

V: Infusion Therapy

Major Competency Area: **V**

Infusion Therapy

Priority: **One**

Competency: **V-1**

Knowledge of Intravenous Therapy

Date: September 1, 2005

A Licensed Practical Nurse will:

- V-1-1 Demonstrate knowledge and ability to apply critical thinking and clinical judgment throughout the intravenous therapy process.**
- V-1-2 Demonstrate knowledge of human anatomy and physiology, specifically the circulatory system, fluids, and electrolytes.**
- V-1-3 Demonstrate knowledge of principles of infusion therapy:**
- fluid and electrolyte maintenance, restoration and replacement
 - medications and nutritional feedings
 - blood and blood products
 - chemotherapy
 - heparin and saline lock.
- V-1-4 Demonstrate knowledge of related terminology such as:**
- infiltration
 - infusion
 - interstitial
 - intravenous
 - hypodermoclysis (HDC)
 - phlebotomy
 - to be absorbed (TBA)
 - to keep vein open (TKVO)
 - total parenteral nutrition (TPN).
- V-1-5 Demonstrate ability to differentiate between peripheral lines, central lines, implanted ports, and epidurals.**

Major Competency Area: **V**
Infusion Therapy

Priority: **One**
Restricted Activity Authorization

Competency: **V-2**
Peripheral Intravenous Therapy

Date: September 1, 2005

A Licensed Practical Nurse will:

V-2-1 Demonstrate understanding of the restricted activity in the LPN Regulation 2003 (13) authorizing intravenous therapy:

“(1) Regulated members are authorized, in accordance with this section, to perform the restricted activity of administering anything by invasive procedure on body tissue below the dermis for the purposes of:

(2) ...insertion of an apparatus for supplying medications or fluids.”

Health Professions Act LPN Regulation 2003

V-2-2 Demonstrate knowledge and ability to monitor, maintain, regulate, and evaluate peripheral infusion therapy.

V-2-3 Demonstrate knowledge and ability to identify common intravenous solutions according to type of solution, additional contents, and indications for use.

V-2-4 Demonstrate knowledge and ability to set-up and prime infusion line.

V-2-5 Demonstrate knowledge and ability to use a variety of infusion therapy equipment such as:

- programmable infusion equipment
- patient controlled analgesia pumps (PCA pumps).

V-2-6 Demonstrate ability to calculate infusion rates.

A Licensed Practical Nurse will:

- V-2-7 Demonstrate knowledge and ability to recognize, and respond to, complications of intravenous therapy as related to etiology, clinical manifestations, and preventative nursing measures:**
- abnormal lab values
 - air emboli
 - allergic reactions
 - correct fluid / medication
 - correct expiry date
 - dehydration
 - fluid overload
 - infection
 - infiltration problem
 - phlebitis / thrombophlebitis
 - safety of client.
- V-2-8 Demonstrate knowledge and ability to resolve common problems associated with peripheral intravenous therapy.**
- V-2-9 Demonstrate knowledge and ability to initiate, flush, monitor and discontinue heparin and saline locks in established peripheral infusion sites.**
- V-2-10 Demonstrate knowledge and ability to prepare and administer medications for infusion as per medication order. (see Competency Band U)**
Note: LPNs are not authorized to provide direct peripheral IV push medications.
- V-2-11 Demonstrate knowledge and ability to provide retrograde push medications via peripheral intravenous infusions in specific settings as per agency policy.**
- V-2-12 Demonstrate knowledge and ability to monitor and regulate Total Parenteral Nutrition (TPN).**
- Note:** LPNs are not authorized to provide the restricted activity of administering (initiation of) TPN.

Major Competency Area: **V**

Infusion Therapy

Priority: **One**

Restricted Activity Authorization

Competency: **V-3**

**Initiate and Discontinue
Peripheral Infusion**

Date: September 1, 2005

A Licensed Practical Nurse will:

V-3-1 Demonstrate knowledge of peripheral venous system.

V-3-2 Demonstrate knowledge and ability to identify common IV puncture sites.

V-3-3 Demonstrate knowledge and ability to initiate peripheral infusion line upon physician / nurse practitioner order and agency policy.

V-3-4 Demonstrate ability to discontinue peripheral infusion and remove infusion catheter.

Major Competency Area: **V**

Infusion Therapy

Priority: **One**

Restricted Activity Authorization

Competency: **V-4**

Care of a Central Line

Date: September 1, 2005

A Licensed Practical Nurse will:

- V-4-1 Demonstrate ability to apply critical thinking and clinical judgment throughout the nursing process when caring for client with a central line.**
- V-4-2 Demonstrate knowledge of different types of central lines and the terminology used by the agency such as:**
- central venous catheter (CVC):
 - implanted
 - non-valved or open ended
 - midline catheter (not a CVC)
 - percutaneous
 - peripherally inserted central catheter (PICC)
 - tunneled
 - valved or closed ended.
- V-4-3 Demonstrate knowledge of risks associated with central lines such as:**
- abnormal heart rhythm
 - air in bloodstream
 - bleeding around site and into chest
 - blockage (blood clots)
 - brachial plexus injury
 - incorrect placement
 - sepsis.
- V-4-4 Demonstrate knowledge and ability to provide basic care to a client with a central line as per agency policy:**
- dressing change.
- V-4-5 Demonstrate ability to monitor the central line infusion.**

Major Competency Area: **V**

Infusion Therapy

Priority: **One**

Restricted Activity Authorization

Competency: **V-5**

**Care of a Central Line
in Specific Settings**

Date: September 1, 2005

A Licensed Practical Nurse will:

V-5-1 Demonstrate knowledge and ability to provide additional care to a client with a central line as per agency policy:

- cap / tubing change
- flush
- heparin/saline locks
- withdraw blood
- administration of fluids and medications as appropriate.

V-5-2 Demonstrate knowledge and ability to maintain central venous pressure while providing care of the central line.

Note: LPNs providing additional care of central lines have been trained through specific on the job certification and are practicing in the Community or the Dialysis Specialty.

Major Competency Area: **V**

Infusion Therapy

Priority: **One**

Restricted Activity Authorization

Competency: **V-6**

Hypodermoclysis

Date: September 1, 2005

A Licensed Practical Nurse will:

- V-6-1 Demonstrate knowledge of human anatomy and physiology, specifically the circulatory system.**
- V-6-2 Demonstrate knowledge and ability to recognize the purpose of hypodermoclysis:**
- replacement of electrolytes
 - correct fluid imbalance
 - symptom control
 - administer several drugs simultaneously utilizing several sites
 - when other routes are no longer available or appropriate
 - continuous medication administration
 - pain management.
- V-6-3 Demonstrate knowledge of appropriate site:**
- upper chest wall
 - abdominal wall
 - anterolateral thigh.
- V-6-4 Demonstrate ability to initiate hypodermoclysis infusion.**
- V-6-5 Demonstrate ability to provide medications and fluids via hypodermoclysis (See Competency Band U).**
- V-6-6 Demonstrate knowledge and ability to monitor, maintain, regulate, and evaluate hypodermoclysis infusion.**

Competency: **V-6**

Hypodermoclysis

Page: 2

Restricted Activity Authorization

A Licensed Practical Nurse will:

- V-6-7 Demonstrate knowledge and ability to identify and describe complications of hypodermoclysis related to etiology and clinical manifestation:**
- allergy
 - infection
 - lack of absorption.
- V-6-8 Demonstrate knowledge and ability to discontinue hypodermoclysis.**
- V-6-9 Demonstrate ability to document hypodermoclysis therapy.**
- V-6-10 Demonstrate knowledge of agency policies pertaining to hypodermoclysis therapy.**

Major Competency Area: **V**

Infusion Therapy

Priority: **One**

Competency: **V-7**

Blood Transfusion

Date: September 1, 2005

A Licensed Practical Nurse will:

- V-7-1 Demonstrate knowledge of circulatory system and components of blood and blood products.**
- V-7-2 Demonstrate knowledge and ability to use standard precautions.**
- V-7-3 Demonstrate knowledge of normal lab values pertaining to blood transfusion.**
- V-7-4 Demonstrate knowledge of common transfusions according to composition and indications for use:**
- cryoprecipitate
 - fresh frozen plasma
 - packed red blood cells
 - packed white blood cells
 - platelets
 - plasma expanders
 - whole blood.
- V-7-5 Demonstrate knowledge of blood typing and cross-matching of blood.**
- V-7-6 Demonstrate knowledge and awareness of the ethical and religious beliefs regarding blood transfusions.**
- V-7-7 Demonstrate knowledge and understanding of client's legal right to refuse blood or blood products.**
- V-7-8 Demonstrate knowledge and ability to set up for blood administration.**
- V-7-9 Demonstrate knowledge and ability to obtain blood or blood products from blood bank as per agency policy.**

A Licensed Practical Nurse will:

V-7-10 Demonstrate knowledge and ability to participate with an appropriate health professional to check patient identification with label on blood or blood product.

V-7-11 Demonstrate knowledge and ability to monitor and regulate administration of blood or blood products.

Note: LPNs are not authorized to provide the restricted activity of administering (initiation of) blood or blood products.

V-7-12 Demonstrate knowledge and ability to recognize a reaction to blood or blood products and change blood infusion to normal saline:

- fever
- chills
- rash
- flank pain or back pain
- bloody urine
- fainting or dizziness.

V-7-13 Demonstrate knowledge and ability to discontinue blood transfusion.

V-7-14 Demonstrate knowledge and ability to monitor and evaluate therapeutic and non-therapeutic responses to blood transfusion.

V-7-15 Demonstrate ability to effectively document information regarding transfusion therapy.

V-7-16 Demonstrate knowledge of agency policies pertaining to blood transfusions.