Thames Valley
Family Health Team

# Medical Directive

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|---|---|---|---|
| **Title:** | **Allergy Injection** | **Assigned Number:** | **001** |
| **Activation Date:** | **July 1, 2011** | **Review due by:** | **December 2025** |

**Approval Signature & Date**

Medical Director: _____ Date Reviewed: Feb 23, 2024

Clinical Services Director: _____ Date Reviewed: Feb 23, 2024

**Order and/or Delegated Procedure:** **Appendix Attached:** ☐ **Yes** ☒ **No** **Title:**

Administration of Allergen Injections by Registered Nurses/Registered Practical Nurses.

**Recipient Patients:** **Appendix Attached:** ☐ **Yes** ☒ **No** **Title:**

All active patients of Thames Valley Family Health Team who require administration of allergen injections.

**Authorized Implementers:** **Appendix Attached:** ☐ **Yes** ☒ **No** **Title:**

Thames Valley Family Health Team Registered Nurses/Registered Practical Nurses (RN/RPN) * herein referred to as the implementer.

* The implementer must receive orientation from the Educator with regards to the task. The implementer must have completed orientation and educational requirements of Emergency Treatment of Anaphylaxis/Severe Allergic Reactions to Allergy Injections or Immunizations medical directive and is encouraged to review Emergency Treatment of Anaphylaxis/Severe Allergic Reactions to Allergy Injections or Immunizations medical directive to ensure all required supplies and reference materials are available in the case of an emergency. The implementer must sign the Implementer Performance Readiness Form electronically via HR Downloads after successful completion of the orientation (and quiz, if applicable) indicating acceptance of this medical directive.

**Indications:**

**Appendix Attached:** ☒ **Yes** ☐ **No**

**Title:** Appendix 1 – Allergy Injection Patient Information & Consent

1. Verbal consent received from the patient/substitute decision maker for the implementer to implement this medical directive.
2. Patient has been prescribed specific allergen solution by a physician/specialist.
3. Patient has signed TVFHT allergy consent form for storage of allergen serum (see Appendix 1)
4. The allergen vial is accompanied by a current order-to-follow describing dosage and interval.
5. The patient must agree to remain onsite for 30 minutes following administration of the injection.
6. In case of adverse reaction, emergency drugs and equipment must be available.

**Contraindications:**

**Appendix Attached:** ☐ **Yes** ☒ **No**
**Title:**

1. No verbal consent from patient or substitute decision maker for the implementer to implement this medical directive.
2. Individuals that have a temperature over 38$^{o}$ degrees Celsius or are feeling unwell.
3. Individuals who developed a Grade 2 or more severe reaction (based on the World Allergy Organization Subcutaneous Immunotherapy Systemic Reaction Grading System) after the last injection.

| Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 |
|---|---|---|---|---|
| **Symptom(s)/sign(s) of 1 organ system present**<br>**Cutaneous**<br>Generalized pruritus, urticaria, flushing, or sensation of heat or warmth<br>**or**<br>Angioedema (not laryngeal, tongue or uvular)<br>**or**<br>**Upper respiratory**<br>Rhinitis—(e.g., sneezing, rhinorrhea, nasal pruritus and/or nasal congestion)<br>**or**<br>Throat-clearing (itchy throat)<br>**or**<br>Cough perceived to originate in the upper airway, not the lung, larynx, or trachea<br>**or**<br>**Conjunctival**<br>Erythema, pruritus or tearing<br>**Other**<br>Nausea, metallic taste, or headache | **Symptom(s)/sign(s) of more than 1 organ system present**<br>**or**<br>**Lower respiratory**<br>Asthma: cough, wheezing, shortness of breath (e.g. less than 40% PEF or $FEV_1$ drop, responding to an inhaled bronchodilator)<br>**or**<br>**Gastrointestinal**<br>Abdominal cramps, vomiting, or diarrhea<br>**or**<br>**Other**<br>Uterine cramps | **Lower respiratory**<br>Asthma (e.g. 40% PEF or $FEV_1$ drop<br>NOT responding to an inhaled bronchodilator)<br>**or**<br>**Upper respiratory**<br>Laryngeal, uvula, or tongue edema with or without stridor | **Lower or upper respiratory**<br>Respiratory failure with or without loss of consciousness<br>**or**<br>**Cardiovascular**<br>Hypotension with or without loss of consciousness | Death |

4. Individuals that have missed scheduled injections since their last visit. Consult with authorizer, or patient's provider/allergist's instructions to determine appropriate dose of allergen injection.
5. Implementer has not received signed Implementer Performance Readiness Form for Medical Directive for Emergency Treatment of Anaphylaxis/Severe Allergic Reactions to Allergy Injections or Immunizations

**Consent:**

**Appendix Attached:** ☐ **Yes** ☒ **No**

**Title:**

1. Patients of Thames Valley Family Health Team.
2. The implementer obtains verbal consent from patient/substitute decision maker prior to the implementation of care.

| **Guidelines for Implementing the Order/ Procedure:** | **Appendix Attached:** ☒ **Yes** ☐ **No**<br>**Title:** |
|---|---|

Patients who meet the **Indications** described above:

1. The allergen injection will be given subcutaneous to the upper arm according to the manufacturer's instructions and the written order included with the allergen vial.
2. The patient is asked to remain in the clinic for 30 minutes post injection.
3. If at any time the patient experiences any signs of a Grade 2 or more severe reaction (based on the World Allergy Organization Subcutaneous Immunotherapy Systemic Reaction Grading System) or anaphylaxis, activate Medical Directive for Emergency Treatment of Anaphylaxis/Severe Allergic Reactions to Allergy Injections or Immunizations
4. After 30 minutes and no signs of a Grade 2 or more severe reaction (based on the World Allergy Organization Subcutaneous Immunotherapy Systemic Reaction Grading System) or anaphylaxis, the patient is to be reassessed by the implementer before discharge. The injection site must be inspected.

    - If the local reaction displays redness, swelling or wheal **greater than the size of the patient's palm,** discuss reaction with authorizer or patient's physician/allergist, discharge as per order of authorizer or patient's physician/allergist. (Dose adjustments in the injection is not necessary when the local reaction is smaller than the size of the patient's palm, but it is unclear whether dose adjustments is necessary beyond this size and the situation should be notified to the authorizer and to consider a reassessment by the prescribing allergist)

**Discharge instructions**:

1. Patients are to be reminded
    a. To seek emergency medical care should a Grade 2 or more severe reaction (based on the World Allergy Organization Subcutaneous Immunotherapy Systemic Reaction Grading System) or anaphylaxis develop.
    b. To notify the provider of any reaction at the next visit.
2. All information pertaining to the injections is documented on the **Order Sheet** maintained with the allergen vial and/or in the patient record according to standard documentation practices. *


∗ Potter, P.A. & Perry, A.G. (2006). Fundamentals of Nursing. St. Louis: Mosby. College of Nurses of Ontario (2008). CNO Practice Standard: Documentation

Safety of Allergen Immunotherapy: A Review of Premedication and Dose Adjustment. Immunotherapy. 2012;4(3):315-322. https://www.medscape.com/viewarticle/762698_1. Accessed Aug 27, 2023

Allergen immunotherapy: an updated review of safety. Curr Opin Allergy Clin Immunol. 2017 Feb; 17(1): 55–59. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5644500/#:~:text=Adverse%20allergic%20reactions%20to%20SCIT,reactions%20%5B7%E2%80%9310%5D. Accessed Aug 27, 2023

Injection Immunotherapy for Inhalant Allergens. Middleton's Allergy: Principles and Practice, 85, 1401-1419.e1. Accessed via ClinicalKey on Aug 27, 2023

Immunotherapy Manual Canadian Society of Allergy & Clinical Immunology 2016. http://csaci.ca/wp-content/uploads/2017/12/IT-Manual-2016-5-July-2017-rev.pdf. Accessed Aug 27, 2023

| **Documentation and Communication:** | **Appendix Attached:** ☐ **Yes** ☒ **No**<br>**Title:** |
|---|---|

1. Documentation in the patient's medical record needs to include the name and number of the directive, name of the implementer (including credential), and name of the authorizer responsible for the directive and patient. Specific sites of immunization must also be noted along with the **Lot Number and Expiration Date**.
2. Information regarding implementation of the procedure and the patient's response should be documented in accordance with standard documentation practice. *

∗ *Potter, P.A. & Perry, A.G. (2006). Fundamentals of Nursing. St. Louis: Mosby. College of Nurses of Ontario (2008). CNO Practice Standard: Documentation*

| **Review and Quality Monitoring Guidelines:** | **Appendix Attached:** ☐ **Yes** ☒ **No**<br>**Title:** |
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1. The Directive remains in force until and unless amendment occurs. Review will occur biennially. In case the Medical Director identifies the need to change the Medical Directive, at least one TVFHT member of the implementing disciplines will be consulted.
2. At any such time that issues related to the use of this directive are identified, the team must act upon the concerns immediately by identifying these concerns to the Medical Director. The Medical Director will review these concerns and consult with at least one TVFHT member of the implementing disciplines, before necessary changes are made.
3. If new information becomes available between routine renewals, and particularly if this new information has implications for unexpected outcomes, the directive will be reviewed by the Medical Director and a minimum of one TVFHT member of the implementing disciplines.

| **Approving Authorizer(s):** | **Appendix Attached:** ☐ **Yes** ☒ **No**<br>**Title:** |
|---|---|

Authorizer Approval Form signed in HR Downloads by Medical Director.

# Appendix 1: Allergy Injection Patient Information & Consent

## Allergy Injection Patient Information

### Before your injection:

- **Avoid** vigorous exercise for **1 hour before** your injection.

### After your injection:

- **Avoid** rubbing or scratching the arm in which you received the injection.
- **Avoid** vigorous exercise for **2 hours after** injections.
- **Local reactions are most common** – they appear as red, warm, itchy, swollen areas at the site of the shot, and can last up to 4 days.

### If a local reaction occurs after your injection:

- Take an antihistamine (like Claritin, Reactine, Allegra, Aerius).
- Use ice on the area as needed and/or an anti-itch cream such as hydrocortisone.
- Record the time and size of the reaction and how long it lasts; report it at your next visit.
- Although you may not experience any reaction within 30 minutes after the injection, it's possible to react later in the day.

A serious systemic reaction can develop after your injection and the symptoms may include:

- Hives or itchy red spots on your body
- Itchy palms and feet
- Flushed face
- Swelling of the throat/mouth and itchy palate
- Wheezing or difficulty breathing /shortness of breath
- Feeling of tightness in the chest
- Nausea, vomiting, diarrhea
- Dizziness
- Coughing, sneezing, runny nose
- Anxiety

Most serious systemic reactions develop within ***30 minutes*** of allergy injections. This is why you must ***always*** wait in the clinic area for ***30 minutes*** after your injection. We are trained to watch for reactions and equipped to identify and treat them. The risk of a systemic allergic reaction never goes away.

**Due to the importance of this safety policy, if you fail or decline to follow this policy, we can no longer provide your injections.**

In case of a severe reaction after leaving the clinic, go to the nearest **emergency department** for treatment. Please do not wait to contact the clinic.

If you've experienced a systemic reaction, please notify your allergist for information on further treatment.

**Next Visits:**

- It's important for you to inform the nurse if you have any new health problems, changes in medications, or if you had any reactions to your last injection.
- If you think you might be pregnant, tell your doctor or nurse. Immunotherapy is generally felt to be safe during pregnancy; however, the dosage should not be increased and your doctor may wish to reduce the dose while you are pregnant.

Page 1 of 2

- You should not receive an allergy injection if you:
  - Have a fever or extended illness for any reason.
  - Are wheezing, short of breath or having an exacerbation of asthma symptoms.
  - Are taking a Beta-Blocker. These are drugs used to treat irregular heartbeats, headaches, eye problems and high blood pressure.
- Allergy extracts should be refrigerated between injections, but never frozen.

These recommendations are based on best practice guidelines (courtesy of the Allergy and Immunology Program of St. Joseph's Health Care London).

**Patient acknowledgement:**

I have read and understood the above Allergy Injection Information and agree to the Thames Valley Family Health Team's policy of waiting 30 minutes after injection for systemic reaction monitoring.

Patient or guardian signature

Date

Witness signature

**Storage of patient injectable/medication in our refrigerator or clinic:**

We provide you with the service of storing (labelled) patient vials (injectables, allergy serum, vaccines, etc.) between prescribed injection visits.

We are not liable for the compromise in the integrity of the medication due to handling before receiving the medication or for loss or compromise of integrity due to power outage, storage equipment failure or catastrophic event.

We are not liable for any loss or theft during storage.

This is a voluntary service and it is your option to keep your vial with you personally and bring with you to each visit.

Patient or guardian signature

Date

Witness signature

****Once signed this consent should be scanned into patient's record.**