

U: Medication Management

Please note: Competencies within this section of the Profile are to be taken in consideration with competencies outlined throughout this document and are not intended to be standalone.

Important: LPNs are responsible to ensure they have any required education or training and the individual competence prior to performing these competencies.

Major Competency
U: Medication Management

Competency
U-1: Principles of Pharmacology

Competency Statement - A Licensed Practical Nurse will:

U-1-1 Demonstrate knowledge of common drug origins:

- animal (hormones, enzymes)
- chemical synthesis (antibiotics, steroidal, radioactive)
- natural (plant, mineral, herbal remedies)

U-1-2 Demonstrate knowledge and understanding of the principles of pharmacology:

- pharmacokinetics
 - absorption
 - distribution
 - metabolism
 - excretion
- pharmacodynamics
 - adverse effect
 - allergic reaction or anaphylaxis
 - antagonistic effect
 - complementary and alternative therapy interactions
 - desired effect
 - drug interactions
 - drug toxicity
 - duration of action
 - idiosyncratic reactions
 - synergistic effect
 - therapeutic duration

U-1-3 Demonstrate knowledge of routes for medication administration:

- gastrointestinal (oral, enteral)
- inhalational
- intra-arterial
- intracerebral
- intradermal
- percutaneous, epicutaneous, subcutaneous
- intramuscular
- intraosseous
- intrathecal
- intravenous
- intravesical
- mucous membranes (sublingual, buccal, nasal, optic, otic, vaginal, rectal)

U-1-4 Demonstrate knowledge and understanding of medication action and effect for patients across the lifespan and associated nursing implications:

- indications and contraindications
- interactions
- lab values
- expected outcomes
- risk factors
- adverse reactions and side effects

U-1-5 Demonstrate knowledge and ability to access credible resources for information and research related to medications prior to administration.

Major Competency
U: Medication Management

Competency
U-1: Principles of Pharmacology

Competency Statement - A Licensed Practical Nurse will:

U-1-6 Demonstrate knowledge and ability to apply infection prevention and control standards in safe storage, handling, removal, and disposal of medications according to employer requirements:

- antineoplastic
- autoimmune
- cytotoxic
- biological
- hormones
- insulin
- narcotics
- known hazardous
- vasodilators
- bronchodilators

U-1-7 Demonstrate knowledge and ability to perform drug counts on controlled medications according to employer requirements:

- maintain accurate record
- accurately record addition and/or removal
- participate in shift count and accurately record inventory
- co-sign waste of controlled medication

U-1-8 Demonstrate knowledge and ability to report adverse events and medication errors according to legislation and employer requirements.

Major Competency
U: Medication Management

Competency
U-2: Medication Preparation and Administration

Competency Statement - A Licensed Practical Nurse will:

U-2-1 Demonstrate knowledge and understanding of the National and Alberta Drug Schedules:

- Schedule 1: drugs requiring a prescription as a condition of sale
- Schedule 2: drugs available without a prescription but must be obtained from a pharmacist
- Schedule 3: drugs available without a prescription from the self-selection section of a pharmacy
- Unscheduled: drugs not listed in a National or Provincial schedule and may be sold from any retail outlet

U-2-2 Demonstrate knowledge and ability to accept, process, verify, and initiate written, verbal, telephone, or electronic medication orders considering:

- date and time prescribed
- patient's full name
- medication name, strength, and dosage
- route, frequency, duration
- authorized prescriber (name, signature, designation)
- order is accurate, appropriate, and complete
- follow up with authorized prescriber as necessary

U-2-3 Demonstrate knowledge and ability to accurately calculate dosages, concentrations, rates, and volumes using formulas and standards of measurement associated with medication administration.

U-2-4 Demonstrate knowledge and ability to perform patient assessment prior to medication administration.

U-2-5 Demonstrate knowledge and ability to appropriately prepare medications for administration according to principles of safe medication preparation and employer requirements.

U-2-6 Demonstrate knowledge and ability to apply the "rights" and "checks" of medication administration to reduce risk of medication error and ensure patient safety.

U-2-7 Demonstrate knowledge and ability to adhere to employer requirements and procedure for safe administration of medication by:

- gastrointestinal (oral, enteral)
- inhalational
- intradermal
- percutaneous, epicutaneous, subcutaneous
- intramuscular
- intravenous (continuous, intermittent, direct)
- mucous membranes (sublingual, buccal, nasal, optic, otic, vaginal, rectal)
- intravesicular (bladder instillation)

Major Competency
U: Medication Management

Competency
U-2: Medication Preparation and Administration

A Licensed Practical Nurse will:

U-2-8 Demonstrate knowledge and ability to adhere to employer requirements when monitoring patient receiving medication administration by:

- intraosseous
- intrathecal
- intra-arterial
- intracerebral

U-2-9 Demonstrate knowledge and ability to monitor, evaluate, and document medication effectiveness.

U-2-10 Demonstrate knowledge and ability to recognize and manage adverse medication reactions and anaphylaxis:

- identify signs and symptoms
- implement protocol according to employer requirements

U-2-11 Demonstrate knowledge and ability to administer nitrous oxide (see Standards of Practice #14, section Z of this document):

- identify risks and precautions
- manage adverse reactions
- provide ongoing monitoring

U-2-12 Demonstrate knowledge and ability to administer diagnostic imaging contrast agents (see Standards of Practice #13, section Z of this document):

- identify the different types
- identify risks and precautions
- manage adverse reactions
- provide ongoing monitoring

Major Competency
U-3: Medication Management

Competency
U-3: Immunization and Communicable Disease Control

Competency Statement - A Licensed Practical Nurse will:

- U-3-1 Demonstrate knowledge and understanding of the immunization restricted activity in the Health Professions Act's Licensed Practical Nurses Profession Regulation.**
- U-3-2 Demonstrate knowledge and ability to provide immunization in accordance with professional legislation, regulation, standards, and guidelines (see Standards of Practice #5, section Z of this document).**

LPN Profession Regulation: *section 13(1) A regulated member may, in the practice of licensed practical nursing, perform the following restricted activities in accordance with the standards of practice:*
(c) administering vaccines for the purpose of providing immunizations where the recipient of the immunization is 5 years of age or older

Major Competency
U-3: Medication Management

Competency
U-3: Immunization and Communicable Disease Control

Competency Statement - A Licensed Practical Nurse will:

- U-3-3 Demonstrate knowledge of immunity and principles of infectious disease prevention and control.**
- U-3-4 Demonstrate knowledge of anatomy, physiology, pathophysiology related to infectious diseases.**
- U-3-5 Demonstrate knowledge of national and provincial legislation, regulation, schedules, and standards of immunization.**
- U-3-6 Demonstrate knowledge of immunization schedules and prevention of infectious disease for:**
 - infants
 - children
 - adults
 - seniors
 - population specific
- U-3-7 Demonstrate knowledge of the action, purpose, uses, and nature of common immunizing and biological products.**
- U-3-8 Demonstrate knowledge and ability to identify the factors which affect the action of immunizing and biological products.**
- U-3-9 Demonstrate knowledge and ability to identify and report side effects, adverse events, and contraindications related to immunization and biological products.**
- U-3-10 Demonstrate knowledge and ability to maintain the cold chain in the transportation and storage of immunizing and biological products.**
- U-3-11 Demonstrate knowledge and ability to identify basis for administration of an immunizing or biological product.**
- U-3-12 Demonstrate knowledge and ability to review pertinent health information prior to immunization.**
- U-3-13 Demonstrate knowledge and ability to identify risk factor and contraindications to immunization and report.**
- U-3-14 Demonstrate knowledge and ability to document patient assessment and report any risks and contraindications.**
- U-3-15 Demonstrate knowledge and ability to provide patient teaching to obtain informed consent for immunization:**
 - name of immunizing and biological product
 - infectious disease prevention
 - benefits of immunization
 - risks and side effects
 - wait time following immunization
 - emergency contact

Major Competency
U-3: Medication Management

Competency
U-3: Immunization and Communicable Disease Control

Competency Statement- A Licensed Practical Nurse will:

- U-3-16 Demonstrate knowledge and ability to perform safe preparation, transportation, and administration of immunizing and biological products.**
- U-3-17 Demonstrate knowledge and ability to apply the “rights and checks” of medication administration when administering immunizing and biological products to reduce risk of medication error and ensure patient safety.**
- U-3-18 Demonstrate knowledge and ability to prepare immunizing and biological product from vial or ampule for injection.**
- U-3-19 Demonstrate knowledge and ability to landmark injection site and use proper technique to administer intradermal, subcutaneous, and intramuscular injections.**
- U-3-20 Demonstrate knowledge and ability to properly dispose of sharps and maintain infection prevention and control standards.**
- U-3-21 Demonstrate knowledge and ability to record immunizing or biological product administration and patient response.**
- U-3-22 Demonstrate knowledge and ability to document and report adverse effects from immunizing or biological product.**