

**DEPARTMENT OF REGULATORY AGENCIES**  
**Division of Registrations**  
**Board of Nursing**

**3 CCR 716-1**

**CHAPTER IX - RULES AND REGULATIONS FOR THE ~~EXPANDED ROLE OF THE~~  
LICENSED PRACTICAL NURSE IN RELATION TO ~~IV THERAPY AND VENOUS~~  
~~BLOOD SAMPLING~~AUTHORITY**

General Authority ~~C.R.S. 12-38-108(1)(d)~~

**1. Statement of Basis and Purpose**

The rules contained in this Chapter IX are adopted pursuant to authority granted the Board by C.R.S. 12-38-101 et seq., as amended, and specifically pursuant to authority granted in C.R.S. 12-38-108(1)(d) as amended. These rules are adopted to set forth the guidelines for the ~~LPN~~Licensed Practical Nurse (LPN) related to his/her role in intravenous therapy. The patient care responsibilities of ~~Licensed Practical Nurses~~LPNs should be within the parameters of their educational preparation and their demonstrated abilities. Therefore, LPNs and their supervisors have a joint responsibility to assure that LPNs practice within the scope of their educational basis and demonstrated abilities. ~~The Board recognizes that a growing number of LPN nursing education programs include IV Therapy and venous blood sampling training in their curricula. The rules contained in this Chapter IX are intended to address situations in which the nursing education program has not provided such training.~~

Historical Note: Prior to January 1, 2006, Chapter IX rules required LPNs in Colorado to obtain separate IV certification, which was then attached to their licenses. LPNs were granted either an IV or IV-2 certification status after completion of a Board-approved IV course. IV-2 status included education in central line IV therapy. LPNs without IV-2 status, as of January 1, 2006, were ruled to no longer have IV certification. LPNs without IV-2 status, including any LPN/LVN endorsing into Colorado from another jurisdiction, must bear the responsibility, with their employer, of acquiring the necessary education, training and experience to safely perform within the IV scope of practice pursuant to section 3 of these rules. The approval process for IV Therapy and venous blood sampling authority contained in these rules replaces the previously applicable bi-level certification.

**2. Definitions:**

For the purposes of Chapter IX of these rules, the following terms have the indicated meaning:

2.1 "Adult Client" is an individual whose chronological age is 13 years or older.

~~2.2~~ "Approved IV Therapy Course/Program" is an IV Therapy Course/Program, as defined in 2.6, and accepted by the Board, that includes theory/lab and clinical practice related to the knowledge, skills and ability to perform IV therapy and venous blood sampling and also meets the standards set in Section 6 of this Chapter.

~~2.32~~ "Board" is the ~~Colorado~~-State Board of Nursing.

~~2.4~~ "Intravenous fluids" means fluids containing one or more of the following elements: dextrose 5%; normal saline; lactated ringers; sodium chloride 0.45%; sodium chloride 0.2%.

~~2.53~~ "IV Authority" refers to the authority attached to an LPN's license by the Board. Board granted permission to practice IV therapy and venous blood sampling.

2.64 "IV Therapy/~~Venous Blood Sampling Course/Program~~" ~~is a course preparing~~ prepares the LPN to perform IV therapy and venous blood sampling, utilizing venous access devices as defined in 2.11 on the Adult Client within the scope of practice as defined in Section 3.

~~2.6 "LPN" refers to a licensed practical nurse who holds an active license without current disciplinary action in Colorado, and who has obtained educational preparation related to IV therapy and venous blood sampling.~~

2.7 "Peripheral Catheter" includes:- ~~defines the area of an extremity used for IV catheter insertion or venous blood sampling.~~

A. The peripheral short catheter; a venous access device less than 3 inches (7.5 cm) in length.

B. A peripheral midline catheter; a peripherally inserted catheter whose tip terminates no further than the axilla and is between 3 inches and 8 inches (7.5 cm and 20 cm) in length.

2.8 "Preceptor" is ~~an experienced clinician,~~ a licensed professional or a licensed practical nurse with IV Authority, employed by a healthcare agency, who assumes joint teaching responsibility with ~~an~~ the clinical instructor when ~~a the clinical~~ instructor is not present in the setting.

2.9 "Premixed" means IV solution prepared and labeled by a pharmacist or manufacturer. Manufacturer prepared solutions include those closed systems requiring activation to administer.

2.10 "Supervision" means a registered nurse, physician, dentist, or podiatrist is physically present or accessible by some form of telecommunication.

2.11 Types of "Venous Access Devices"

A. Peripheral short catheter catheters

~~1. "Peripheral short catheter" is a venous access device less than 3 inches (7.5 cm) in length.~~

~~2. "Peripheral midline catheter" means a peripherally inserted catheter whose tip terminates no further than the axilla and is between 3 inches and 8 inches (7.5 cm and 20 cm) in length.~~

B. ~~Central catheters~~ Peripheral midline catheter

~~1. "PICC (peripherally inserted central catheter)" means an IV catheter whose tip terminates in the superior vena cava and is confirmed by chest x-ray.~~

~~2. "Central catheter" means an IV catheter whose tip terminates in the superior vena cava and may be either tunneled, implanted, or percutaneously inserted and is confirmed by chest x-ray.~~

C. PICC line

**3. Scope of Practice of the Licensed Practical Nurse with IV ~~Therapy and Venous Blood Sampling~~ Authority**

3.1 The ~~A~~ licensed practical nurse with IV Authority may perform the following procedures under the direction of a registered nurse, physician, dentist, or podiatrist:

A. Observe and monitor the Adult Client receiving intravenous fluid therapy;

B. Calculate and observe flow rate of intravenous infusions;

C. Stop the flow of intravenous infusions through a peripheral short catheter for Adult Clients;

- D. Remove peripheral short catheter for Adult Clients;
- E. Report and document observations and procedures relating to intravenous infusion and insertion sites.
- F. Utilize peripheral veins for intravenous access with a peripheral short catheter.
- G. Perform blood sampling from a venous access device ~~central IV catheters or ports, or peripheral veins~~ using a syringe or vacutainer device.
- H. Administer the following:
  - 1. Intravenous fluids ~~as defined in section 2.5~~ through venous access devices.
  - 2. Pre-mixed intravenous fluids containing electrolytes and vitamins.
  - 3. Pre-mixed antibiotic solutions via venous access devices delivered per labeled instructions.
  - 4. The first dose of IV antibiotic therapy under the observation of a registered nurse, physician, podiatrist, or dentist who is present in the same patient care area.
- I. Regulate the prescribed flow rate of the intravenous fluids ~~defined in section 2.5 of this chapter.~~
- J. Monitor the systemic effects of intravenous therapy.
- K. Flush venous access devices designed to maintain venous patency with normal saline or a sub-therapeutic dosage of heparin.
- L. Change dressings and/or caps to venous access devices.
- M. Switch from continuous infusion of IV fluid to heparin/saline lock.

**~~4. The IV Therapy/Venous Blood Sampling Scope of Practice does not authorize the LPN to perform any of the following~~OUTSIDE THE SCOPE OF IV AUTHORITY:**

4.1 A licensed practical nurse with IV Authority may **not** perform any of the following procedures – with or without the direction of a registered nurse, physician, dentist, or podiatrist–, as they are outside the LPN’s scope of practice:

- 4.1A. Administration of IV medications except as allowed in Section 3.H.3.
- 4.2B. Administration of medications by IV push except as outlined in Section 3.H.3.
- 4.3C. Administration of parenteral nutrition solutions.
- 4.4D. Administration of blood and blood products.
- 4.5E. Administration of chemotherapy intravenous medications/solutions.
- 4.6F. Administration of investigational drugs.
- ~~4.7 Access or deaccess implanted central venous access ports.~~
- 4.8G. Administration of thrombolytic agent to declot a ~~central venous access device~~PICC Line.

~~4.9H. Insertion of a PICC line or a peripheral midline catheters.~~

~~4.10 Repair of venous access devices.~~

~~4.11 Remove a central venous access catheter.~~

## **5. Requirements for obtaining IV Therapy/Venous Blood Sampling Authority**

~~LPNs whose IV authority was removed on January 1, 2006, or those who had not received IV authority prior to January 1, 2006, or those who had not had IV therapy content as part of their basic practical nursing program must complete a course including theory/lab and clinical practice related to the knowledge, skills and ability to perform IV Therapy and Venous Blood Sampling. The content defined in Section 6 must be included.~~

~~5.1 Upon completion of IV therapy education content meeting the standards of section 6, the applicant will~~Successful completion of an Approved IV Therapy Course/Program is required if:

~~A. The LPN's IV Authority was removed on January 1, 2006, or;~~

~~B. The LPN had not received IV Authority prior to January 1, 2006 or;~~

~~C. The LPN's basic practical nursing program did not include an Approved IV Therapy Course/Program.~~

~~A. Submit an IV application on current Colorado Board approved form, and pay the applicable fee.~~

~~B. Verify completion of a Colorado Board approved course through transcript or certificate. This education can be obtained through a basic practical nursing education program or an IV Therapy/Venous Blood Sampling course.~~

~~5.2 Endorsement from other states.~~Upon the successful completion of an Approved IV Therapy Course/Program, the applicant must:

~~A. Upon endorsement for licensure, submit IV authority application on current Colorado Board approved form, and pay the applicable fee.~~Possess an active, unencumbered Colorado or multi-state practical nurse license.

~~B. Submit proof of IV Therapy/Venous Blood Sampling course completion.~~Submit an IV Authority application on a current Board approved form, and pay the applicable fee.

~~C. Submit proof that course(s) meet substantially the same educational requirements in content as defined in Section 6.~~Verify completion of an Approved IV Therapy Course/Program through a Board approved competency checklist.

5.3 Endorsement of IV Authority from other U.S. state or U.S. territories must:

A. Possess an active, unencumbered Colorado or multi-state practical nurse license.

B. Upon endorsement for licensure, submit an IV Authority application on a current Board approved form, and pay the applicable fee.

C. Submit proof of completion of an Approved IV Therapy Course/Program.

## 6. Standards for IV Therapy/Venous Blood Sampling Courses

6.1 Curriculum for IV Therapy/~~Venous Blood Sampling~~ Course/Program shall:

- A. Provide adequate theory and supervised clinical practice in IV therapy/~~Venous Blood Sampling~~ related to the Adult Client necessary for the performance of nursing functions as outlined in Section 3.
- B. Provide the following content:
  1. Legal implications and scope of practice.
  2. Role of the licensed practical nurse in intravenous therapy.
  3. Related anatomy and physiology including the physiology of aging and site selection.
  4. Fluids and electrolytes.
  5. Commonly used IV fluids.
  6. Hazards and complications of IV therapy, local and systemic.
  7. Psychological aspects of venipuncture.
  8. Infection control measures.
  9. Identifying types of venous access devices.
  10. Monitoring venous access devices ~~s\_ site~~.
  11. Dressing and cap changes.
  12. Initiating, monitoring, regulating, replacing, and discontinuing IV fluids.
  13. Use of appropriate equipment including IV pumps.
  - ~~14. Drug incompatibilities.~~
  - ~~15.~~ Administration of pre-mixed vitamins and electrolytes.
  - ~~16.~~ Pharmacology of heparin and antibiotics including drug incompatibilities.
  - ~~17.~~ Administration of pre-mixed IV antibiotics.
  - ~~18.~~ Flushing of venous access devices designed to maintain venous patency.
  - ~~19.~~ Collection of venous blood specimens for tests and use of appropriate equipment for same.
  - ~~20.~~ Nursing care, intervention, reporting and documentation related to intravenous therapy/venous blood sampling.
- C. Each student ~~should~~shall complete clinical practice ~~or simulated clinical practice~~ related to:
  1. Peripheral ~~IV starts on clients~~short catheter insertion on Adult Clients.

2. Initiation and monitoring of IV fluid administration on Adult Clients through ~~peripheral and central~~ venous access devices.
3. Flushes into venous access devices designed to maintain venous patency for Adult Clients.
4. Administration of pre-mixed antibiotics via venous access device to Adult Clients.
5. Utilization of IV pumps.
6. Peripheral venous blood sampling on Adult Clients.
7. Discontinuation of peripheral short devices.
8. Documentation of nursing actions and observations.
9. Sterile dressing change on central venous access devices.
10. Blood collection from a ~~central venous access device~~ PICC line.

~~D. D.~~ At the discretion of the instructor, students may challenge content and/or skills with validation of previous IV therapy ~~venous blood sampling~~ education.

E. All Approved IV Therapy Courses/Programs shall submit an annual report on a Board approved form to demonstrate compliance with Chapter IX rules. Failure to submit an annual report may result in withdrawal of Board approval.

## **7. Restrictions on Withdrawal of IV Authority**

7.1 The Board may withdraw IV Authority if the Board has reasonable cause to believe that the nurse no longer meets the requirements for IV Authority as set forth in Section 5 of this Chapter, or the Board has reasonable cause to believe that the nurse is unable to practice IV Authority with reasonable skill and safety.

~~7.1 An LPN with IV authority may be subject to the restriction of this authority by the Board on a case-by-case basis. The Board may impose such restriction if it finds the LPN has a condition described in C.R.S. 12-38-117(1)(i) or (j), has engaged in any conduct constituting grounds for discipline under C.R.S. 12-38-117, or if the Board otherwise has reasonable cause to believe that a nurse is unable to practice nursing with reasonable skill and safety to patients.~~

~~7.2 Once an LPN's IV authority has been restricted by the Board, it is within the discretion of the Board to determine on a case-by-case basis:~~

~~A. Whether to remove the restriction; and~~

~~B. The conditions or requirements which must be met before the restriction may be removed.~~