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THIS CHAPTER MEETS THE FOLLOWING IMMUNIZATION COMPETENCIES FOR HEALTH PROFESSIONAL (PHAC, 2008): <u>http://www.phac-aspc.gc.ca/im/pdf/ichp-cips-eng.pdf</u>

#### **#9: Adverse Events Following Immunization**

 Competency: Anticipates, identifies, and manages adverse events following immunization, as appropriate to the practice setting.

#### **#10: Documentation**

 Competency: Documents information relevant to each immunization encounter in accordance with national guidelines for immunization practices and jurisdictional health information processes.



NOTE: Refer to the employer's medical directives, practice standards, policies and procedures for anaphylaxis management as applicable.

### 1.0 ANAPHYLAXIS

"Anaphylaxis is an exaggerated response to an allergen. It is a potentially life-threatening event that requires vigilance on the part of the healthcare practitioner who needs to recognize the condition quickly and initiate early treatment." (Linton and Watson, 2010, p. 35).

# 1.1 Description

Anaphylaxis is a serious, potentially life-threatening allergic reaction to foreign antigens. It has been proven to be causally associated with vaccines with an estimated frequency of 1.3 episodes per million doses of vaccine administered. Anaphylaxis is preventable in many cases and treatable in all. It should be anticipated in every vaccinee (CIG). Prevention of anaphylaxis is critically important. Pre-vaccination screening includes screening for a history of anaphylaxis and identification of potential risk factors. It should include questions about possible allergy to any component of the vaccine(s) being considered in order to identify if there is a contraindication to administration. Refer to Table 1.

# Table 1: Causes of Anaphylaxis

- Drugs including vaccines (rare), antibiotics, non-steroidal anti-inflammatories, contrast media, anesthetic agents, muscle relaxants, aspirin, vitamin K, and opiates
- Blood products (e.g., immunoglobulins, packed cells) and plasma expanders
- Foods (e.g., eggs, peanuts, shellfish, tree nuts)

► Insect bites and stings (e.g., bee or wasp venom, fire ants, horse flies) (Adapted from Linton and Watson, 2010)

Anaphylactic reactions are a mediated antibody response and result when the biological agent interacts with specific Ig receptors on the surface of mast cells or basophils. This triggers the release of biologically active mediators (e.g., histamine), which can result in potentially fatal anaphylaxis within minutes to hours later after exposure. Within 10 minutes, increased vascular permeability allows transfer of as much as 50% of the intravascular fluid into the extravascular space. As a result, hemodynamic collapse might occur rapidly with little or no cutaneous or respiratory manifestations.

Anaphylaxis usually begins a few minutes after injection and is usually evident within 30 minutes; shorter intervals to onset foretell more severe reactions. It may involve multiple body systems and progress to unconsciousness only as a late event in severe cases. Up to 11% of children and 23% of adults have anaphylaxis episodes that follow a biphasic course with recurrence of the reaction 2 to 9 hours after resolution. The presentation of the second phasic reaction may be as pronounced as that of the initial anaphylactic episode.

# 1.2 Presentation

Changes develop over several minutes and involve two or more body systems (e.g., affecting the skin, respiration, circulation, GI system). Unconsciousness is rarely the sole manifestation of anaphylaxis and occurs only as a late event in severe cases.

Anaphylaxis occurs as part of a continuum. Even when there are mild symptoms initially there is the potential for progression to a severe and even irreversible outcome. Fatalities during anaphylaxis usually result from delayed administration of epinephrine and from severe respiratory complications, cardiovascular complications, or both. There is no contraindication to epinephrine administration in anaphylaxis.

Urticaria and angioedema are the most common manifestations of potential anaphylaxis. Urticaria is raised, often itchy, wheals on the surface of the skin. Angioedema is a swelling similar to urticaria, but the swelling is beneath the skin rather than on the surface. The swelling usually occurs around the eyes and lips, but may also be found on the hands, feet, and neck and in the throat.

Features of early or mild anaphylaxis may include swelling and urticaria at injection site, sneezing, nasal congestion, tearing, coughing, and facial flushing. These symptoms are generally associated with minimal dysfunction. In general, the sooner the onset, the more rapid and severe the anaphylactic reaction

Clinical progression	Signs and symptoms of an acute allergic reaction
Mild early-warning signs	<ul> <li>Generalized skin itch, rash which can be urticarial (red, raised lumps) or flushing (redness)</li> <li>Swelling of the face or other body parts</li> <li>Blocked and runny nose, sneezing, red and itchy eyes</li> <li>Nausea, vomiting, abdominal pain</li> </ul>
Severe symptoms of anaphylaxis	Noisy breathing (wheeze or stridor), hoarse voice, difficulty swallowing or talking, difficulty breathing (fast breathing, recession), collapse, low blood pressure, weak pulse, capillary filling time > 3 seconds

Table 2:	<b>Recognition</b> of	the signs and	symptoms of	an acute allergic reaction
	necogintion of	the signs and	Symptoms of	

Source: WHO: <u>https://www.who.int/publications/i/item/anaphylaxis-aefi-management-and-response</u>

# 2.0 ANAPHYLACTIC REACTION VERSUS SYNCOPE OR ANXIETY

Anaphylaxis must be distinguished from vasovagal syncope, anxiety, and breath-holding spells which are more common and benign reactions. The lack of urticaria, a slow, steady pulse rate, and cool pale skin distinguishes a vasovagal episode from anaphylaxis. Refer to <u>Table 3: Anaphylaxis</u> <u>versus Syncope and Anxiety</u>.

# 2.1 Syncope

- Syncope is fairly common, mild reaction to immunization;
- The greatest risk is injury from a fall;
- Usually brief warning symptoms may include: nausea, light-headedness, diaphoresis, and pallor. A typical finding is low blood pressure and a slow, steady pulse;
- It is sometimes observed before immunization, but usually occurs a few seconds to a few minutes after an injection;
- Recovery of consciousness occurs within a minute or two, but clients may remain pale, diaphoretic and mildly hypotensive for several more minutes. If unconsciousness persists for more than 2-3 minutes, call 9-1-1 and proceed as per emergency treatment for anaphylaxis. Unconsciousness may reflect hypoxia;
- **Prior to immunization, ask clients about history of syncope with previous immunizations**. Consider the following measures to lower stress in those awaiting immunization:
  - Seat every client prior to immunization;
  - Maintain a comfortably cool room temperature and if possible, plenty of fresh air;
  - Avoid long line ups in mass immunization clinics;
  - Prepare vaccine(s) out of view of recipients;
  - Provide privacy during vaccination;
  - If client is anxious and pale or if syncope occurs: have them lie down with legs elevated for at least 10 minutes, reassure, and apply cold wet cloth to face;
  - $\circ$  If a person was lying down, have them sit up for a few minutes before standing; and
  - At all times the client should be reassured. Monitor the client closely until they have recovered. The client may remain pale and/or diaphoretic.

# 2.2 Anxiety

- People experiencing an anxiety reaction may appear fearful, pale and diaphoretic, hyperventilate, and complain of light-headedness, dizziness, numbness, and tingling of the face and extremities;
- Hyperventilation (rapid shallow breathing that lowers the level of carbon dioxide in a person's blood) is usually evident. If an individual appears anxious, it may be helpful to have them rebreathe into a paper bag until symptoms subside. If hyperventilation occurs, have the client breathe slowly into a small paper bag and re-breath the air in the bag about 10 times. Set the bag aside and breathe slowly for a few minutes (1 breath every 5 seconds). Use bag every few minutes as necessary and monitor patient.

 Breath-holding spells occur in some young children when they are upset, crying hard, and reacting to injection pain. Some spells end with resumption of crying, but others end with a brief period of unconsciousness during which breathing resumes. No treatment is required beyond reassurance of the child and parents.

	ANAPHYLAXIS	SYNCOPE	ANXIETY
DEFINITION	A potentially life threatening allergic reaction that is rapid in onset and progression of symptoms.	Temporary unconsciousness caused by diminished blood supply to the brain due to painful stimuli or emotional reaction.	A protective physiological state recognized as fear, apprehension, or worry.
ONSET	Rapid onset and progression of symptoms. Usually within 15 - 30 minutes after injection but can be up to hours	Sudden, occurs before, during or shortly after immunization, recovery within 1 - 2 minutes.	Sudden, occurs before, during or shortly after immunization, recovery within 1 - 2 minutes.
SKIN/MUCOSAL	Warm, flushed, blotchy areas, progressing to pallor and clamminess, pruritis and urticaria, tingling and swelling in mouth, tongue and face.	Pallor, diaphoresis, cold and clammy.	Pallor, diaphoresis, cold and clammy
RESPIRATORY	Sneezing, coughing, wheezing, laboured breathing, hoarseness and difficulty swallowing due to swelling. Shortness of breath, rhinitis, watery eyes.	Slow or normal rate, shallow, irregular or laboured.	Hyperventilation – shallow and rapid. Breath holding in children.
PULSE	Rapid and weak.	Slow, steady.	Rapid.
BLOOD PRESSURE	Decreased systolic and diastolic; hypotension can progress to cause shock.	Decreased systolic and diastolic.	Normal or elevated systolic.
SYMPTOMS & BEHAVIOUR	Adults: potential feelings of uneasiness, restlessness, agitation, impending doom Children: quietness or sleepiness, lethargy.	Fearful, light-headedness, dizziness, numbness and weakness, sometimes accompanied by brief clonic seizure activity.	Fearful, light- headedness; dizziness, numbness and weakness, tingling around lips and spasms in the hands and feet associated with hyperventilation.
GASTRO- INTESTINAL	Nausea and vomiting; abdominal pain, loose stools.	Nausea.	Nausea.
OTHER	Loss of consciousness.	Loss of consciousness.	

Table 3: Anaphylaxis versus Syncope and Anxiety<sup>1</sup>

(Adapted from BCCDC Immunization Manual, Part 3, Section 2.3, February 2019 <u>http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%202%20-%20Imms/Part\_3\_Anaphylaxis.pdf</u>)

# 3.0 SUPERVISION OF VACCINEE POST-IMMUNIZATION

Advise recipients of any biological product (e.g., vaccine, immune globulin, TB skin test) to remain under supervision for at least 15 minutes after immunization; regardless of whether or not they have had the particular product previously. It is recommended that this information for clients be posted in all offices of immunization providers. Thirty (30) minutes is a safer duration when the person has had a prior allergic reaction to the biological product or a component of the biological product. If an individual has such a history, future immunization should be administered in accordance with MHO recommendations.

Where vaccinees choose not to remain under supervision after immunization, they (or their parent/guardian) should be informed of the signs and symptoms of anaphylaxis and instructed to obtain immediate medical attention if symptoms occur.

# 4.0 ADMINISTRATION OF EPINEPHrine (Adrenalin)

In the event of anaphylaxis, the prompt administration of EPINEPHrine is the most important treatment measure.

- Refer to CIG Anaphylaxis and other Acute Reactions following Vaccination
   <u>https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-2-vaccine-safety/page-4-early-vaccine-reactions-including-anaphylaxis.html or agency specific policy. Health care providers are strongly advised to familiarize themselves with this information before immunizing.

  </u>
- **Prompt intramuscular administration of EPINEPHrine is the priority** and should not be delayed. EPINEPHrine is the treatment of choice for management of anaphylaxis in community and healthcare settings as it prevents and relieves upper airway swelling, hypotension and shock. In addition, it causes increased heart rate, increased force of cardiac contractions, increased bronchodilation, and decreased release of histamine and other mediators of inflammation. EPINEPHrine reaches peak plasma and tissue concentrations rapidly.
- Intramuscular (IM) is the recommended route for the administration of epinephrine and the thigh (vastus lateralis) is the preferred site for its administration.
  - **IM EPINEPHrine** injection in the **vastus lateralis site** provides rapid absorption and high plasma levels.
  - Alternate the vastus lateralis muscles preferably for each dose to maximize drug absorption.
  - Ensure IM injections are spaced at least 2.5 cm from each other in the utilized muscle.
- Repeat EPINEPHrine at 5-minute intervals to a maximum of 3 doses for continued or worsening symptoms.
- If required during anaphylaxis, IM EPINEPHrine can be given through clothing.

# 4.1 Action of EPINEPHrine:

- Acts on beta adrenergic receptors found in the skeletal muscle vasculature and counteracts histamine-induced vasodilation;
- Increases heart rate and cardiac contractility to increase oxygenated blood flow to vital organs;
- Acts on smooth muscles of bronchial tree thereby reducing bronchospasm;
- Suppresses body's immune response (slows down histamine cascade);
- The anaphylactic state in clients receiving beta adrenergic antagonist therapy (for elevated blood pressure) will be more resistant to epinephrine therapy; and
- Side effects of EPINEPHrine pose little danger but can add to the person's distress by causing palpitations, tachycardia, flushing, and headache. Cardiac dysrhythmias can occur in older adults but are rare in otherwise healthy children.

### 4.2 EPINEPHrine Dosages

• Calculations that are based on actual body weight are preferred when a client's weight is known.

Age Weight kg. Weight lb. Dose Dosage										
0 – 6 months* 2 – 5.4 kg 4–11 lb. 0.05 mg <b>0.05 mL ll</b>										
7 - 24 months* 5.5 – 10.4 kg 12–22 lb. 0.1 mg <b>0.10 mL l</b>										
25 - 36 months* 10.5 – 15.4 Kg 23-33 lb. 0.15 mg <b>0.15 m</b>										
37 - 59 months* 15.5 – 20.4 kg 34–44 lb. 0.2 mg <b>0.20</b>										
5 - 7 years 20.5 – 25.4 kg 45–55 lb. 0.25 mg <b>0.25 mL</b>										
8-10 years 25.5 – 35.4 kg 56–77 lb. 0.3 mg 0.30 mL										
11-12 years 35.5–45.4 kg 78–99 lb. 0.4 mg 0.40 mL										
≥ 13 years ≥ 45.5 kg ≥ 100 lb. 0.5 mg 0.50 mL IM										
* Dosing by weight (0.01 mg/kg) is preferred if body weight is known. If weight is unknown or is not readily available, then dosing by age is appropriate practice.										

#### Table 4: Appropriate EPINEPHrine Dosages According to Age and Weight

# Table 5: Aqueous EPINEPHrine (Adrenalin) 1:1000

Composition	Each 1 mL dose of aqueous epinephrine 1:1000 contains 1 mg of EPINEPHrine hydrochloride dissolved in an isotonic sodium chloride solution.						
Supply	1 mL ampoule of clear liquid.						
Storage	<ul> <li>Keep in the manufacturer's box at room temperature of 15–30°C</li> <li>Avoid exposure to light</li> <li>Do not refrigerate</li> <li>Do not freeze</li> <li>Do not use after expiration date</li> <li>Do not administer this product if it has a pinkish or darker than slightly yellow color or contains a precipitate</li> </ul>						
Indications	Severe immediate hypersensitivity reaction to biological products.						
Contraindications	There is no contraindication in the event of anaphylaxis.						

# 5.0 ADMINISTRATION OF diphenhydrAMINE HYDROCHLORIDE (BENADRYL®)

Antihistamines (first generation and second generation) have no role in preventing or treating respiratory or cardiovascular symptoms of anaphylaxis in a community setting and should never be used in place of EPINEPHrine.

#### 5.1 Non-Anaphylactic Allergic Reactions

• Allergic reactions constitute a spectrum, the extreme end of which is anaphylaxis, but milder forms may involve both the dermatologic/mucosal systems (e.g., urticaria, pruritis, rhinitis) and/or the respiratory systems (e.g., upper airway swelling, respiratory distress).

#### 5.2 Symptom Management of Severe Urticaria and Pruritis

- DiphenhydrAMINE would only be administered if the following parameters have been met:
  - o 3 doses of EPINEPHrine have been administered; and
  - Client is stable; and
  - Experiencing severe skin rash or itching that is causing great discomfort or distress; and
  - Transportation to an acute care facility takes 30 minutes or more.
- IM diphenhydrAMINE hydrochloride may be given in the limb that epinephrine and/or vaccine was given, as long as adequate spacing (minimum 2.5 cm) is used between injection sites.
- DO NOT administer DiphenhydrAMINE on own for skin manifestations.

### 5.3 Injection Site Reactions

- A mild local reaction resolving by itself within a few minutes does not require special observation. If swelling and urticaria occur at the injection site(s):
  - Keep client under **direct observation for at least 30 minutes** to ensure the reaction remains localized; and
  - Observe for any deterioration in condition.
- If urticaria or swelling disappears, or there is no evidence of any progression to other parts of the body or any other symptoms within the 30-minute observation period, no further observation is necessary. Release the client from observation.
- If any other symptoms arise, even if considered mild (e.g., sneezing, nasal congestion, tearing, coughing, facial flushing) or if there is evidence of any progression of the urticaria or swelling to other parts of the body, administer EPINEPHrine as per regional guidelines.
- Apply ice for comfort to site.

Table 6: DiphenhydrAMINE Hydrochloride Dosages for Age by IM Administration
---

Age	Weight kg.	Weight Ib.	Dose	Dosage
0 – 6 months*	2 – 5.4 kg	4–11 lb.	*Dose/dosag determined	by weight (1
7 - 24 months*	5.5 – 10.4 kg	12–22 lb.	mg/kg) when weight is known.	
25 - 36 months	10.5 – 15.4 kg	23-33 lb.	15 mg	0.3 mL
37 - 59 months	15.5 – 20.4 kg	34–44 lb.	20 mg	0.4 mL
5 - 7 years	20.5 – 25.4 kg	45–55 lb.	25 mg	0.5 mL
8-10 years	25.5 – 35.4 kg	56–77 lb.	35 mg	0.7 mL
11-12 years	35.5–45.4 kg	78–99 lb.	45 mg	0.9 mL
≥ 13 years	≥ 45.5 kg	≥ 100 lb.	50 mg	1 mL

#### 6.0 DOCUMENTATION

It is important to accurately document the event on the <u>Appendix 12.2: Anaphylaxis Treatment</u> <u>Worksheet:</u>

- The names of all vaccine products administered:
  - the lot number;
  - o route of administration; and
  - injection site for each product.
- The time the reaction was observed;
- The reaction signs and symptoms, the client's condition;
- Steps taken, the drugs administered, dose route, time;
- Time when intervention stopped if applicable;
- Condition of client upon leaving the premises; and
- Time of transfer to hospital

Afterwards, refer to SIM, <u>Chapter 11, Adverse Events Following Immunization</u>. Complete the Adverse Event Following Immunization report form (available at <u>https://www.canada.ca/content/dam/phac-aspc/documents/services/immunization/aefi-form-october-2021-eng.pdf</u>) and immediately forward to the regional MHO.

# 7.0 MAINTENANCE OF EPINEPHrine VIALS AND OTHER EMERGENCY SUPPLIES

- ALWAYS ENSURE A FULLY CHARGED CELL PHONE OR LAND LINE IS AVAILABLE FOR USE IN CASE OF AN EMERGENCY.
- Check EPINEPHrine vials and other emergency supplies prior to each immunization clinic and replace if outdated.
- Protect EPINEPHrine and diphenhydrAMINE hydrochloride from light and open vial(s) only when ready to use.
- **Do not pre-load a syringe with EPINEPHrine in anticipation of a reaction.** EPINEPHrine rapidly deteriorates and loses potency when exposed to oxygen.
- Also recommended for management of anaphylaxis:
  - o stethoscope
  - o sphygmomanometer with adult and child sized blood pressure cuffs
  - child and adult sized pocket masks

# 7.1 Suggested Anaphylaxis (Epi) Kit Contents:

- A copy of the anaphylaxis procedures and doses recommended of EPINEPHrine and diphenhydrAMINE for weight and age.
- 4 syringes, 1 cc
- 4 needles (25 27 gauge, 1")
- 4 needles (25 27 gauge, 1.5")
- 3 ampoules of EPINEPHrine 1:1,000
- 1 vial of diphenhydrAMINE hydrochloride 50 mg/ml
- Alcohol swabs
- Cotton balls/pads/swabs
- Pens
- Anaphylaxis treatment worksheet

#### 8.0 REFERENCES

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#### 9.0 APPENDICES

#### Appendix 12.1: Recommended Emergency Treatment of Anaphylaxis

#### A) IMMEDIATELY UPON SIGNS AND SYMPTOMS OF ANAPHYLAXIS

1. Give EPINEPHrine (1:1,000) IM into an unimmunized vastus lateralis site. It can be given into the same muscle as vaccine was given as long as adequate spacing is used (2.5 cm) between sites.

Age	Weight kg.	Weight lb.	Dose	Dosage				
0 – 6 months*	2 – 5.4 kg	4–11 lb.	0.05 mg	0.05 mL IM				
7 - 24 months*	5.5 – 10.4 kg	12–22 lb.	0.1 mg	0.10 mL IM				
25 - 36 months*	10.5 – 15.4 Kg	23-33 lb.	0.15 mg	0.15 mL IM				
37 - 59 months*	15.5 – 20.4 kg	34–44 lb.	0.2 mg	0.20 mL IM				
5 - 7 years	20.5 – 25.4 kg	45–55 lb.	0.25 mg	0.25 mL IM				
8-10 years	25.5 – 35.4 kg	56–77 lb.	0.3 mg	0.30 mL IM				
11-12 years	35.5–45.4 kg	78–99 lb.	0.4 mg	0.40 mL IM				
≥ 13 years	≥ 45.5 kg	≥ 100 lb.	0.5 mg	0.50 mL IM				
* Dosing by weight (0.01 mg/kg) is preferred if body weight is known. If weight is unknown or								

is not readily available, then dosing by age is appropriate practice.

- 2. Call 9-1-1 or Ambulance; do not leave client unattended.
- 3. Position client in recumbent position and elevate legs, as tolerated symptomatically.
- 4. Monitor respiratory rate and effort, pulse, blood pressure and level of consciousness frequently and document on anaphylaxis worksheet.

Age	HR/n	nin (upper limit)	Resps./min (u	oper limit)	
0-1 month		180	60		
2-12 months		160	50		
12-24 months		140	40		
2-6 years		120	30		
6-12 years	years 110		20		
>12 years (adult)		100	20		
AGE		Systolic Pressure (mm Hg)		Diastolic	: Pressure(mm Hg)
Infant (6 months)		87 –105		53 – 66	
Toddler (2 Yr)		95 – 105		53 – 66	
School Age (7 Yr)		97 – 112		57 – 71	
Adolescent (13 Yr)		112 –	128	66 - 80	

#### B) IF PERSON'S BREATHING MORE LABOURED OR LEVEL OF CONSCIOUSNESS DECREASES:

- 1. Repeat EPINEPHrine doses at 5 minute intervals apart for a total of 3 doses. Alternate vastus lateralis sites if possible.
- 2. Alternate right and left IM vastus lateralis for repeat doses of epinephrine.
- 3. Elevate head and chest slightly.
- 4. If airway is impaired use head tilt, chin lift or jaw thrust. If vomiting is likely, turn person to left side lying (recovery) position.
- C) IF CLIENT IS STABLE BUT HAS SEVERE URTICARIA AND/OR PRURITIS AND IF CLIENT IS MORE THAN 30 MINUTES AWAY FROM AN ACUTE CARE FACILITY, ADMINISTERE ONE DOSE OF diphenhydrAMINE HYDROCHLORIDE:
- 1. Administer diphenhydrAMINE hydrochloride IM as per <u>Section 5.0, Administration of Diphenhydramine</u> <u>Hydrochloride.</u>

Age	Weight kg	Weight lb.	Dose	Dosage	
0 – 6 months*	2 – 5.4 kg	4–11 lb.	*Dose/dosage should		
7 - 24 months*	5.5 – 10.4 kg	12–22 lb.	weight (1 mg/kg) when weight is known		
25 - 36 months	10.5 – 15.4 kg	23-33 lb.	15 mg	0.3 mL	
37 - 59 months	15.5 – 20.4 kg	34–44 lb.	20 mg	0.4 mL	
5 - 7 years	20.5 – 25.4 kg	45–55 lb.	25 mg	0.5 mL	
8-10 years	25.5 – 35.4 kg	56–77 lb.	35 mg	0.7 mL	
11-12 years	35.5–45.4 kg	78–99 lb.	45 mg	0.9 mL	
≥ 13 years	≥ 45.5 kg	≥ 100 lb.	50 mg	1 mL	



#### Appendix 12.2: Sample Anaphylaxis Treatment Worksheet

Anaphylaxis Treatment Worksheet DATE:								
DATE: PLEASE USE A BLACK PEN AND ENSURE TO PRINT CLEARLY								
Client Name:Birthdate (Last name, first name) mm/dd/yyyy								
				m	m/dd/yyyy			
Parent/Guardian:			Not Applicable		hip to Client:			
HSN:				Telephone (_	)			
Medications given:		Do	osage		Route	Site	Time	Provider name
EPINEPHrine #1								
EPINEPHrine #2								
EPINEPHrine #3								
Other:								
REACTION DETAILS	Rea	ction onset time:						
Skin/mucosal								
Urticaria 🛛 Eryth	nema 🗆 P	ruritis 🛛 Prickli	ng sensation 🛛	Tingling sen	sation 🛛 Rash			
Eyes: 🗆 Itchy 🗆 Rec				0 0				
Angioedema:			-	5 🗆 Evelids	□ Face □Lim	os 🗆 Ini	ection si	te
Respiratory						,		
Sneezing C Rhinor	rhea 🛛 Ho	arse voice ПSe	ensation of throa	t closure 🛛	Stridor 🗖 Dry o	ough ∏'	Tachypn	ea
□ Wheezing □ Indra						<u>-</u> -		
□ Difficulty swallowin					nout			
Cardiovascular		carry breathing		55				
Measured hypotens	sion 🗖 De	creased central n		Capillary refi	ll time more than	3 500		
		or loss of consciou				3 360		
	Jecreaseu				icope			
Gastrointestinal			(					
Diarrhea Abdor			-					
OTHER (describe):								
Time								
Resp. Rate								
Pulse								
LOC								
BP								
Other								
Initial								
Care Handover to EMS:  Y  N *note required if "no" Time of handover to EMS:								
Name(s) of Recorder(s	5):					_		
Signature(s):						_		
Date (mm-dd-yyyy):								
Upload this workshee	Upload this worksheet into the client's Panorama record as per Appendix 12.3: Policy: Uploading an Anaphylaxis							

Worksheet into a Client's Panorama Record. Additional documentation may be required per employer procedures.

# Appendix 12.3: Policy: Uploading an Anaphylaxis Worksheet into a Client's Panorama Record

	Name of Activity:	Uploading an Anaphylaxis Worksheet into a Client's Panorama Record			
Putting Patients First	Role Performing Activity:	Public Health Nurse or appointed staff			
	Location: Public Health Centre Departme			ent: Immunization - Panorama	
Policy	Document Owner: Ministry of Health				Region/Organization where this Policy originated: eHealth Saskatchewan
	Date Prepared: February 1		Last Revis	sion:	Date Approved: February 1, 2022

**Policy:** All Anaphylaxis Worksheets must be uploaded into a client's Panorama profile as per the procedure outlined below.

Sequence	Procedure			
1.	User logs into Panorama.			
	- Ensure that PDF anaphylaxis worksheet is available for uploading.			
2.	Search for client and put them into context.			
	- Create a client record if non-existent.			
3.	From the left hand navigation bar in the client's record, expand the <b>Document Management</b> section and select <b>Context Documents</b>			
	Image: Context Documents			
4.	Click the Add New button.			
5.	Click the <b>Choose File</b> button, navigate to the location the file is saved in, select the file and click <b>Upload File.</b>			
6.	Complete all mandatory fields: • Document Title (Anaphylaxis worksheet) • Effective Date (Date of event) • Status (only indicate as 'Complete') Optional fields: • Expiration Date - do not use • Enter Key word - do not use • Description ('Anaphylaxis')			
7.	Click Submit once the required information is entered.			