

**MISSISSIPPI BOARD OF NURSING  
IV THERAPY COURSE FOR THE  
EXPANDED ROLE LICENSED PRACTICAL NURSE**

**COURSE OUTLINE**

**THEORY—MINIMUM 40 HOURS**

<b>UNIT</b>	<b>TOPIC</b>	<b>HOURS*</b>
<b>I</b>	<b>LEGAL ASPECTS AND PRACTICE OF IV THERAPY</b>	<b>1</b>
<b>II</b>	<b>REVIEW OF ANATOMY AND PHYSIOLOGY</b>	<b>6</b>
<b>III</b>	<b>FLUID AND ELECTROLYTE BALANCE</b>	<b>10</b>
<b>IV</b>	<b>EQUIPMENT AND PROCEDURES IN IV THERAPY</b>	<b>14</b>
<b>V</b>	<b>COMPLICATIONS, PREVENTION, AND NURSING INTERVENTIONS</b>	<b>6</b>
<b>VI</b>	<b>MEDICATIONS</b>	<b>3</b>
	<b>MINIMUM NUMBER OF THEORY HOURS</b>	<b>40</b>

\*This column indicates the minimum number of hours which must be allocated to the content. The actual number of hours may be increased if necessary, depending on the faculty and the students.

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**CLINICAL—MINIMUM 40 HOURS**

The student must successfully complete all skills, activities and procedures outlined on the clinical performance checklist and must do so at or above a satisfactory level.

MBN  
Approved 11-14-91

**MISSISSIPPI BOARD OF NURSING  
IV THERAPY COURSE FOR THE  
EXPANDED ROLE LICENSED PRACTICAL NURSE**

**THEORY:**     **MINIMUM 40 HOURS**

**PURPOSE:**     The theory portion of this course is designed to prepare qualified License Practical Nurses to perform the expanded role of IV therapy as outlined in the Mississippi Nursing Practice Law, Rules and Regulations.

**OBJECTIVES:** At the completion this course, the Licensed Practical Nurse shall be able to:

1. Summarize the major legal implications of IV therapy relative to state regulations and agency policy.
2. Summarize the major legal requirements of the nurse.
3. Identify and locate peripheral veins used for venipuncture and list factors that influence their size and condition.
4. Identify IV equipment used in administering IV solutions; indicate the criteria for use, and list precautions and complications of each.
5. Discuss and demonstrate nursing responsibilities in preparation for and during venipuncture.
6. Discuss and demonstrate nursing care of the patient with an IV infusion.
7. Summarize the fundamentals of fluid and electrolyte balance in relation to IV therapy.
8. Demonstrate understanding of fluid and electrolyte balance and classifications of IV fluids.
9. Discuss and demonstrate appropriate aseptic technique in IV therapy.
10. Compare and contrast the hazards and complications of IV infusions, their prevention, and nursing interventions.
11. Report and record all pertinent information related to IV therapy.
12. Apply correct principles for administering IV antibiotics by using reference material, scheduling administration of IV antibiotics, and calculating drug doses.

**EVALUATION:**     The LPN must score at least 80% on each theory examination and at least 80% on the final comprehensive theory examination.

**MISSISSIPPI BOARD OF NURSING  
IV THERAPY COURSE FOR THE  
EXPANDED ROLE LICENSED PRACTICAL NURSE**

**CLINICAL:** Minimum 40 hours

**PURPOSE:** The clinical portion of this course is designed to develop proficiency in IV therapy according to the scope of practice outlined in the Nursing Practice Law, Rules and Regulations and in conjunction with agency policy.

**OBJECTIVES:** At the completion of this course, the License Practical Nurse shall be able to:

1. Correctly initiate peripheral IV therapy.
2. Correctly calculate prescribed IV infusion rate.
3. Provide ongoing care to the IV site.
4. Maintain patency of peripheral IV therapy lines using a flush solution.
5. Assist the Registered Nurse with central venous infusion by checking the infusion rate and changing the site dressing.
6. Observe and report patient responses to IV therapy.
7. Report, record and properly respond to complications or contraindications of IV therapy.
8. Discontinue peripheral IV therapy.

**CLINICAL:** During an affiliation with a clinical laboratory, the LPN must observe and then practice sticking peripheral veins for the purpose of withdrawing blood samples until the LPN is proficient in the procedure. No medications or fluids may be injected into the vein during this time.

**PATIENT EXPERIENCE:**

Following a period of observation, the LPN must participate in all phases of IV therapy which are within the scope of practice as outlined in the Mississippi Board of Nursing Rules and Regulations. The LPN must demonstrate proficiency in each step of each procedure.

**EVALUATION:** The LPN must perform satisfactorily on each clinical procedure and must implement all phases of IV Therapy to the satisfaction of the instructor. Three (3) unsatisfactory performances in any portion of any procedure shall result in the LPN's termination from the IV Therapy course.

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UNIT I MINIMUM TIME ALLOTMENT

LEGAL ASPECTS AND PRACTICES 1 HOUR

OBJECTIVES:       Upon the completion of this unit, the LPN shall be able to:

1.     Identify the major legal implications of IV therapy.
2.     Demonstrate understanding of the Nursing Practice Law, Rules and Regulations regarding the role of the LPN in IV therapy.
3.     Discuss IV therapy policies of selected health care agencies.

CONTENT:   1.     Course overview  
               2.     Legal aspects of IV therapy  
               3.     Expanded role of the LPN—Practice Law, Rules and Regulations  
               4.     Scope of practice in IV therapy for the Expanded Role LPN  
               5.     Health agency policies

EVALUATION:       The LPN must score at least 80% on each examination administered in this unit.

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UNIT II	MINIMUM TIME ALLOTMENT
REVIEW OF ANATOMY AND PHYSIOLOGY	6 HOURS

**OBJECTIVES:** Upon the completion of this unit, the LPN shall be able to:

1. Demonstrate understanding of structure and function of the integumentary system as relates to IV therapy.
2. Demonstrate understanding of structure and function of the circulatory system as relates to IV therapy.
3. Demonstrate understanding of structure and function of the respiratory system as relates to IV therapy.
4. Demonstrate understanding of structure and function of the urinary system as relates to IV therapy.
5. Identify and locate peripheral veins used for venipuncture.
6. Differentiate the anatomic characteristics of veins and arteries.
7. Identify signs of an inadvertent arterial puncture.
8. Identify factors that influence the size and condition of the veins.

**CONTENT:**

1. Integumentary system
2. Circulatory system
3. Respiratory system
4. Urinary system
5. Vein structure and location (peripheral)
  - a. Structure and function
    - (1) Endothelial lining
    - (2) Valves
    - (3) Carry blood toward heart
    - (4) Thinner than arteries
  - b. Location
    - (1) Arm—deep and superficial
    - (2) Leg—deep and superficial

**EVALUATION:** The LPN must score at least 80% on each examination administered in this unit.

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<b>UNIT III</b>	<b>MINIMUM TIME ALLOTMENT</b>
<b>FLUID AND ELECTROLYTE BALANCE</b>	<b>10 HOURS</b>

**OBJECTIVE:** Upon the completion of this unit, the LPN shall be able to:

1. Identify body fluid compartments and electrolyte compositions.
2. Define fluid deficit, fluid maintenance and fluid replacement.
3. List effects of isotonic, hypotonic, and hypertonic IV fluids.
4. List and classify common parenteral fluids.
5. Identify electrolyte norms in laboratory reports on blood samples.
6. Discuss the normal methods of fluid and electrolyte intake and output.

- CONTENT:**
1. Elements found in intracellular and extracellular fluid.
  2. Passage of substances through membranes
    - a. Osmosis
    - b. Diffusion
  3. Types of IV fluids
    - a. Isotonic
    - b. Hypotonic
    - c. Hypertonic
  4. Body's reaction to dehydration and overhydration
  5. Functions of electrolytes, with emphasis on potassium, sodium and chloride
  6. Electrolyte norms in blood tests

**EVALUATION:** The LPN must score at least 80% on each examination administered in this unit.

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UNIT IV

MINIMUM TIME ALLOTMENT

EQUIPMENT AND PROCEDURES IN IV THERAPY

14 HOURS

OBJECTIVES: Upon completion of this unit, the LPN shall be able to:

1. Demonstrate appropriate medical and surgical aseptic technique.
2. Explain the purpose of infection control.
3. Identify the types of organisms that cause infections of IV sites and fluids.
4. List factors that contribute to the growth of microorganisms.
5. Correctly interpret orders for initiating and discontinuing IV therapy.
6. Demonstrate skill in documenting and reporting promptly all pertinent information.
7. Evaluate and accurately describe patient observations during and following IV infusion.
8. Discuss legal responsibilities and other important considerations in maintaining proper records.
9. Identify various types of equipment and supplies available for use in IV therapy.
10. Discuss the responsibility of the nurse in preparing the patient psychologically for venipuncture.
11. Select veins suitable for venipuncture.
12. List factors to be considered in selection of a vein.
13. Describe dangers associated with the use of veins of the lower extremities.
14. List factors to be considered in selecting a cannula for venipuncture.
15. Demonstrate technique and discuss the possible adverse reactions related to the administration of subcutaneous xylocaine as a local anesthetic prior to venipuncture.
16. Demonstrate technique of venipuncture using various devices.
17. Demonstrate and discuss securing a device, tubing and extremity for IV therapy.
18. Discuss the nurse's role in maintaining the infusion.
19. Identify methods of distending veins.
20. Demonstrate skill in calculation of IV infusion rates.
21. Identify factors which influence rate of infusion.
22. Safely discontinue IV infusion.
23. Observe and provide care for IV equipment and site.

- CONTENT:
1. Terminology
  2. Infection control
  3. Safe technique in preparing, initiating, monitoring and discontinuing IV therapy
  4. Equipment and supplies
    - a. Types
    - b. Advantages and disadvantages
    - c. Packaging of solutions
    - d. Labeling (including expiration dates)
    - e. Safe handling
  5. Solutions
    - a. Types
    - b. Reading labels
  6. Asepsis—Medical and surgical procedures review
  7. Sites
  8. Techniques
    - a. Preparing IV
      - (1) Equipment, supplies, solutions
      - (2) Bubbles in tubing
      - (3) Patient's clothing
      - (4) Height of IV pole
    - b. Initiating IV
      - (1) Administration of subcutaneous xylocaine
      - (2) Insertion of IV—needles, catheters, butterflies
      - (3) Securing IV and site dressing
    - c. Monitoring
      - (1) Infusion rate
      - (2) Patient
      - (3) Intake and output
    - d. Site care
      - (1) Peripheral lines
      - (2) Central lines
    - e. Recording and reporting

NOTE: LPN must practice skill of initiating IV on training arm until proficient.

EVALUATION: The LPN must score at least 80% on each examination administered in this unit.



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UNIT V

MINIMUM TIME ALLOTMENT  
6 HOURS

COMPLICATIONS, PREVENTION AND NURSING INTERVENTIONS

OBJECTIVES:        Upon the completion of this unit, the LPN shall be able to:

1.    List complications of IV therapy.
2.    List and describe symptoms of each complication.
3.    Discuss preventive measures in systemic and local complications.
4.    Discuss appropriate nursing interventions for complications of IV therapy.

CONTENT:  1.    Signs and symptoms of complications

              2.    Preventive measures

              3.    Treatment measures

              4.    Nursing interventions

EVALUATION:        The LPN must score at least 80% on each examination administered in this unit.

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<b>UNIT VI</b>	<b>MINIMUM TIME ALLOTMENT</b>
<b>MEDICATIONS</b>	<b>3 HOURS</b>

**OBJECTIVES:** Upon the completion of this unit, the LPN shall be able to:

1. Match terms and abbreviations associated with IV medications.
2. Distinguish among ways IV antibiotics are used.
3. State the five “rights” of administering medications and additional “rights” associated with administration of IV antibiotic medications.
4. List facts to determine regarding an IV antibiotic medication before administration.
5. Identify safety measures to observe when administering IV antibiotic medications.
6. List medication information to be obtained in a nursing history.
7. Distinguish among methods of administering IV antibiotic medications.
8. State nursing responsibilities and interventions with regard to the administration of IV antibiotic medications.
9. List the effects of drug incompatibilities.
10. Describe types of drug incompatibilities.
11. Discuss factors that affect compatibilities.
12. State nursing responsibilities and interventions with regard to avoiding incompatibilities.
13. Define and describe potential untoward reactions and side effects.
14. Name the body systems affected by untoward reactions.
15. Identify nursing responsibilities and interventions with regard to untoward reactions and side effects.
16. State the formula for calculation of drug doses.
17. Schedule the administration of IV antibiotic medications.
18. Calculate drug doses and dilutions.

**CONTENT:** 1. Terms and abbreviations associated with IV medications

2. Ways drugs are used
  - a. Diagnostic
  - b. Prophylactic
  - c. Therapeutic
3. “Rights” of administering IV antibiotics
  - a. Medication, dose, route, time, patient
  - b. Method or mode; length of infusion time; incompatibilities
4. Facts to determine about an IV antibiotic before administration
  - a. Average dose
  - b. Route of administration
  - c. Length of time of infusion
  - d. Expected action (effect)
  - e. Common untoward reactions (side effects)
  - f. Incompatibilities
5. Safety measures to observe when administering IV antibiotics
6. Medication information to be obtained in a nursing history
7. Methods of administering IV antibiotic medications
  - a. Intermittent infusion
  - b. Continuous infusion
8. Nursing responsibilities and interventions with regard to administration of IV antibiotic medications
9. Incompatibilities
  - a. Effects
  - b. Types
  - c. Nursing responsibilities and interventions
10. Factors that affect compatibilities
11. Untoward reactions or side effects
  - a. Terms
  - b. Types
  - c. Body systems affected
  - d. Nursing responsibilities and interventions

12. Calculation of drug doses

EVALUATION: The LPN must score at least 80% on each examination administered in this unit.

**MISSISSIPPI BOARD OF NURSING  
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**PROCEDURE: BLOOD SAMPLE WITH VACUTAINER**

1. Check medical order
2. Gather equipment
3. Identify patient
4. Wash hands
5. Wear gloves
6. Locate peripheral vein on correct patient
7. Clean area using a circular motion with antiseptic swab
8. Screw needle into plastic holder
9. Insert vacutainer tube into holder
10. Prepare injection site and insert needle into vein
11. Advance vacutainer to end of holder
12. Remove vacutainer tube and set aside  
Insert another vacutainer tube, if needed  
Remove as much blood as needed
13. Remove needle and discard
14. Label blood tubes
15. Leave patient safe and comfortable
16. Send specimens to laboratory and record procedure

**CLINICAL PRACTICE:** The LPN must successfully demonstrate the procedure a minimum of three (3) times. Additional successful demonstrations may be required at the instructor's discretion. Three (3) unsatisfactory performances in technique shall result in the LPNs termination from the IV Therapy course.

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**PERFORMANCE CHECKLIST: BLOOD SAMPLE WITH VACUTAINER**

STUDENT: \_\_\_\_\_

LICENSE # : \_\_\_\_\_

SCHOOL OR FACILITY: \_\_\_\_\_

DATE: \_\_\_\_\_

	<u>SATISFACTORY</u>	<u>UNSATISFACTORY</u>
1. Checked medical order	_____	_____
2. Gathered equipment	_____	_____
3. Identified patient	_____	_____
4. Washed hands	_____	_____
5. Wore gloves	_____	_____
6. Located peripheral vein on correct patient	_____	_____
7. Cleaned the area using a circular motion with antiseptic swab	_____	_____
8. Screwed needle into plastic holder	_____	_____
9. Inserted vacutainer tube into holder	_____	_____
10. Prepared injection site and inserted needle into vein	_____	_____
11. Advanced vacutainer to end of holder	_____	_____
12. Removed vacutainer tube and set aside	_____	_____
Inserted another vacutainer tube, if needed	_____	_____
Removed as much blood as needed	_____	_____
13. Removed needle and discarded	_____	_____
14. Labeled blood tubes	_____	_____
15. Left patient safe and comfortable	_____	_____
16. Sent specimens to laboratory and recorded procedure	_____	_____

PERFORMANCE CHECKLIST: BLOOD SAMPLE WITH VACUTAINER

PASS \_\_\_\_\_  
(MUST HAVE 100% SATISFACTORY PERFORMANCE)

FAIL \_\_\_\_\_

Each clinical instructor/preceptor must sign below and may write pertinent comments and observations.

<u>DATE</u>	<u>COMMENTS</u>	<u>SIGNATURE</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

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PROCEDURE:           VENIPUNCTURE – TRANSFER OF BLOOD TO TUBE

1.     Check medical order
2.     Gather equipment
3.     Identify patient
4.     Wash hands
5.     Wear gloves
6.     Locate peripheral vein on correct patient
7.     Clean the area using a circular motion with antiseptic swab
8.     Perform venipuncture using appropriate needle and syringe
9.     Withdraw required amount of blood
10.    Remove needle and apply pressure to site until hemostasis occurs
11.    Remove needle from syringe and place in needle holder
12.    Divide blood specimen into specimen tubes
13.    Inject designated amount into tube
14.    Place syringe to one side and place stoppers in tubes
15.    Label blood tubes

CLINICAL PRACTICE:

The LPN must successfully demonstrate the procedure a minimum of three (3) times. Additional successful demonstrations may be required at the instructor's discretion. Three (3) unsatisfactory performances in technique shall result in the LPN's termination from the IV therapy course.

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PERFORMANCE CHECKLIST: VENIPUNCTURE—TRANSFER OF BLOOD TO TUBE

STUDENT: \_\_\_\_\_

LICENSE # : \_\_\_\_\_

SCHOOL OR FACILITY: \_\_\_\_\_

DATE: \_\_\_\_\_

	<u>SATISFACTORY</u>	<u>UNSATISFACTORY</u>
1. Checked medical order	_____	_____
2. Gathered equipment	_____	_____
3. Identified patient	_____	_____
4. Washed hands	_____	_____
5. Wore gloves	_____	_____
6. Located peripheral vein on correct patient	_____	_____
7. Cleaned the area using a circular motion with antiseptic swab	_____	_____
8. Performed venipuncture using appropriate needle and syringe	_____	_____
9. Withdrew required amount of blood	_____	_____
10. Removed needle and applied pressure to site until hemostasis occurred	_____	_____
11. Removed needle from syringe and placed in needle holder	_____	_____
12. Divided blood specimen into specimen tubes	_____	_____
13. Injected designated amount into tube	_____	_____
14. Placed syringe to one side and placed stoppers in tubes	_____	_____
15. Labeled blood tubes	_____	_____

PERFORMANCE CHECKLIST: VENIPUNCTURE—TRANSFER OF BLOOD TO TUBE

PASS \_\_\_\_\_ FAIL \_\_\_\_\_

(MUST HAVE 100% SATISFACTORY PERFORMANCE)

Each clinical instructor/preceptor must sign below and may write pertinent comments and observations.

<u>DATE</u>	<u>COMMENTS</u>	<u>SIGNATURE</u>
_____		
_____		
_____		
_____		
_____		



**MISSISSIPPI BOARD OF NURSING  
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**Procedure: Venipuncture**

1. Check the medical order
2. Gather equipment
  - a. tourniquet
  - b. antiseptic swabs
  - c. butterfly needle or angiocath
  - d. tape
  - e. anti-microbial ointment
  - f. dressing materials
3. Identify the patient
4. Explain the procedure
5. Adjust lighting
6. Wash hands
7. Prepare the patient physically
  - a. provide for privacy
  - b. provide hospital gown
  - c. place patient in comfortable position
  - d. place towel under the arm
  - e. remove jewelry
8. Wash hands
9. Position self for comfort
10. Select a site
11. Put on gloves
12. Place a tourniquet above site selected
13. Locate a peripheral vein on correct patient
14. Clean the area using a circular motion with antiseptic swab
15. Insert the sterile IV needle/angiocath

16. Suggested procedure:
  - a. hold at a 20-45 degree angle
  - b. insert the needle with the bevel up
  - c. lower hub of needle close to skin for insertion into vein
  - d. observe tubing/flash back chamber for blood return
  - e. allow blood to displace air in butterfly tubing
  - f. thread cannula into vein if angiocath used
  - g. release tourniquet prior to infusing primary fluid
  - h. secure with a piece of tape
17. Connect IV solution if ordered, maintaining sterility
18. Start the correct IV solution to the correct patient at a KVO rate
19. Tape securely leaving site open for assessment
20. Apply sterile dressing
21. Tape arm board in position if necessary
22. Review movement restrictions with patient
23. Regulate IV infusion according to medical order
24. Dispose of used equipment
25. Wash hands
26. Record procedure
27. Suggested data to record:
  - a. IV site
  - b. Size of needle/angiocath
  - c. Date and time
  - d. Signature of nurse
  - e. Patient's response and/or number of attempts

#### CLINICAL PRACTICE:

The LPN must successfully demonstrate the procedure a minimum of three (3) times. Additional successful demonstrations may be required at the instructor's discretion. Three (3) unsatisfactory performances in technique shall result in the LPN's termination from the IV Therapy course.

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PERFORMANCE CHECKLIST: VENIPUNCTURE

STUDENT: \_\_\_\_\_

LICENSE #: \_\_\_\_\_

SCHOOL OR FACILITY: \_\_\_\_\_

DATE: \_\_\_\_\_

	<u>SATISFACTORY</u>	<u>UNSATISFACTORY</u>
1. Checked medical order	_____	_____
2. Calculated IV infusion rate	_____	_____
3. Washed hands	_____	_____
4. Located a peripheral vein on correct patient	_____	_____
5. Cleaned the area using a circular motion with antiseptic swab	_____	_____
6. Inserted the sterile IV needle/angiocath	_____	_____
7. Released tourniquet prior to infusing primary fluid	_____	_____
8. Connected IV solution if ordered, maintaining sterility	_____	_____
9. Taped securely, leaving site open for assessment	_____	_____
10. Applied sterile dressing	_____	_____
11. Regulated IV infusion according to medical order	_____	_____
12. Recorded procedure	_____	_____
13. Performed satisfactorily within the allotted time	_____	_____

\_\_\_\_\_

PERFORMANCE CHECKLIST: VENIPUNCTURE  
(continued)

PASS \_\_\_\_\_ FAIL \_\_\_\_\_  
(MUST HAVE 100% SATISFACTORY PERFORMANCE)

Each clinical instructor/preceptor must sign below and may write pertinent comments and observations.

<u>DATE</u>	<u>COMMENTS</u>	<u>SIGNATURE</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**MISSISSIPPI BOARD OF NURSING  
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PROCEDURE: INITIAL IV SITE

1. Check the medical order
  - a. Type solution
  - b. Amount of solution
  - c. Infusion rate
  - d. Sequence of solution if applicable
2. Calculate correct IV flow rate
3. Wash hands
4. Gather equipment
  - a. Solution
  - b. Tubing
  - c. Tape
  - d. IV pole
  - e. Antiseptic swab
5. Identify patient
6. Explain procedure
7. Set up equipment
  - a. Examine solution for:
    - (1) Cloudiness
    - (2) Particles
    - (3) Leakage
    - (4) Cracks in bottle or bag
    - (5) Expiration date
  - b. Open the package containing the tubing, maintaining sterility of all connectors.
  - c. Close regulator on the tubing
  - d. Open the entry area of the fluid container, maintaining sterility of the entry port
  - e. Clean the entry port with antiseptic swab if necessary
  - f. Insert the tubing spike into the fluid container through the correct entry port
  - g. Invert the bottle or bag with the tubing hanging down
  - h. Hang solution on IV pole
  - i. Fill the drip chamber half full with fluid
  - j. Displace air in tubing with fluid and close regulator
8. Examine the site for signs and symptoms of inflammation/infiltration
9. Put on gloves
10. Connect the end of the IV tubing to the hub of the needle, maintaining sterility
11. Start the correct IV solution to the correct patient at a KVO rate

12. Tape securely, leaving site open for assessment
13. Apply sterile dressing
14. Tape arm board in position if necessary
15. Review movement restrictions with patient
16. Regulate IV infusion according to physician's order
17. Dispose of used equipment
18. Wash hands
19. Record procedure
20. Recommended data to record
  - a. Date and time
  - b. Type of solution
  - c. Amount of solution
  - d. Infusion rate
  - e. Tubing change
  - f. Assessment of needle site
  - g. Dressing change
  - h. Signature

**CLINICAL PRACTICE:**

The LPN must successfully demonstrate the procedure a minimum of three (3) times. Additional successful demonstrations may be required at the instructor's discretion. Three (3) unsatisfactory performances in technique shall result in the LPN's termination from the IV Therapy course.

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PERFORMANCE CHECKLIST: INITIAL IV SITE

STUDENT: \_\_\_\_\_

LICENSE #: \_\_\_\_\_

SCHOOL OR FACILITY: \_\_\_\_\_

DATE: \_\_\_\_\_

		<u>SATISFACTORY</u>	<u>UNSATISFACTORY</u>
1.	Checked the medical order	_____	_____
	a. Type solution		
	b. Amount of solution		
	c. Infusion rate		
	d. Sequence of solution if applicable		
2.	Examined the site for signs and symptoms of inflammation/infiltration	_____	_____
3.	Checked solution. Connected tubing and expelled Air from tubing, maintaining sterility	_____	_____
4.	Connected the end of the IV tubing to the hub of the needle, maintaining sterility	_____	_____
5.	Started the correct IV solution to the correct patient at a KVO rate	_____	_____
6.	Taped securely, leaving site open for assessment	_____	_____
7.	Applied sterile dressing	_____	_____
8.	Regulated IV infusion according to medical order	_____	_____
9.	Washed hands	_____	_____
10.	Recorded procedure	_____	_____
11.	Performed satisfactorily within allotted time	_____	_____

PERFORMANCE CHECKLIST: INITIAL IV SITE  
(CONTINUED)

PASS \_\_\_\_\_ FAIL \_\_\_\_\_  
(MUST HAVE 100% SATISFACTORY PERFORMANCE)

Each clinical instructor/preceptor must sign below and may write pertinent comments and observations.

<u>DATE</u>	<u>COMMENTS</u>	<u>SIGNATURE</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____



**MISSISSIPPI BOARD OF NURSING  
IV THERAPY CORUSE FOR THE  
EXPANDED ROLE LICENSED PRACTICAL NURSE**

PROCEDURE: DISCONTINUING IV FLUIDS AND/OR INT

1. Check the medical orders
2. Wash hands
3. Collect equipment
  - a. Alcohol prep or 2 x 2
  - b. Band-Aid
  - c. Antibiotic ointment (if required)
  - d. Adhesive remover
4. Identify patient
5. Explain procedure to patient
6. Wash hands
7. Turn off intravenous fluid flow with regulator clamp
8. Put on gloves
9. Untape the intravenous needle and remove dressing
10. Withdraw the needle/angiocath
11. Apply pressure to the puncture site with the alcohol prep until hemostasis occurs
12. Observe needle and/or angiocath for intactness, frayed edges
13. Observe puncture area for signs and symptoms of inflammation, infection, bleeding
14. Apply Band-Aid to puncture site (hospital policy may require antibiotic ointment)
15. Observe amount and type of intravenous fluid remaining in bottle/bag
16. Make patient comfortable
17. Discard used equipment
18. Wash hands
19. Record procedure
20. Suggested data to record:
  - a. Amount and type of fluid remaining in bottle/bag
  - b. Amount and type of fluid received by patient
  - c. Condition of angiocath or needle (intact, frayed edge)

- d. Appearance of puncture site
- e. Patient tolerance of procedure
- f. Date
- g. Name
- h. Time

**CLINICAL PRACTICE:**

The LPN must successfully demonstrate the procedure a minimum of three (3) times. Additional successful demonstrations may be required at the instructor's discretion. Three (3) unsatisfactory performances in technique shall result in the LPN's termination from the IV Therapy course.

**MISSISSIPPI BOARD OF NURSING  
IV THERAPY COURSE FOR THE  
EXPANDED ROLE LICENSED PRACTICAL NURSE**

PERFORMANCE CHECKLIST: DISCONTINUING IV FLUIDS AND/OR INT

STUDENT: \_\_\_\_\_

LICENSE #: \_\_\_\_\_

SCHOOL OR FACILITY: \_\_\_\_\_

DATE: \_\_\_\_\_

		<u>SATISFACTORY</u>	<u>UNSATISFACTORY</u>
1.	Checked the medical orders	_____	_____
2.	Washed hands	_____	_____
3.	Collected equipment	_____	_____
	a. Alcohol prep or 2 x 2	_____	
	b. Band-Aid	_____	
	c. Antibiotic ointment (if required)	_____	
	d. Adhesive remover	_____	
4.	Identified patient	_____	_____
5.	Explained procedure to patient	_____	_____
6.	Washed hands	_____	_____
7.	Turned off intravenous fluid flow with regulator clamp	_____	_____
8.	Put on gloves	_____	_____
9.	Untaped the intravenous needle and removed dressing	_____	_____
10.	Withdrew the needle/angiocath	_____	_____
11.	Applied pressure to the puncture site with the alcohol prep until hemostasis occurred	_____	_____
12.	Observed needle and/or angiocath for intactness, frayed edges	_____	_____
13.	Observed puncture area for signs and symptoms of inflammation, infection, bleeding	_____	_____
14.	Applied Band-Aid to puncture site (hospital policy may require antibiotic ointment)	_____	_____

- 15. Observed amount and type of intravenous fluid remaining in bottle/bag \_\_\_\_\_
- 16. Made patient comfortable \_\_\_\_\_
- 17. Discarded used equipment \_\_\_\_\_
- 18. Washed hands \_\_\_\_\_
- 19. Recorded procedure \_\_\_\_\_
- 21. Suggested data to record:
  - a. Amount and type of fluid remaining in bottle \_\_\_\_\_
  - b. Amount and type of fluids received by patient \_\_\_\_\_
  - c. Condition of angiocath or needle (intact, frayed edge) \_\_\_\_\_
  - d. Appearance of puncture site \_\_\_\_\_
  - e. Patient tolerance of procedure \_\_\_\_\_
  - f. Date \_\_\_\_\_
  - g. Name \_\_\_\_\_
  - h. Time \_\_\_\_\_

PASS \_\_\_\_\_ FAIL \_\_\_\_\_  
 (MUST HAVE 100% SATISFACTORY PERFORMANCE)

Each clinical instructor/preceptor must sign below and may write pertinent comments and observations.

<u>DATE</u>	<u>COMMENTS</u>	<u>SIGNATURE</u>
_____		
_____		
_____		
_____		
_____		

**MISSISSIPPI BOARD OF NURSING  
IV THERAPY COURSE FOR THE  
EXPANDED ROLE LICENSED PRACTICAL NURSE**

PROCEDURE: EXISTING IV SITE – NEW SOLUTION AND NEW TUBING

1. Check the medical order
  - a. Type solution
  - b. Amount of solution
  - c. Infusion rate
  - d. Sequence of solution if applicable
2. Calculate correct IV flow rate
3. Wash hands
4. Gather equipment
  - a. Solution
  - b. Tubing
  - c. Tape
  - d. IV pole
  - e. Antiseptic swab
5. Identify patient
6. Explain procedure
7. Set up equipment
  - a. Examine solutions for:
    - (1) Cloudiness
    - (2) Particles
    - (3) Leakage
    - (4) Cracks in bottle or bag
    - (5) Expiration date
  - b. Open the package containing the tubing, maintaining sterility of all connectors
  - c. Close regulators on the tubing
  - d. Open the entry area of the fluid container, maintaining sterility of the entry port
  - e. Clean the entry port with antiseptic swab if necessary
  - f. Insert the tubing spike into the fluid container through the correct entry port
  - g. Invert the bottle or bag with the tubing hanging down
  - h. Hang solution on IV pole
  - i. Fill the drip chamber half full with fluid
  - j. Displace air in tubing with fluid and close regulator
8. Examine the site for signs and symptoms of inflammation/infiltration
9. Put on gloves
10. Connect the end of the IV tubing to the hub of the needle, maintaining sterility

11. Start the correct IV solution to the correct patient at a KVO rate
12. Tape securely, leaving site open for assessment
13. Apply sterile dressing
14. Tape arm board in position if necessary
15. Review movement restrictions with patient
16. Regulate IV infusion according to medical order
17. Dispose of used equipment
18. Wash hands
19. Record procedure
20. Recommended data to record:
  - a. Date and time
  - b. Type of solution
  - c. Amount of solution
  - d. Infusion rate
  - e. Tubing change
  - f. Assessment of needle site
  - g. Dressing change
  - h. Signature

**CLINICAL PRACTICE:**

The LPN must successfully demonstrate the procedure a minimum of three (3) times. Additional successful demonstrations may be required at the instructor's discretion. Three (3) unsatisfactory performances in technique shall result in the LPN's termination from the IV Therapy course.

**MISSISSIPPI BOARD OF NURSING  
IV THERAPY COURSE FOR THE  
EXPANDED ROLE PRACTICAL NURSE**

PERFORMANCE CHECKLIST: EXISTING IV SITE—NEW SOLUTION AND NEW TUBING

STUDENT: \_\_\_\_\_

LICENSE # OR SOCIAL SECURITY #: \_\_\_\_\_

SCHOOL OR FACILITY: \_\_\_\_\_

DATE: \_\_\_\_\_

		<u>SATISFACTORY</u>	<u>UNSATISFACTORY</u>
1.	Checked the medical order	_____	_____
	a. Type solution		
	b. Amount of solution		
	c. Infusion rate		
	d. Sequence of solution if applicable		
2.	Examined the site for signs and symptoms of inflammation/infiltration	_____	_____
3.	Checked solution. Connected tubing and expelled air from tubing, maintaining sterility	_____	_____
4.	Connected the end of the IV tubing to the hub of the needle, maintained sterility	_____	_____
5.	Started the correct IV solution to the correct patient at a KVO rate	_____	_____
6.	Taped securely, leaving site open for assessment	_____	_____
7.	Applied sterile dressing	_____	_____
8.	Regulated IV infusion according to medical order	_____	_____
9.	Washed hands	_____	_____
10.	Recorded procedure	_____	_____
11.	Performed satisfactorily within allotted time	_____	_____

PERFORMANCE CHECKLIST:                      EXISTING IV SITE - -NEW SOLUTION AND NEW TUBING  
(continued)

PASS \_\_\_\_\_                      FAIL \_\_\_\_\_  
(MUST HAVE 100% SATISFACTORY PERFORMANCE)

Each clinical instructor/preceptor must sign below and may write pertinent comments and observations.

<u>DATE</u>	<u>COMMENTS</u>	<u>SIGNATURE</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____



**MISSISSIPPI BOARD OF NURSING  
IV THERAPY COURSE FOR THE  
EXPANDED ROLE LICENSED PRACTICAL NURSE**

PROCEDURE: PIGGYBACK ADMINISTRATION OF PRE-MIXED ANTIBIOTIC MEDICATIONS

1. Check MAR and Kardex against the medical order
  - a. Patient's name
  - b. Type of medication
  - c. Dose
  - d. Time
  - e. Date of order
  - f. Allergies
  - g. Route
2. Report inconsistencies to charge nurse
3. Verify the compatibility of all antibiotic medications and fluids being mixed
4. Wash hands
5. Gather equipment
  - a. Solution
  - b. Secondary tubing
  - c. Antiseptic swab
  - d. Needle and syringe
6. Secure correct antibiotic medication
7. Calculate correct infusion rate for IVPB
8. Open the package containing the tubing, maintaining sterility of all connectors
9. Close slide clamp
10. Attach tubing spike to solution using sterile technique
11. Apply needle to distal end of tubing using sterile technique
12. Fill drip chamber half full
13. Open side clamp
14. Displace air in IVPB tubing and closing slide clamp
15. Identify patient
16. Explain procedure
17. Hang solution on IV pole
18. Lower primary bottle with extension hook

PROCEDURE: PIGGYBACK ADMINISTRATION OF PRE-MIXED ANTIBIOTIC MEDICATIONS  
(continued)

19. Check to see that existing IV is functioning properly
20. Clean the injection port on primary line with an antiseptic swab and insert needle
  - a. COMPATIBLE MEDICATIONS:
    - (1) Open IVPB slide clamp
    - (2) Administer correct dose of correct IVPB antibiotic medicine to the correct patient at the correct rate maintaining sterility
    - (3) After completion of IVPB, close slide clamp on IVPB tubing and raise primary solution to previous level
  - b. INCOMPATIBLE MEDICATIONS:
    - (1) Clamp tubing and flush with normal saline
    - (2) Administer correct dose of correct IVPB antibiotic medicine to the correct patient at the correct rate maintaining sterility
    - (3) After completion of IVPB, flush with normal saline
    - (4) Unclamp primary tubing
21. Regulate primary line according to medical order
22. Administer antibiotic medication – 30 minutes of scheduled time
23. Dispose of used equipment
24. Wash hands
25. Record procedure
26. Suggested data to record:
  - a. Medication
  - b. Dose
  - c. Route
  - d. Patient's response
  - e. Infusion rate
  - f. Signature
  - g. Time

CLINICAL PRACTICE:

The LPN must successfully demonstrate the procedure a minimum of three (3) times. Additional successful demonstrations may be required at the instructor's discretion. Three (3) unsatisfactory performances in technique shall result in the LPN's termination from the IV Therapy course.

**MISSISSIPPI BOARD OF NURSING  
IV THERAPY COURSE FOR THE  
EXPANDED ROLE LICENSED PRACTICAL NURSE**

PERFORMANCE CHECKLIST: PIGGYBACK ADMINISTRATION OF PRE-MIXED ANTIBIOTIC MEDICATION

STUDENT: \_\_\_\_\_

LICENSE #: \_\_\_\_\_

SCHOOL OR FACILITY: \_\_\_\_\_

DATE: \_\_\_\_\_

	<u>SATISFACTORY</u>	<u>UNSATISFACTORY</u>
1. Checked MAR and Kardex against the medical order	_____	_____
a. Patient's name	_____	_____
b. Type of medication	_____	_____
c. Dose	_____	_____
d. Time	_____	_____
e. Date of order	_____	_____
f. Allergies	_____	_____
g. Route	_____	_____
2. Reported inconsistencies to charge nurse	_____	_____
3. Verified the compatibility of all medications and fluids being mixed	_____	_____
4. Washed hands	_____	_____
5. Checked to see that existing IV was functioning properly.	_____	_____
6. Cleaned the injection port on primary line with an antiseptic swab and inserted needle	_____	_____
7. a. COMPATIBLE MEDICATIONS:	_____	_____
(1) Opened IVPB slide clamp	_____	_____
(2) Administered correct dose of correct IVPB antibiotic medicine to the correct patient at the correct rate maintaining sterility	_____	_____
(3) After completion of IVPB, closed slide clamp on IVPB tubing and raised primary solution to previous level	_____	_____

PERFORMANCE CHECKLIST: PIGGYBACK ADMINISTRATION OF PRE-MIXED ANTIBIOTIC MEDICATIONS  
(continued)

b. INCOMPATIBLE MEDICATIONS:

- (1) Clamped tubing and flushed with normal saline \_\_\_\_\_
  - (2) Administered correct dose of correct IVPB antibiotic medicine to the correct patient at the correct rate maintaining sterility \_\_\_\_\_
  - (3) After completion of IVPB, flushed with normal saline \_\_\_\_\_
  - (4) Unclamped primary tubing \_\_\_\_\_
8. Regulated primary line according to medical order \_\_\_\_\_
9. Administered medication ± 30 minutes of scheduled time \_\_\_\_\_
10. Recorded procedure \_\_\_\_\_
11. Performed satisfactorily within the allotted time \_\_\_\_\_

PASS \_\_\_\_\_ FAIL \_\_\_\_\_  
(MUST HAVE 100% SATISFACTORY PERFORMANCE)

Each clinical instructor/ preceptor must sign below and may write pertinent comments and observations.

<u>DATE</u>	<u>COMMENTS</u>	<u>SIGNATURE</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**MISSISSIPPI BOARD OF NURSING  
IV THERAPY COURSE FOR THE  
EXPANDED ROLE LICENSED PRACTICAL NURSE**

PROCEDURE: ADMINISTRATION OF PRE-MIXED ANTIBIOTIC MEDICATION PER INT

1. Check the MAR or medicine card and Kardex against the medical order
  - a. Patient's name
  - b. Type of medication
  - c. Dose
  - d. Time
  - e. Date of order
  - f. Allergies
  - g. Route
2. Report inconsistencies to charge nurse
3. Verify the compatibility of all antibiotic medications and fluids being mixed
4. Wash hands
5. Gather equipment
  - a. Medication
  - b. Saline flush
  - c. Heparin flush
  - d. Antiseptic swabs
6. Prepare the correct antibiotic medication
7. Identify patient
8. Identify injection port
9. Clean the port with an antiseptic swab
10. Check to see that INT is functioning properly
11. Administer correct dose of correct medicine to the correct patient at the correct rate, maintaining sterility
12. Flush INT with appropriate amount of saline and/or heparinized saline according to hospital policy, at the correct rate
13. Withdraw needle, maintaining positive pressure
14. Observe the patient during procedure
15. Administer medication  $\pm$  30 minutes of scheduled time
16. Dispose of used equipment
17. Wash hands
18. Record procedure

19. Suggested data to record

- a. Medication
- b. Dose
- c. Route
- d. Patient response
- e. Rate, if indicated
- f. INT flushed
- g. Nurse's signature
- h. Time

CLINICAL PRACTICE:

The LPN must successfully demonstrate the procedure a minimum of three (3) times. Additional successful demonstrations may be required at the instructor's discretion. Three (3) unsatisfactory performances in technique shall result in the LPN's termination from the IV therapy course.

**MISSISSIPPI BOARD OF NURSING  
IV THERAPY COURSE FOR THE  
EXPANDED ROLE LICENSED PRACTICAL NURSE**

PERFORMANCE CHECKLIST: ADMINISTRATION OF PRE-MIXED ANTIBIOTIC MEDICATION PER INT

STUDENT: \_\_\_\_\_

LICENSE #: \_\_\_\_\_

SCHOOL OR FACILITY: \_\_\_\_\_

DATE: \_\_\_\_\_

	<u>SATISFACTORY</u>	<u>UNSATISFACTORY</u>
1. Checked the MAR or medicine card and Kardex against the medical order	_____	_____
a. Patient's name	_____	_____
b. Type of medication	_____	_____
c. Dose	_____	_____
d. Time	_____	_____
e. Date of order	_____	_____
f. Allergies	_____	_____
g. Route	_____	_____
2. Reported inconsistencies to charge nurse	_____	_____
3. Verified the compatibility of all antibiotic medications and fluid being mixed	_____	_____
4. Washed hands	_____	_____
5. Cleaned the port with an antiseptic swab	_____	_____
6. Checked to see that the INT was functioning properly	_____	_____
a. Examined the INT site for signs and symptoms of inflammation/infiltration	_____	_____
b. Flushed INT with appropriate amount of saline	_____	_____
c. If resistance met, did not flush	_____	_____
7. Administered correct dose of correct medication to the correct patient at the correct rate, maintaining sterility.	_____	_____
8. Flushed INT with appropriate amount of saline, flush solution, or heparinized saline according to hospital policy, at the correct rate	_____	_____
9. Observed the patient during procedure	_____	_____
10. Administered medication + 30 minutes of scheduled time	_____	_____

11. Recorded procedure \_\_\_\_\_

12. Performed satisfactorily within the allotted time \_\_\_\_\_

PASS \_\_\_\_\_ FAIL \_\_\_\_\_  
(MUST HAVE 100% SATISFACTORY PERFORMANCE)

Each clinical instructor/preceptor must sign below and may write pertinent comments and observations.

<u>DATE</u>	<u>COMMENTS</u>	<u>SIGNATURE</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____



**MISSISSIPPI BOARD OF NURSING  
IV THERAPY COURSE FOR THE  
EXPANDED ROLE LICENSED PRACTICAL NURSE**

PROCEDURE: ASSIST RN WITH CENTRAL VENOUS INFUSION – CHECKING INFUSION RATE AND CHANGING SITE DRESSING

1. Check the medical order
  - a. Type solution
  - b. Amount of solution
  - c. Infusion rate
2. Calculate correct IV flow rate
3. Wash hands
4. Identify patient
5. Explain procedure
6. Examine the site for signs and symptoms of inflammation/infiltration
7. Put on gloves
8. Apply sterile dressing
9. Review movement restrictions with patient
10. Check rate according to medical orders (do not change rate)
11. Dispose of used equipment and supplies
12. Wash hands
13. Record procedure and report to R.N.
14. Recommended data to record:
  - a. Date and time
  - b. Type of solution
  - c. Amount of solution
  - d. Infusion rate
  - e. Appearance of site
  - f. Dressing change
  - g. Signature

**CLINICAL PRACTICE:**

The LPN must successfully demonstrate the procedure a minimum of three (3) times. Additional successful demonstrations may be required at the instructor's discretion. Three (3) unsatisfactory performances in technique shall result in the LPN's termination from the IV Therapy course.

**MISSISSIPPI BOARD OF NURSING  
IV THERAPY COURSE FOR THE  
EXPANDED ROLE LICENSED PRACTICAL NURSE**

PERFORMANCE CHECKLIST: ASSIST RN WITH CENTRAL VENOUS INFUSION—CHECKING INFUSION RATE AND CHANGING SITE DRESSING

STUDENT: \_\_\_\_\_

LICENSE # OR SOCIAL SECURITY #: \_\_\_\_\_

SCHOOL OR FACILITY: \_\_\_\_\_

DATE: \_\_\_\_\_

	<u>SATISFACTORY</u>	<u>UNSATISFACTORY</u>
1. Checked medical order	_____	_____
a. Type of solution	_____	_____
b. Amount of solution	_____	_____
c. Infusion rate	_____	_____
2. Calculated correct IV flow rate	_____	_____
3. Washed hands	_____	_____
4. Examined the site for signs and symptoms of inflammation/infiltration	_____	_____
5. Applied sterile dressing	_____	_____
6. Checked rate according to medical orders (do <u>not</u> change rate)	_____	_____
7. Washed hands	_____	_____
8. Recorded procedure and reported to RN	_____	_____
9. Performed satisfactorily within allotted time	_____	_____

PASS \_\_\_\_\_ FAIL \_\_\_\_\_  
(MUST HAVE 100% SATISFACTORY PERFORMANCE)

Each clinical instructor/preceptor must sign below and may write pertinent comments and observations.

<u>DATE</u>	<u>COMMENTS</u>	<u>SIGNATURE</u>
_____		
_____		
_____		