

F694

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§483.25(h) Parenteral Fluids.

Parenteral fluids must be administered consistent with professional standards of practice and in accordance with physician orders, the comprehensive person-centered care plan, and the resident's goals and preferences.

INTENT §483.25(h)

The intent of this requirement is that the facility assures that each resident receives care and services for the provision of parenteral fluids consistent with professional standards of practice in order to provide:

- Safe administration of parenteral fluids by qualified, competent and trained staff in accordance with State laws/practice acts;
- Care consistent with the resident's input, goals and preferences, as delineated in the care plan; and
- Ongoing support of the resident, during *parenteral* treatments, including monitoring the resident's status, monitoring for complications and assuring the provision of appropriate infection control practices.

DEFINITION §483.25(h)

Parenteral fluid is *the delivery of fluid or medication through an intravenous, subcutaneous, intramuscular, or mucosal route (Taber's Online Medical Dictionary, <https://www.tabers.com/tabersonline/>) to maintain adequate hydration, restore and/or maintain fluid volume, reestablish lost electrolytes, or provide nutrition which includes Total Parenteral Nutrition (TPN).*

Intravenous (IV) therapy is *the administration of parenteral fluids or medications through an IV catheter to treat a condition.*

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GUIDANCE §483.25(h)

There is no requirement that a facility must offer IV *therapy*. If the facility has an arrangement with an outside contractor for the provision of IV *therapy*, the facility must inform each resident before or at the time of admission, and periodically during the resident's stay, of *such* services if available in the facility.

Residents of a facility may receive IV *therapy* through options such as *the following*:

- The facility provides the IV *therapy* either directly or *under contract with* individuals to provide the services; however, these individuals must be qualified, trained and competent in accordance with professional standards of practice, licensure and State practice acts/laws; or
- If a current resident needs and agrees to receive IV *therapy* and the facility does not allow *such* services *to be administered onsite*, the facility must assist the resident with the transfer to another facility or *with* the relocation to *another* setting (e.g. private home, or residential/assisted living facility) of his/her choice that provides IV *therapy*.

For facilities who offer IV therapy, the facility must develop and implement resident care policies based upon current professional standards of practice for the preparation, insertion, administration, maintenance and discontinuance of an IV, as well as for the prevention of infection at the site to the extent possible. The procedures must include the care and use of all equipment, such as pumps, tubing, syringes, fluids, etc.

The facility minimizes risks to a resident receiving IV therapy by developing and implementing policies that adhere to professional standards of practice, which may include, but are not limited to:

- Use of appropriate hand hygiene during all aspects of IV *therapy*;
- Use of aseptic technique when placing a venous access device;
- *Use of appropriate antiseptic (e.g., chlorhexidine, povidone iodine, an iodophor, or 70 percent alcohol, which is recommended in CDC guidelines) to scrub IV ports, needleless connectors, and hubs prior to access or use.*
- Use of personal protective equipment (PPE) (based on potential for exposure to blood, bodily fluids, and infectious agents);
- Competency of staff to:
 - Use infusion equipment;
 - Accurately perform IV insertion, and maintain vascular access; and
 - Assess for complications.
- Administration of solutions according to orders (correct solution, administration route (central/peripheral line), duration, frequency, and infusion rate);
- Labeling and dating, as appropriate, infusion fluids and lines;
- Frequency of assessment of IV catheter to assess the insertion site for signs and symptoms of infection or inflammation (i.e., at least daily or with each use). Frequency may depend upon such factors as the:*

- Ability of resident to report symptoms of pain, redness, etc.
- Type of infusion—is it an irritant or vesicant?
- Location of IV catheter—is it inserted in an area of flexion; and
- Facility policy based on long-term care pharmacy IV policies and procedures.
- Assessment of continued need for the catheter if not being used for IV fluids or medications.

According to the CDC, the following terminology has been used to describe IV catheters: “Terminology and Estimates of Risk - The terminology used to identify different types of catheters is confusing, because many clinicians and researchers use different aspects of the catheter for informal reference. A catheter can be designated by:

- The type of vessel it occupies (e.g., peripheral venous, central venous, or arterial);
 - Its intended life span (e.g., temporary or short-term versus permanent or long-term);
 - Its site of insertion (e.g., subclavian, femoral, internal jugular, peripheral, and midline or peripherally inserted central catheter [PICC]);
 - Its pathway from skin to vessel (e.g., tunneled versus nontunneled);
 - Its physical length (e.g., long versus short); or
 - Some special characteristic of the catheter (e.g., presence or absence of a cuff, impregnation with heparin, antibiotics or antiseptics, and the number of lumens).
- To accurately define a specific type of catheter, all of these aspects should be described (Table 1).” - <https://www.cdc.gov/hai/pdfs/bsi-guidelines-2011.pdf>.

Complications/Risks of Intravenous Fluid Administration

Administration of IV fluids may be required to restore or maintain adequate hydration, replace electrolytes, or provide partial nutrition. However, because it is invasive, administration of IV fluids has associated risks such as:

- Infiltration;
- Bruising;
- Embolism (Air or Blood);
- Phlebitis;
- Fluid overload;
- Electrolyte imbalance; and
- Infections (Cellulitis, Septicemia).

NOTE: Refer to Centers for Disease Control (CDC) guidelines for the prevention of intravascular catheter related infections found at: <https://www.cdc.gov/hai/pdfs/bsi-guidelines-2011.pdf>.

In addition to adhering to professional standards of practice, facilities are responsible to administer IV therapy according to the resident-centered care plan and in accordance with

physician's orders and the resident's goals, preferences, and advance directives, as applicable and according to State law.

INVESTIGATIVE PROCEDURES

Observations: Observe the resident to determine:

- Are there signs of inflammation or infiltration at the insertion site and has site been changed according to current, professional standards of practice?
- If the rate of parenteral fluid being administered reflects that which was ordered by the physician.
- If the resident received the amount of fluid during the past 24 hours that he/she should have received according to the physician's orders (allow flexibility up to 150cc unless an exact fluid intake is critical for the resident)?

Observe staff *accessing the port and changing the IV site, tubing, or bottle/bag, if possible. Determine if the central venous or peripheral access port, needleless connector, and hub was scrubbed with an appropriate antiseptic prior to access or use.* Determine whether aseptic technique is maintained in accordance with current, professional standards of practice.

Record Review:

Review the medical record and comprehensive care plan (or baseline if the resident's admission was within 14 days of the review) *for residents receiving IV therapy to determine:*

- If the *clinical record includes documentation to support the need for IV therapy;*
- If the resident has orders for parenteral fluid, *Note the solution type, administration route, frequency, and infusion rate to compare to observations.*
- How frequently staff are to change IV tubing.

Review facility policies and procedures related to *IV therapy to determine if policies and/or procedures address:*

- Aseptic technique for IV insertion;
- Maintenance of IV site;
- Frequency of IV site, tubing, and bag changes, and do they reflect current, professional standards of practice?
- *Documentation for the continued need for the IV catheter if no longer being used for IV fluid or medication.*

Interviews:

Interview the resident or, if applicable, the *resident representative to determine:*

- If they understand why the resident is receiving parenteral fluid;
- If the resident has had any complications or concerns related to the *IV therapy*

Interview staff to determine if there are specific qualifications and/or competencies required for staff who perform IV insertion, IV maintenance, and parenteral fluid administration.

DEFICIENCY CATEGORIZATION §483.25(h)

Examples of Severity Level 4 Noncompliance Immediate Jeopardy to Resident Health or Safety include, but are not limited to:

- Facility's failure to adhere to sterile technique during maintenance of IV therapy that lead to sepsis and resulted in the resident's hospitalization or death.
- Facility's failure to monitor administration of fluid that resulted in overload of cardiovascular system, resulting in hospitalization or death.

Examples of Severity Level 3 Noncompliance Actual Harm that is Not Immediate Jeopardy include, but are not limited to:

- Facility's failure to monitor for complications related to IV therapy, resulting in infiltration of the IV, causing the resident to experience pain and swelling.
- Facility's failure to ensure a resident received fluids as ordered, resulting in dehydration, which was later reversed after staff became aware.

Examples of Severity Level 2 Noncompliance No Actual Harm with Potential for More Than Minimal Harm that is Not Immediate Jeopardy include, but are not limited to:

- Facility's failure to consistently flush a resident's IV site, resulting in the IV becoming clogged and requiring replacement.
- Facility's failure to anchor the IV needle and tubing, resulting in leakage around the IV site that required topical treatment and resolved without complications.

Severity Level 1 Noncompliance No Actual Harm with Potential for Minimal Harm:

The failures of the facility to provide appropriate care and services related to parenteral fluids places the resident at risk for more than minimal harm. Therefore, Severity level 1 does not apply for this regulatory requirement.

POTENTIAL TAGS FOR ADDITIONAL INVESTIGATION:

- If noncompliance with parenteral therapy is related to staff competency issues, also consider F725, §483.35(a)(3), Nursing Services
- If noncompliance with parenteral therapy is related to accuracy of fluid type, or amount, also consider F755, §483.45 Pharmacy Services.
- If noncompliance with parenteral therapy is related to lack of equipment such as IV tubing, pumps, etc., also consider F907 §483.90(d) Space and equipment.

If noncompliance with parenteral therapy is related to the provision of adequate nutrition/hydration, also consider F692 §483.25(g), Assisted Nutrition and Hydration.