

V: Infusion Therapy

Major Competency Area: **V**
Infusion Therapy

Competency: **V-1**
Principles of Infusion Therapy

Date: June 1, 2015

A Licensed Practical Nurse will:

- V-1-1 Demonstrate knowledge and ability to apply critical thinking and critical inquiry throughout the nursing process related to infusion therapy.**
- V-1-2 Demonstrate knowledge of principles of infusion therapy related to:**
- circulatory system
 - arterial
 - venous
 - blood and blood products
 - chemotherapy
 - fluid and electrolyte maintenance, restoration and replacement
 - infection prevention and control
 - medications and nutritional feedings
- V-1-3 Demonstrate knowledge of peripheral lines, central lines, implanted ports, spinals, epidurals and patient controlled analgesia pumps.**
- V-1-4 Demonstrate knowledge and ability to provide health teaching and coaching related to infusion therapy.**
- V-1-5 Demonstrate knowledge and ability to communicate and collaborate with inter-professional team.**

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

Date: June 1, 2015

A Licensed Practical Nurse will:

V-2-1 Demonstrate knowledge and ability to manage peripheral infusion therapy:

- initiate, monitor, regulate, lock, discontinue
 - assemble and prime lines
 - calculate infusion rates
 - client safety
 - infusion equipment
 - patient controlled analgesia pumps (PCA pumps)
 - administration of fluids and medications

V-2-2 Demonstrate knowledge and ability to manage complications of peripheral intravenous therapy including:

- abnormal lab values
- air emboli
- allergic reactions
- dehydration/hypervolemia
- equipment/line problems
- fluid/medication error
- infection
- infiltration
- phlebitis/thrombophlebitis

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Competency: **V-3**
Hypodermoclysis (HDC)

Date: June 1, 2015

A Licensed Practical Nurse will:

V-3-1 Demonstrate knowledge and ability to manage hypodermoclysis:

- initiate, monitor, regulate, lock, discontinue
 - assemble and prime lines
 - calculate infusion rates
 - client safety
 - infusion equipment/pumps
 - administration of fluids and medications

V-3-2 Demonstrate knowledge and ability to manage complications of hypodermoclysis including:

- allergic reactions
- edema
- equipment/line problems
- fluid/medication error
- hypervolemia
- infection
- localized pain
- pooling of fluid at site

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Competency: **V-4**
Central Line Care

Date: June 1, 2015

A Licensed Practical Nurse will:

V-4-1 Demonstrate knowledge of central lines and specific application:

- central venous catheter (CVC):
 - implanted vascular access device (IVAD)
 - non-valved or open ended
 - midline catheter (not a CVC)
 - percutaneous
 - peripherally inserted central catheter (PICC)
 - tunneled
 - valved or closed ended

V-4-2 Demonstrate knowledge of risks associated with central lines including:

- abnormal heart rhythm
- blockage
- brachial plexus injury
- embolus or thrombus
- faulty or fractured device
- hemorrhage/hematoma
- incorrect placement
- infection/sepsis

V-4-3 Demonstrate knowledge and ability to manage risks associated with removal of non-tunneled peripherally inserted central venous catheters (PICC) including:

- abnormal heart rhythm
- embolus or thrombus
- brachial plexus injury
- faulty or fractured device
- hemorrhage/hematoma
- infection/sepsis

A Licensed Practical Nurse will:

V-4-4 Demonstrate knowledge and ability to monitor and manage central lines according to agency policy including:

- dressing changes
- cap/tubing change
- flush and lock
- maintain central venous pressure
- administration of fluids
- administration of medications (continuous, intermittent, direct)
- occlusion issues
- patient controlled analgesia pump (PCA pump)
- withdraw blood

V-4-5 Demonstrate knowledge and ability to remove non-tunneled peripherally inserted central venous catheters (PICC) according to agency policy.

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Competency: **V-5**
Blood and Blood Products

Date: June 1, 2015

A Licensed Practical Nurse will:

- V-5-1 Demonstrate knowledge of circulatory system and components of blood and blood products.**
- V-5-2 Demonstrate knowledge of normal/abnormal lab values pertaining to blood transfusion.**
- V-5-3 Demonstrate knowledge of types of transfusions according to composition and indications for use including:**
- albumin
 - cryoprecipitate
 - Factor 8 (anti-hemophilic factor-AHF)
 - fresh frozen plasma
 - immunoglobulin
 - packed red blood cells
 - packed white blood cells
 - plasma expanders
 - platelets
 - whole blood
- V-5-4 Demonstrate knowledge of blood typing and cross-matching of blood.**
- V-5-5 Demonstrate knowledge and ability to obtain informed consent understanding and respecting:**
- ethical and religious beliefs
 - legal right to refuse
- V-5-6 Demonstrate knowledge and ability to prepare for blood administration according to agency policy including:**
- set up and prime infusion
 - obtain blood or blood products
 - check blood or blood products with authorized professional

Competency: **V-5**

Blood and Blood Products

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A Licensed Practical Nurse will:

- V-5-7 Demonstrate knowledge and ability to monitor, regulate and discontinue blood or blood products.**
- V-5-8 Demonstrate knowledge and ability to identify a reaction to blood or blood products according to agency policy including:**
- anaphylaxis
 - abdominal status (pain, nausea)
 - abnormal bleeding
 - abnormal breath sounds (cough, dyspnea, wheezing)
 - chest flank or back pain
 - circulatory overload
 - elevated blood pressure
 - embolus
 - increased temperature
 - mental state (anxious, drowsy, calm)
 - sepsis
 - skin color and appearance (urticaria, jaundice)
 - urine output and color
- V-5-9 Demonstrate knowledge and ability to manage a reaction to blood or blood products according to agency policy.**

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

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Competency: **V-6**
Epidural and Spinal Infusions

Date: June 1, 2015

A Licensed Practical Nurse will:

- V-6-1 Demonstrate knowledge of epidural infusions including:**
- calculate infusion rates
 - client safety
 - infusion equipment/pumps
 - neurological assessment and client monitoring
 - administration of fluids and medications
- V-6-2 Demonstrate knowledge and ability to manage complications of epidural and spinal infusion therapy including:**
- abnormal lab values
 - allergic reactions
 - fluid/medication error
 - equipment/line problems
 - hemorrhage
 - infection
 - infiltration
 - post epidural cerebrospinal fluid leak/headache
- V-6-3 Demonstrate knowledge and ability to manage client care following epidural or spinal regional anesthesia/pain block.**
- V-6-4 Demonstrate knowledge and ability to monitor and regulate epidural infusions.**

Note: LPNs are not authorized to initiate or remove epidural and spinal catheters.

Major Competency Area: **V**
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Competency: **V-7**
Total Parenteral Nutrition

Date: June 1, 2015

A Licensed Practical Nurse will:

- V-7-1 Demonstrate knowledge of total parenteral nutrition according to:**
- composition:
 - dextrose
 - amino acids
 - protein
 - minerals
 - fats
 - vitamins
 - trace elements
 - indications for use:
 - absorption impairment
 - inability to tolerate enteral feeding
 - gastro-intestinal tract blockage
 - nutritional impairments
- V-7-2 Demonstrate knowledge and ability to monitor, regulate and discontinue total parenteral nutrition.**
- V-7-3 Demonstrate knowledge and ability to manage side effects associated with total parenteral nutrition.**
- V-7-4 Demonstrate knowledge and ability to manage complications associated with total parenteral nutrition including:**
- convulsion or seizure
 - hepatic dysfunction (fatty liver disease, jaundice, hepatomegaly, cholelithiasis)
 - metabolic imbalance (hyper/hypoglycemia, hyper/hypokalemia, hyper/hypocalcemia)
 - nutritional imbalance
 - poor night vision

Note: LPNs are not authorized to provide the restricted activity of administering (initiation of) total parenteral nutrition.