

# Administration of Fluids and Electrolytes

## Purpose

The purpose of this procedure is to provide guidelines for the safe and aseptic administration of intravenous fluids and electrolytes for hydration.

## Preparation

1. A physician's order is necessary for this procedure.
2. Review the resident's plan of care to assess for any special needs of the resident.
3. Assemble the equipment and supplies as needed.
4. The licensed nurse responsible for administering fluids and electrolytes shall be knowledgeable of:
  - a. indications for use;
  - b. appropriate doses and dilutents;
  - c. side effects;
  - d. toxicities;
  - e. incompatibilities;
  - f. stability;
  - g. storage requirements; and
  - h. potential complications.

## Equipment and Supplies

1. Infusion solution;
2. Administration set;
3. Saline or heparin for flush, if appropriate;
4. Needleless access device/adaptor;
5. Electronic infusion pump;
6. Gloves;
7. Alcohol swabs; and
8. Tape.

## Assessment

1. Inspect intravenous catheter site for signs of infection and/or complications at scheduled intervals and upon routine site care and administration set changes.
2. Prior to administration of intravenous fluids and electrolytes assess resident's:
  - a. overall health status;
  - b. cardiovascular status;
  - c. history of allergies;
  - d. baseline vital signs, height and weight; and
  - e. laboratory results and appropriateness of therapy.
3. Review physician's order: Confirm type and amount of solution, route, and rate of administration.
4. Verify the identity of the resident.
5. Inspect solution for leaks, cracks, precipitate and expiration date.
6. Verify that administration site has time, date and initials of the nurse who administered the treatment.

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## Steps in the Procedure

1. Perform hand antisepsis and don gloves.
2. Prime tubing of administration set.
3. Disinfect catheter injection/access port.
4. Flush catheter, if appropriate.
5. Connect primed administration set to catheter injection/access port using needless access device/adaptor.
6. Open roller clamp.
7. Establish prescribed rate of flow:

### If using **gravity system**:

- a. follow orders for amount to be infused and duration;
- b. calculate drops per minute (see procedure for *Calculating Flow Rates*); and
- c. adjust clamp to achieve desired flow rate.

### If using **electronic infusion pump**:

- a. follow orders for amount to be infused and duration;
- b. follow manufacturer's directions to program pump; and
- c. program to achieve desired flow rate.

8. For **intermittent therapy**, when infusion is complete, clamp tubing and disconnect from catheter.
  - a. If tubing will be reused, replace cap.
  - b. Flush catheter per protocol.
9. Document procedure in the resident's medical record.

## Documentation

The following information should be recorded in the resident's medical record:

1. The date and time of the infusion was administered.
2. The type of solution administered.
3. The amount of solution administered.
4. The route of administration.
5. The rate of administration.
6. The condition of the IV site.
7. Notification of the physician, if any.
8. Resident's response.
9. The signature and title of the person recording the data.

## Reporting

1. Notify the supervisor if the resident refuses the procedure.
2. Report other information in accordance with facility policy and professional standards of practice.