PURPOSE:
To administer intravenous (IV) fluids or IV medications to a child.

CONSIDERATIONS:
1. Whenever possible, use a route other than IV because of the risk involved with children.
2. The site must be chosen carefully and special care taken to preserve the vein because a child’s veins are so small.
3. The hands and forearms are the best sites for IV therapy. Scalp, umbilical, foot and leg veins are not recommended because of high risk of phlebitis and/or limitation of activity. No cut-down should be done at home.
4. The caregiver(s) of the child must be carefully screened and educated in the care of the child with IV therapy.
5. A child is less tolerant of fluid and medication overdoses because of his/her small size.
6. Since a child’s metabolism is three times faster than an adult’s, accurate records are necessary because complications develop quickly. Monitor intake and output. Assess weight, general condition and laboratory studies frequently.
7. For older children, showing the equipment and practicing on a stuffed animal is helpful.
8. Restraining an infant at home for IV therapy is not recommended. If absolutely needed, a physician’s order is required. Infants, toddlers, preschoolers and very active children may need a protective device to prevent dislodging the IV catheter. The type and size of the device should be appropriate to the type and placement of the IV catheter, the patient’s developmental level and overall condition.
9. Pediatric infusion sets, mini-drips and pumps should be used. Infusion control devices are recommended for children under the age of 10 years. Fluid to be infused should be ordered in milliliters per hour by the physician.
10. Only an experienced IV nurse should attempt to start an IV on a child.
11. If possible, the nurse should prepare the caregiver(s) and the patient for IV therapy: teaching with handouts, hands-on practice sessions and use of distraction and play therapy are advisable as appropriate. The nurse should take the patient’s developmental level into consideration when preparing and giving IV therapy. Caregiver involvement is strongly recommended as parental anxiety has an impact on the child.
12. Infants and toddlers will usually require two people to insert an IV catheter.
13. A typical analgesic cream may be utilized to decrease pain and anxiety (physician order is required).
14. The amount and type of flushes must be included in the physician’s order.
15. Use at least two patient identifiers prior to administering medications.

EQUIPMENT:
Small (21-27) gauge needle
Intravenous solution, as ordered by the physician
Volume control set
Infusion pump
IV pole
IV start kit
Tape
Armboard
Gloves
Impervious trash bag
Puncture-proof container
Disposable apron (optional)
Protective eye wear (optional)

PROCEDURE:
1. Adhere to Standard Precautions.
2. Identify the patient and explain the procedure to the caregiver(s) and patient, if age appropriate.
3. Explain the importance of protecting the IV site and of not playing with the site, tubing, solution, pump and pole. When appropriate, have the patient assist you by handing you the tape, etc.
4. Perform venipuncture. (See Infusion Therapy: Intravenous Therapy Administration.)
5. Tape VERY securely but not occluding vein so that you can easily check site for signs and symptoms of complications. A sterile, transparent dressing may be used to cover the insertion site directly.
6. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient’s record:
   a. Medication administered, dose, time, rate and route.
   b. Insertion site description, including location and any problems, such as redness, swelling, leaking.
   c. Ease of flushing catheter.
   d. Type of IV pump, if used, and all settings used for infusion.
   e. Teaching done and patient’s/caregiver’s(s’) response to teaching.
   f. Patient’s/caregiver’s(s’) response to procedure, side effects and management.
   g. Instructions given to patient/caregiver(s).
   h. Patient/caregiver(s) return demonstration of administration of IV medication.
2. Continue to monitor and document:
   a. Intake and output.
   b. Weight, if appropriate.
   c. Site description.
   d. Medication administration (dose, time, rate, amount), if appropriate.
   e. Safety in home.
   f. Patient's response to care.
   g. Communication between physician, laboratory and supplier.