



BC Centre for Disease Control  
AN AGENCY OF THE PROVISIONAL HEALTH SERVICES AUTHORITY

## Worksheet for Events Managed as Anaphylaxis Following Immunization

This worksheet should be completed by the health care professional who observed and treated the anaphylaxis episode. The information in the worksheet can then be used for transcribing the event into the public health information system (Panorama or PARIS) for reporting this episode as an adverse event following immunization (AEFI). The completed worksheet can be uploaded and attached to the client's AEFI record in Panorama.

**PERSON COMPLETING FORM:** \_\_\_\_\_  
(Last Name, First Name)

**DATE OF REPORT:** \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
YYYY / MM / DD

**DATE OF EVENT:** \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
YYYY / MM / DD

### Client Information

Name: \_\_\_\_\_  
(Last Name, First Name)

PHN: \_\_\_\_\_

Date of Birth: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Sex:  Male  Female  
YYYY / MM / DD

### Parent/Guardian

Name: \_\_\_\_\_  
(Last Name, First Name)

Contact Number: \_\_\_\_\_

Relationship to Client: \_\_\_\_\_

Medication Administered	Pulse (per min)	Resp (per min)	Time (24-hour)	Lot #	Route*	Dose (mL)	Site*	Administered By (Last name, First Name)	Signature
Epinephrine #1									
Epinephrine #2									
Epinephrine #3									
Benadryl™ (diphenhydramine)									

### Client History

Any history of prior anaphylaxis?  Yes  No *If yes, give details of severity & allergen below*

Any history of prior allergic reaction?  Yes  No *If yes, give details of severity & allergen below*

Details: \_\_\_\_\_

### For this episode:

Attended by ambulance services  Yes  No    Transfer to hospital  Yes  No    Time of Transfer: \_\_\_\_\_  
(24-hour)

Released to care of family  Yes  No    Released to care of Primary Care Provider  Yes  No    Name of Primary Care Provider: \_\_\_\_\_

### Vaccine Information

Vaccine(s) Given	Manufacturer	Lot #	Dose #	Route*	Site*	Approx Time Vaccine Given (24-hour)



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CLIENT NAME: \_\_\_\_\_  
(Last Name, First Name)

Time to onset of first symptoms: \_\_\_\_\_  
(minutes)

Rapid Progression of Symptoms:

**Table 1.** Check all signs/symptoms present during course of the episode.<sup>1</sup> See appendix for definition of terms.

	SYMPTOMS	YES	NO	UNKNOWN / DID NOT ASSESS
<b>Skin/Mucosal</b>	Angioedema (swelling), generalized or localized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Erythema (redness), generalized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Prickle sensation, generalized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Pruritus (itching) WITH skin rash (raised), generalized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Pruritus (itching) WITHOUT skin rash, generalized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Urticaria localized at injection site (hives)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Urticaria (rash, hives), generalized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Red and itchy eyes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Respiratory</b>	Breathing difficulty WITHOUT wheeze or stridor (sensation of chest tightness)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Indrawing/retractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Cyanosis (bluish or purple discolouration of skin and/or mucosa)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Grunting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Hoarse voice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Increased use of accessory muscles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Persistent dry cough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Rhinorrhea (runny nose)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Sneezing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Stridor (harsh vibrating sound during inspiration)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Tachypnea (rapid respirations for age)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Throat closure, sensation of (difficulty swallowing, drooling)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Upper airway swelling (lip, tongue, throat, uvula or larynx)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Wheeze, bilateral (bronchospasm) assessed with stethoscope	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Cardiovascular</b>	Capillary refill > 3 seconds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Hypotension, documented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Decreased level of consciousness or loss of consciousness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Decreased central pulse volume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Tachycardia (rapid heart rate for age)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Gastrointestinal</b>	Abdominal pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Diarrhea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Nausea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Vomiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Laboratory</b>	Mast cell tryptase elevation > upper normal limit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**PERSON COMPLETING FORM**

Name: \_\_\_\_\_  
(Last Name, First Name)

Phone number: \_\_\_\_\_

Health Authority & Branch Office: \_\_\_\_\_

Date of Event: \_\_\_\_\_  
YYYY / MM / DD



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### APPENDIX:

#### \*GLOSSARY OF ABBREVIATIONS:

VL - vastus lateralis	IM - intramuscular	(R) - right
ALT - anterolateral thigh, fatty area	SC - subcutaneous	(L) - left
UA - upper arm, lateral aspect	ID - intradermal	
FA - forearm, anterior surface		

#### DEFINITION OF TERMS:

##### GENERAL

- **Sudden Onset:** An event that occurred unexpectedly and without warning leading to a marked change in a subject's previously stable condition

##### DERMATOLOGIC AND MUCOSAL (SKIN)

- **Urticaria (hives):** Localized swelling of superficial layers of skin that is itchy, raised, sharply demarcated, and transient (usually <12 hrs)<sup>2</sup>
- **Erythema:** Abnormal redness of the skin without any raised skin lesions
- **Angioedema:** Areas of deeper swelling of the skin and/or mucosal tissues in either single or multiple sites which may not be well circumscribed and is usually not itchy. Typical sites in anaphylaxis include tongue, lips, around the eyes (periorbital), eyelids. Do not include hereditary angioedema.
- **Pruritus:** An unpleasant skin sensation that provokes the desire to rub and/or scratch to obtain relief
- **Prickle sensation:** Tingling or smarting (stinging) sensation
- **Red and itchy eyes:** Redness of the whites of the eyes (sclera) with sensation that provokes the desire to rub and/or scratch to obtain relief
- **Body location terms applicable to urticaria, erythema, pruritus, prickle sensation**
  - **Generalized:** Involving >1 body site with each limb counted separately as are the abdomen, back, head and neck
  - **Localized:** Involving one body site, as defined above
  - **Injection site urticaria:** Urticaria which is continuous with the injection site or within a few centimeters of where the immunization was given

##### RESPIRATORY (RESP)

- **Difficulty breathing:** A sensation of difficulty breathing
- **Indrawing/retractions:** Inward movement of the intercostal area upon inspiration
- **Cyanosis:** A dark bluish or purplish discoloration most easily seen in the facial or perioral area or tongue.
- **Grunting:** A sudden and short noise with each breath when breathing out
- **Hoarse voice:** An unnaturally harsh cry in an infant or vocalisation in a child or adult
- **Increased use of accessory (respiratory) muscles:** Vigorous movement of the muscles of breathing, generally best seen in the lower part of the neck (supra-clavicular or tracheal tug) or below the chest (sub-costal). The movements are usually a sign of difficulty with breathing
- **Persistent dry cough:** Rapid expulsion of air from the lungs and not accompanied by expectoration (a non-productive cough) that will not abate during the period of observation including through measures such as taking a sip of water
- **Rhinorrhea:** Discharge of thin nasal mucus
- **Sneezing:** An involuntary (reflex), sudden, violent, and audible expulsion of air through the mouth and nose
- **Stridor:** A harsh vibrating sound heard during respiration in cases of obstruction of the air passage
- **Tachypnea:** Abnormally rapid breathing which is high for age and level of physical activity
  - Infants and children - A respiratory rate that is above the upper limit expected for age
  - Adults - A respiratory rate in excess of 25 breaths per minute
- **Sensation of throat closure:** Feeling or perception of throat closing with a sensation of difficulty breathing
- **Bilateral wheeze (bronchospasm):** A whistling, squeaking, musical, or puffing sound on expiration. Bilateral wheezing can only be confirmed on chest auscultation with a stethoscope or other direct listening device.



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### CARDIOVASCULAR (CV)

- **Documented hypotension:** An abnormally low blood pressure documented by appropriate measurement<sup>3</sup>
  - Infants and children - low systolic Blood Pressure (BP) (age specific) or > 30% decrease in BP
  - Adults – Systolic BP of less than 90mm Hg or greater than 30% decrease from that persons' normal BP
- **Tachycardia:** A heart rate that is abnormally high for age and circumstance.
  - Infants and children- A heart rate that is above the upper limit expected for age<sup>4</sup>
    - <1yr 160
    - 1 to 2 yrs 150
    - 2 to 5 yrs 140
    - 5 to 12 yrs 120
    - >12 yrs 100
  - Adults and adolescents - The term is usually applied to a heart rate >100 beats/min
- **Capillary refill time of greater than 3 seconds:** The capillary refill time is the time required for the normal skin colour to reappear after a blanching pressure is applied. It is usually performed by pressing on the nail bed to cause blanching and then counting the time it takes for the blood to return to the tissue, indicated by a pink colour returning to the nail. Normally it is 3 seconds or less
- **Decreased central pulse volume:** Absent or decreased pulse in one of the following vessels – carotid, brachial or femoral arteries
- **Loss of consciousness:** Total suspension of conscious relationship with the outside world as demonstrated by an inability to perceive and respond to verbal, visual or painful stimulus
- **Decreased level of consciousness:** Partial suspension of conscious relationship with the outside world as demonstrated by a decreased ability to perceive and respond to verbal, visual or painful stimulus

### GASTROINTESTINAL (GI)

- **Abdominal pain:** Sensation of discomfort or pain in the abdominal region
- **Diarrhea:** Loose or watery stool
- **Nausea:** An unpleasant sensation vaguely referred to the upper abdominal region (upper region of the abdomen) and the abdomen, with a tendency to vomit
- **Vomiting:** The reflex act of ejecting the contents of the stomach through the mouth

### REFERENCES

1. Rüggeberg JU, Gold MS, Bayas JM, Blum MD, Bonhoeffer J, Friedlander S, de Souza Brito G, Heininger U, Imoukhuede B, Khamesipour A, Erlewyn-Lajeunesse M, Martin S, Mäkelä M, Nell P, Pool V, Simpson N; Brighton Collaboration Anaphylaxis Working Group. Anaphylaxis: case definition and guidelines for data collection, analysis, and presentation of immunization safety data. *Vaccine*. 2007 August 1;25(31):5675-84. PubMed PMID: 17448577.
2. Parker CW, Urticaria. In *Textbook of Immunopathology*. Ed: Miescher PA, Muller-Eberhard HJ. 2<sup>nd</sup> Edition. Grune and Stratton, NY 1976.
3. *J Allerg Clin Imm* 2006; 117:391-71; Second Symposium on the Definition and Management of Anaphylaxis, Summary Report; HA Sampson, A Munoz-Furlong, RL Campbell et al.
4. *Practical Pediatrics*, 6<sup>th</sup> Edition, 2007. Eds DM Roberton, MJ South, Elsevier Health Sciences.