



New Brunswick College of Pharmacists
Ordre des pharmaciens du Nouveau-Brunswick

POLICY NAME:	Administration of injections policy (EN)
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AUTHORITY DERIVED FROM:	
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OTHER:	GM-PP-I-03 (Supplement to administration of injections policy) should be considered as an addendum to this policy

NBCP POLICY

Administration of injections

Administration of Injections policy

All training programs must hold **Stage II CCCEP accreditation** to be acceptable for the purposes of acquiring authorization to administer injections.

Application for authorization to administer injections must be made to the College within one year of successful completion of the training program. If not registered within one year, the training program must be repeated. Pharmacists who wish to administer injections as authorized under Part XXII of the Regulations must meet the following requirements:

- For intramuscular (IM) and subcutaneous (SC) administration:
Successfully complete an accredited education program recognized by the College on administration of injections by intramuscular or subcutaneous route.
- For intradermal (ID) or intravenous (IV) administration:
Successfully complete a training program, approved by Council, on IV or ID administration. The training program must include the same educational content of the administration of injections by IM or SC routes plus additional material on the IV or ID administration; if not, the applicant must also successfully complete an accredited education program recognized by the College on administration of injections by intramuscular or subcutaneous route.

Prior to administering injections, pharmacists must:

1. Receive notification from the College that they are authorized to administer injections.
2. Adhere to the Standards of Practice for Administration of Injections (Appendix 1).
3. Ensure that the components of service delivery are properly implemented and meet and demonstrate the Criteria for Preparation and Administration of Injections where appropriate (Appendix 2).
4. Meet and demonstrate the Competencies for Administration of Injections (where appropriate) (Appendix 3 and 4)
5. Once authorized to administer injections, the member shall:
 - Maintain current certification in CPR and First Aid as a requirement of licensure as a pharmacist
 - Maintain an inventory of drugs to treat a possible emergency.
 - Keep the injection products under appropriate storage conditions within the pharmacy.
 - Not administer an injection to a child younger than five (5) years old.
 - Follow good infection control procedures to help prevent spread of infection.

APPENDIX 1 – STANDARDS OF PRACTICE FOR ADMINISTRATION OF INJECTIONS

1. **A pharmacist authorized to administer drugs by injection under section 50(b) of the Pharmacy Act must:**
 - a) have a policy and procedures manual for provision of the service in place and conduct a review of these on an annual basis; and
 - b) ensure that the environment in which the injection is to be administered is appropriate, i.e., clean, safe, appropriately private and comfortable for the client.

2. **A pharmacist authorized to administer drugs by injection must have proper regard for the interests of the client and take all necessary steps to ensure that the injection is administered safely. These steps include:**
 - a) Obtain informed consent from the client, or client's agent, and ensure proper documentation is maintained;
 - b) Be satisfied that the prescription is valid, complete and appropriate in relation to the drug that will be administered;
 - c) Ensure:
 - i. there is ready access to drugs and health care products, aids and devices used to treat reactions to injectable drugs, and
 - ii. the pharmacist is trained to administer the drugs and health care products, aids and devices used to treat reactions to injectable drugs.
 - d) Be satisfied that the drug product to be administered:
 - i. has been prepared for administration using aseptic technique,
 - ii. is stable, and
 - iii. has been stored and labelled appropriately following reconstitution or mixing.
 - e) Observe routine precautions for infection control;
 - f) Use aseptic technique; and
 - g) Respond appropriately to complications if they arise.

3. **Routine precautions for infection control - defined**

For the purpose of 2(e), routine precautions for infection control include precautions to help prevent the spread of infection, such as:

 - a) handling all body fluids and tissues as if they were infectious, regardless of the client's diagnosis;
 - b) wearing gloves (when required) to prevent contact with bodily fluids, excretions or contaminated surfaces or objects.
 - c) washing hands before and after caring for the client, and after removing gloves; and
 - d) proper disposal of waste materials.

4. **Steps required after administration**

Following the administration of a drug by injection, the pharmacist must:

 - a) ensure the client is appropriately monitored;
 - b) ensure devices, equipment and any remaining drug are disposed of safely and appropriately;
 - c) provide relevant information to other regulated health professionals as appropriate; and
 - d) complete documentation of administration.

5. **No injection for a child younger than five (5) years**

A pharmacist must not administer an injection to a child younger than five years old.

APPENDIX 2 – COMPONENTS OF SERVICE DELIVERY AND CRITERIA FOR PREPARATION AND ADMINISTRATION OF INJECTIONS

For clients in an institutional setting, some of the components listed below are addressed in institutional policy and procedures. Where such written policy exists, these will be deemed to be equivalent. The pharmacist is expected to comply fully with such policies.

The following criteria outline the components of service delivery to be in place and the knowledge required before administering injections:

1. Develop, maintain and review, at least annually, a policy and procedures manual including but not limited to:
 - a) Emergency procedure protocol
 - b) Emergency treatment protocol including the following minimum equipment or supplies:
 - i. Adrenalin/epinephrine and appropriate syringes for administration
 - ii. Diphenhydramine
 - iii. Ice or cold compress
 - c) Precautions required for clients with latex allergies
 - d) Management of needle stick injuries
2. Knowledge of routes of administration
 - a) Indications and contraindications for each route
 - b) Advantages and disadvantages of each route
 - c) Common complications and prevention/management of each
 - d) Appropriate sites for administration
 - e) Special requirements in certain client groups, e.g., pediatric clients
 - f) Applicable administration protocols related to specific route of administration or the specific drug(s), e.g., facility protocols, regional protocols.
3. Knowledge of common injections
 - a) Indication, action and purpose
 - b) Adverse effects and contraindications
 - c) Factors that may interfere with their effectiveness
 - d) Protocols for common injections including immunization schedules for adults, children and special populations
4. Maintain a setting within which the injection is to be administered that is clean, safe, comfortable and appropriately private and furnished for the client.
5. Obtain informed consent from the client, or client's agent, with regard to
 - a) Name of the injection to be administered
 - b) Disease or condition being prevented
 - c) Benefits and risks of the injection
 - d) Expected reaction
 - e) Usual and rare side effects
 - f) Rationale for the 15-30-minute wait following the injection
 - g) Contacts for follow-up or emergency

6. Perform basic assessment of the client
 - a) History
 - b) Overall condition and vital signs (e.g., blood pressure, heart rate, etc.)
 - c) Appropriate information for the injection e.g. Immunization records
 - d) Injection site

7. Assess the appropriateness of the drug for the specific client, including but not limited to:
 - a) Indication
 - b) Dose
 - c) Allergy status
 - d) Risk factors and contraindications
 - e) Route of administration including:
 - Appropriateness for the client
 - Appropriateness for the drug/solution
 - Drug and route follows established protocols, if applicable

8. Prepare the injection for administration
 - a) Use aseptic technique in preparation and administration of the injection
 - b) Check the drug product and expiry date
 - c) Determine stability/compatibility
 - d) Assemble appropriate equipment and supplies (e.g., syringes, needles and administration sets, emergency supplies)
 - e) Draw the injection product from the vial or ampoule
 - f) Maintain aseptic technique throughout the process
 - g) Apply universal precautions
 - h) Properly store prepared injections/solutions

9. Use applicable equipment
 - a) Setting, use and troubleshooting for infusion pumps
 - b) Other injectable devices, if applicable

10. Dispose of sharps, drug containers and drug wastage
 - a) Safely disassemble equipment, discard used materials and sharps

11. Perform and provide care of the injection site
 - a) Assessment of the site
 - b) Select and landmark the injection site
 - c) Requirements for dressings
 - d) For IV administration, ensure the line is patent and there are no signs of infection at the catheter site

12. Perform precautions required for clients with latex allergies

13. Implement appropriate emergency measures including but not limited to:
 - a) Basic First Aid procedures
 - b) CPR
 - c) Use of Adrenalin/epinephrine

- d) Established procedures for handling sensitivity/anaphylactic reactions
 - e) Management of needle stick injuries
14. Provide therapeutic monitoring required for each injection administered and evaluate the outcome of the injection/solution on the client
- a) Goals of therapy
 - b) Monitoring for the specific client
 - c) Initiate appropriate intervention as necessary
15. Document history, assessment and injections administered
- a) Drug and dose given
 - b) Manufacturer and lot #
 - c) Route of administration
 - d) Date and time of administration
 - e) Client response
 - f) Client teaching done
 - I. Adverse reactions and management
 - II. Plans for follow-up
 - g) Name and title of person administering the injection
16. Notify and provide relevant information to other health professionals, as per Regulation 21.15.

APPENDIX 3 - COMPETENCIES FOR ADMINISTRATION OF INJECTIONS

Refer to “Immunization Competencies for Health Professional” document for full details on competencies 1-14 (separate document)

1. The Immune System and Vaccines

Competency: Explains how vaccines work using basic knowledge of immune system

2. Vaccine-Preventable Diseases

Competency: Demonstrates an understanding of the rationale and benefit of immunization, as relevant to the practice setting

3. Vaccine Development and Evaluation

Competency: Integrates into practice knowledge about the main steps in vaccine development and evaluation.

4. The Types of Immunizing Agents and Their Composition

Competency: Applies the knowledge of the components and properties of immunizing agents as needed for safe and effective practice

5. Population Health

Competency: Applies relevant principles of population health for improving immunization coverage rates

6. Communication

Competency: Communicates effectively about immunization as relevant to the practice setting(s)

7. Storage and Handling of Immunization Agents

Competency: Implements Canadian guidelines when storing, handling or transporting vaccines

8. Administration of Immunizing Agents

Competency: Prepares and administers immunization agents correctly

9. Adverse Events Following Immunization

Competency: Anticipates, identifies and manages adverse events following immunization

10. Documentation

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

11. Populations Requiring Special Considerations

Competency: Recognizes and responds to the unique immunization needs of certain population groups

12. The Canadian Immunization System

Competency: Demonstrates an understanding of the immunization system in Canada and its impact on his/her own practice

13. Immunization Issues

Competency: Addresses immunization issues using an evidence-based approach

14. Legal and Ethical Aspects of Immunization

Competency: Acts in accordance with legal and high ethical standards in all aspects of immunization practice

To accommodate substances other than immunizing agents, NAPRA adopted a “15th Competency” (Appendix 4) to define requirements for the administration of those substances.

15. Essential Competencies for administration of Other Substances

Competency: Safely and effectively administers substances by injection

APPENDIX 4
The 15TH COMPETENCY

15. ESSENTIAL COMPETENCIES FOR INJECTION OF OTHER SUBSTANCES

Competency: Safely and effectively administers substances by injection

Learning Objectives:

The pharmacist will be able to perform the following:

- Demonstrate the necessary technical skills required to prepare and administer injections (subcutaneously, intramuscularly, intradermally)
- Describe legal and regulatory requirements for administering drugs by injection, including federal and provincial legislation and standards
- Conduct a Therapeutic Review: [PHAC # 13]
 - Locate evidence based information relating to current therapeutic information of the specific drug to be injected, including indications, contraindications, approved routes of administration, pharmacokinetics, injection protocol, precautions and patient monitoring, and patient factors that should be considered, e.g., pregnancy
 - Prepare a checklist to assess and determine preferred route of administration
 - appropriate for the drug/solution
 - appropriate for the patient
 - drug and route according to protocol
- Perform all necessary steps for administering substances by injection:
 - Assess the Patient, including: [PHAC # 8 (1.),11]
 - age, weight, current and previous relevant medical conditions and medications, current patient status (e.g., fever/signs of infection, pregnancy), allergies, relevant patient adherence issues, past experience or reactions with injections, medications and/or immunizations.
 - special population considerations
 - Provide Patient Education and Obtain Consent: [PHAC #6,13,14]
 - Explain reason for the injection and outline risks and benefits, including common and serious potential side effects and management
 - Obtain and record informed consent for administration of injection
 - Provide teaching on self-administration, if appropriate

- Ensure Medication Appropriateness, including the ‘Seven rights of medication administration: [PHAC competency #8,10]
 - Right Product
 - Right Client
 - Right Dose
 - Right Time
 - Right Route
 - Right Reason
 - Right Documentation

- Ensure Safe Medication Preparation, Administration, Storage and Disposal: [PHAC # 7, 8]
 - Ensure a clean, safe, private and comfortable environment for the patient
 - Demonstrate the following appropriate infection control procedures: aseptic reconstitution technique, needle gauge and size appropriate for patient
 - Take precautions for patients and health care workers with latex allergies
 - Demonstrate correct administration technique appropriate for route of injection, including techniques for reducing pain associated with injection
 - Determine and locate appropriate site for injection, taking into account patient characteristics, product considerations, and anatomical landmarks (bones, muscles, blood vessels, nerves)
 - Perform universal precautions in addition to preventing and managing needle-stick injuries
 - Monitor and maintain temperature-appropriate storage conditions of injectable medications following product specific storage guidelines.
 - Ensure safe disposal of injectable medications

- Monitor the patient after injection: [PHAC #9]
 - Maintain currency in CPR and First Aid
 - Anticipate, identify, manage and report adverse effects following medication injection
 - Respond to anaphylactic reactions with appropriate use of emergency kits and following established step-by-step protocols.
 - Describe and perform therapeutic monitoring of patient with respect to goals of medication therapy

References:

1. Immunization competencies for health professionals. Public Health Agency of Canada (PHAC). <http://www.phac-aspc.gc.ca/im/pdf/ichp-cips-eng.pdf>.
2. Guidelines and Criteria for Injections and Immunization Continuing Education Programs for Alberta Pharmacists. https://pharmacists.ab.ca/document_library/InjImmGuidelinesFINAL.pdf
3. Draft Bill 179 Regulation Ontario College of Pharmacists. [http://www.ocpinfo.com/Client/ocp/OCPHome.nsf/object/BILL_179/\\$file/Draft+Bill+179+Regulation++for+website+posting+December+13+2011.pdf](http://www.ocpinfo.com/Client/ocp/OCPHome.nsf/object/BILL_179/$file/Draft+Bill+179+Regulation++for+website+posting+December+13+2011.pdf)
- (4. MD Briefcase Immunization Competencies Education Program (ICEP) www.AdvancingPractice.com.)
- (5. OPA Injection and Immunization Certificate program.)

APPLICATION FOR AUTHORIZATION TO ADMINISTER DRUGS BY INJECTION

You must receive authorization from the College before providing injection services.

Preamble

All training programs must hold **Stage II CCCEP accreditation** to be acceptable for the purposes of acquiring authorization to administer injections.

Application for authorization to administer injections must be made to the College within **one year** of successful completion of the training program. Pharmacists who wish to administer injections as authorized under Regulation 22.3 must meet the following requirements:

1. Pharmacists must apply for authorization to administer drugs by injection. The application will be reviewed and, if approved, you will receive authorization from the College to administer drugs by injection.
2. Be familiar with the legislation concerning administration of drugs by injection.
3. Successfully complete a training program, and provide a copy of the documentation of successful completion, as follows:

For intramuscular (IM) and subcutaneous (SC) administration:

Successfully complete an accredited education program recognized by the College on administration of injections by intramuscular or subcutaneous route

For intradermal (ID) or intravenous (IV) administration:

Successfully complete a training program, approved by Council, on IV or ID administration. The training program must include the same educational content of the administration of injections by IM or SC routes plus additional material on the IV or ID administration; if not, the applicant must also successfully complete an accredited education program recognized by the College on administration of injections by intramuscular or subcutaneous route.

Once authorized to administer drugs by injection, you must:

- Maintain your competence and skill level in administering injections by intramuscular or subcutaneous route. If you do not, you must seek remedial training to bring your knowledge and skill level up to standard.
- Successfully complete another training program if you have not administered injections for a three-year period.
- Complete a professional declaration annually at renewal, indicating that you:
 - a. Have taken action to maintain both your clinical and technical competencies in administration of injections; and
 - b. Have and will maintain valid CPR and First Aid certification

Before you begin the online application, please have electronic versions of the following ready to upload:

1. Certificate of Completion - Immunization and Injection Administration Training Program
 - a. (IIATP) Injection Administration Workshop
Intramuscular (IM) and subcutaneous (SC) administration routes
OR
 - b. (IIATP) Immunization Competency Online Program
Intramuscular (IM) and subcutaneous (SC) administration routes

Application to Administer Injections [[LINK](#)]

Miscellaneous

Reporting of Adverse Events Following Immunization

Should a client experience an adverse event following an immunization injection, you must complete and forward a report to the Public Health Agency of Canada. The reporting form is available at the following link:

English <http://www.phac-aspc.gc.ca/im/pdf/raefi-dmcisi-eng.pdf>

French <http://www.phac-aspc.gc.ca/im/pdf/raefi-dmcisi-fra.pdf>

Post-Exposure Management of Occupational Exposure to Blood/Body Fluids

The following link presents an overview of treatment for accidental exposure to blood or body fluids e.g. needlestick injury.

http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%201%20-%20CDC/CPS_CManual_BBFExpManage.pdf

Canadian Immunization Guide

This document covers basic principles and recommended immunization schedules

English <https://www.canada.ca/en/public-health/services/canadian-immunization-guide/introduction.html>

French <https://www.canada.ca/fr/sante-publique/services/guide-canadien-immunisation/introduction.html>

Immunization Competencies for Health Professionals

This document outlines the competencies a health professional should have if involved in immunization clients.

English <https://www.canada.ca/en/public-health/services/publications/healthy-living/immunization-competencies-health-professionals.html>

French <https://www.canada.ca/fr/sante-publique/services/publications/vie-saine/competences-immunisation-intention-professionnels-sante.html>

National Advisory Committee on Immunization (NACI)

<http://www.phac-aspc.gc.ca/naci-ccni/#rec>

MONITORING FREQUENCY:

MONITORING METHOD:

REVISION FREQUENCY:

RESBONSIBILITY: