approved by the SHR VP Practitioner Staff Affairs and complies with the Saskatoon Health Region Medical Directives Policy (7311-60-027).</i></p> <p><i>Review will occur every year. This Directive is in effect until September 2018.</i></p>																																																							
<p>_____ DATE _____ TIME _____</p>			<p>These orders do not require a prescribing practitioner signature</p>																																																				

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### **Assessment of Anaphylaxis**

Persons who are experiencing anaphylaxis will rapidly develop S&S that involve at least two body systems (integumentary, respiratory, circulatory, or gastrointestinal) should be treated promptly with EPINEPHrine. The cardinal features of anaphylaxis include:

- 1) Itchy, urticarial rash
- 2) Progressive, painless swelling of face, mouth, and tongue
- 3) Sneezing, coughing, wheezing, labored breathing, hoarseness, and difficulty swallowing due to upper airway swelling
- 4) Rapid and weak pulse, decreased blood pressure
- 5) Nausea, vomiting, abdominal pain, and loose stools.

Appendix B



**SASKATOON HEALTH REGION**  
 Saskatoon, Saskatchewan  
 RUH  SCH  SPH Other \_\_\_\_\_

Patient Label

NAME: \_\_\_\_\_

HSN: \_\_\_\_\_

D.O.B.: \_\_\_\_\_

**ANAPHYLAXIS TREATMENT WORKSHEET**

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Causative agent (if medication, include lot number, expiry date, manufacturer, dose, route, site, and time given):

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Reaction details (see reverse for definitions):

Skin/Mucosal

- Urticaria - generalized       Urticaria - localized at injection site       Erythema
- Pruritus       Prickling sensation       Tingling sensation       Rash
- Angioedema:  Tongue       Throat       Uvula       Lip       Eyelids       Face
- Limbs       Injection site
- Eyes:  Itchy       Red       Tearing

Respiratory

- Sneezing       Rhinorrhoea       Hoarse voice       Sensation of throat closure       Stridor       Dry cough
- Tachypnea       Wheezing       Indrawing/retractions       Grunting and nasal flaring
- Cyanosis       Sore throat       Difficulty swallowing       Difficulty breathing       Chest tightness

Cardiovascular

- Decreased central pulse       Capillary refill time greater than 3 sec.       Tachycardia
- Decreased or loss of consciousness       Dizziness       Syncope

Gastrointestinal

- Diarrhea       Abdominal pain       Nausea       Vomiting

Other (describe)

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**Treatment**

Medication Administered	Time	Dose	Site/Route	Administered By	Pulse	Resp.	BP	SpO <sub>2</sub>	Oxygen
EPINEPHrine Dose #1			IM						
EPINEPHrine Dose #2			IM						
EPINEPHrine Dose #3			IM						

Code Team/Paramedics called:  Yes – time arrived: \_\_\_\_\_  No

Additional Information:

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Name of Recorder(s): \_\_\_\_\_ Signature: \_\_\_\_\_

Name of Recorder(s): \_\_\_\_\_ Signature: \_\_\_\_\_

## ANAPHYLAXIS TREATMENT WORKSHEET

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Patient Label

NAME: \_\_\_\_\_

HSN: \_\_\_\_\_

D.O.B.: \_\_\_\_\_

### **Anaphylactic Symptom Definitions**

**Angioedema:** Swelling caused by edema in the deeper skin and/or mucosal tissue in either single or multiple sites which may not be well circumscribed and is usually not itchy.

**Capillary refill time:** The time for normal skin colour to reappear after a blanching pressure is applied. Usually performed by pressing on the nail bed to cause blanching and then continuing the time for blood to return to tissue, indicated by a pink colour returning to the nail. Normal = 3 seconds or less.

**Cyanosis:** A bluish or purplish discoloration most easily seen in the facial or perioral area or tongue.

**Decreased central pulse volume:** Absent or decreased pulse on one of the following vessels – carotid, brachial, or femoral arteries.

**Erythema:** Abnormal redness of the skin without any raised skin lesions.

**Stridor:** An abnormal, high-pitched, musical breathing sound caused by a blockage in the throat or voice box (larynx). It is usually when taking in a breath.

**Tachycardia:** A heart rate that is abnormally high for age and circumstance.

Age		Heart Rate – upper limit (beats/minute)
Infants and Children	<1 year	160
	1 to 2 years	150
	2 to 5 years	140
	5 to 12 years	120
	>12 years	100
Adults and Adolescents		>100

**Tachypnea:** Abnormally fast breathing.

**Urticaria:** Hives. Raised, itchy areas of skin that are usually a sign of an allergic reaction. Hives can be rounded or flat topped, but are always elevated above the surrounding skin. They reflect circumscribed dermal edema (local swelling of the skin). The hives are usually well circumscribed, but may be coalescent and will blanch with pressure.

**Uvula:** The anatomic structure that dangles downward at the back of the mouth and is attached to the rear of the soft palate.