THE QUEEN'S HEALTH SYSTEMS

Guidance Date 2/02/21

QMC COVID AMBULATORY VACCINE CLINIC EMERGENCY PROTOCOL

1) **PURPOSE**

- a) To provide guidance for medical emergencies in The Queen's Health Systems when vaccines are being administered in the ambulatory setting.
- b) This does NOT apply to the Mass Vaccine Clinics (Blaisdell and Queen's Conference Center) which will following the QMC COVID Mass Vaccine Clinic Emergency Protocol.
- c) To assure accurate identification and medical management of anaphylaxis related to vaccine administration.

2) AUTHORITY

The following protocol is authorized under the direction of the Chief Medical Officer.

3) **DEFINITION**

Anaphylaxis is an acute, life-threatening systemic allergic reaction associated with different clinical presentations and severity resulting from exposure to an allergen trigger. *Refer to Appendix A.*

- a) Diagnostic criteria: Anaphylaxis is highly likely when there is sudden onset (minutes to hours) of Skin/Mucosal symptoms + [Respiratory OR Cardiovascular Symptoms]:
 - i) Skin/mucosal tissue symptoms: generalized hives, itching, flush, swollen face-lips-tongueuvula
 - ii) Respiratory system: stridor (high-pitched sound while breathing), shortness of breath, wheeze, cough, hypoxemia
 - iii) Cardiovascular system: hypotension (abnormally low blood pressure), dizziness, fainting, tachycardia (abnormally fast heart rate), light-headedness, incontinence
 - iv) Gastrointestinal symptoms: nausea, vomiting, diarrhea, abdominal pain
- b) Clinical pearls in the early recognition of anaphylaxis
 - i) Maintain a high clinical suspicion for an anaphylactic reaction
 - ii) The constellation of symptoms immediately following injection may strongly suggest anaphylaxis: full body or rapidly worsening urticaria (hives), facial swelling (eyes, lips or tongue), flushing, wheezing, chest tightness, shortness of breath, fullness or "lump" in throat, light headiness, rapid pulse.
 - iii) Dermatologic findings (pruritus, rash, flush, angioedema) may not be initially present as early symptoms of anaphylaxis.

4) EQUIPMENT

At minimum, the following emergency equipment will be available at all vaccination sites to include:

- a) Epinephrine HCl/anaphylaxis (EPIPEN)
- b) Diphenhydramine liquid
- c) Stethoscope
- d) Blood pressure cuff
- e) Pulse oximeter

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5) **PROCEDURE**

- a) The clinic will designate a qualified clinician to be available at all times during clinic hours
 - i) Qualified clinician will have documented in-service on this protocol (QMC COVID Ambulatory Vaccine Clinic Emergency Protocol)
 - ii) Qualified clinician will be responsible for performing assessment and instituting emergency protocols
 - iii) Medications will be administered by qualified clinician or designee
 - iv) Qualified clinician or designee will be responsible for documentation of encounter

b) Rapidly perform assessment

- i) Assess airway and breathing
 - (1) Respiratory rate
 - (2) Respiratory effort
 - (3) Presence of wheezing
 - (4) Oxygen saturation
- ii) Assess circulation
 - (1) Palpate for pulse
 - (2) Check BP and Heart Rate
- iii) Assess Level of consciousness
- iv) Assess Skin and mucosa (mouth)
- c) Call for emergency medical services
- d) Patients meeting criteria for anaphylaxis
 - i) Initiate emergency protocols as below. Do not delay anaphylaxis treatment
 - ii) Place patient in a supine position (face up), with feet elevated, unless upper airway obstruction is present, or the patient is vomiting
 - Administer epinephrine 0.3 ml of the 1 mg/ml or epinephrine autoinjector intramuscularly at the upper lateral thigh. May repeat dosing every 5-15 minutes (or more often) as needed to control symptoms. (There are NO absolute contraindications to epinephrine in the setting of anaphylaxis)
- e) Patients experiencing non-anaphylactic allergic reactions (limited to dermatologic symptoms)
 - i) Consider diphenhydramine 25mg PO upon assessment by qualified clinician.
- f) All other medical emergencies shall be transported to the ED for management

APPENDIX A- Anaphylaxis diagram



OR 2 Two or more of the following that occur suddenly after exposure to a *likely allergen or other trigger** for that patient (minutes to several hours)



Sudden skin or mucosal symptoms and signs (e.g. generalized hives, itch-flush, swollen lips-tongue-uvula)



and signs (e.g. shortness of breath, wheeze, cough, stridor, hypoxemia)



Sudden reduced BP or symptoms of end-organ dysfunction (e.g. hypotonia [collapse], incontinence)



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Sudden gastrointestinal symptoms (e.g. crampy abdominal pain, vomiting)

OR ③ Reduced blood pressure (BP) after exposure to a *known allergen** for that patient* (minutes to several hours)



Adults: systolic BP of less than 90 mm Hg or greater than 30% decrease from that person's baseline

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REFERENCE:

- Shaker MS, et al. "Anaphylaxis-a 2020 practice parameter update, systematic review, and Grading of Recommendations, Assessment, Development and Evaluation (GRADE) analysis." Journal of Allergy and Clinical Immunology 2020;145(4):1082-1123. doi: 10.1016/j.jaci.2020.01.017.
- Brown JC et al. "Epinephrine in the Management of Anaphylaxis" J All Clin Immunol 2020 Apr;8(4):1186-1195
- ACIP Rapid Overview: Emergent Management of Anaphylaxis in Adults. https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/adverse-reactions.html#t-02
- Interim Considerations: Preparing for the Potential Management of Anaphylaxis after COVID-19 Vaccination. https://www.cdc.gov/vaccines/covid-19/clinical-considerations/managinganaphylaxis.html